

2025 Vernal Pool Habitat Conservation Plan Management and Monitoring Annual Report

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Prepared for:

David Zoutendyk, Division Supervisor
U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Avenue
Carlsbad, CA 92008
david_zoutendyk@fws.gov

Glen Lubcke, Environmental Program Manager
California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA 92123
Glen.Lubcke@wildlife.ca.gov

From:

City of San Diego
City Planning Department
202 C Street, MS 413
San Diego, CA 92101

Prepared by:

AECOM
401 West A Street, Suite 1200
San Diego, CA 92101

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Acronyms and Abbreviations

%	percent
2025 Annual Report	2025 Vernal Pool Habitat Conservation Plan Management and Monitoring Annual Report
Caltrans	California Department of Transportation
CE	California state endangered
City	City of San Diego
CR	Vernal Pool Creation
EDD	Economic Development Department
EF	Enterprise Funds
EN	Enhancement
ERAR	<i>Eryngium aristulatum</i> var. <i>parishii</i>
FE	federally endangered
FT	federally threatened
FY	fiscal year
GF	General Fund
GPMF	General Plan Maintenance Fund
ITP	Incidental Take Permit
MSCP	Multiple Species Conservation Program
NA	Not Applicable
NAFO	<i>Navarretia fossalis</i>
NC	No Change
ORCA	<i>Orcuttia californica</i>
P&R	Parks and Recreation
POAB	<i>Pogogyne abramsii</i>
PONU	<i>Pogogyne nudiuscula</i>
PUD	Public Utilities Department
RE	Re-establishment
RES	Restoration
RFS	<i>Streptocephalus woottoni</i>
SDFS	<i>Branchinecta sandiegonensis</i>
TBD	To Be Determined

USFWS	United States Fish and Wildlife Service
VPHCP	Vernal Pool Habitat Conservation Plan
VPMMP	Vernal Pool Management and Monitoring Plan
Wildlife Agencies	United States Fish and Wildlife Service and the California Department of Fish and Wildlife

1 Overview

1.1 Overview of Vernal Pool Habitat Conservation Plan and Vernal Pool Management and Monitoring Plan

In January 2018, the City of San Diego's (City's) Vernal Pool Habitat Conservation Plan (VPHCP) (City 2019) was approved. The VPHCP is a framework that provides guidance on protection, enhancement, and restoration of vernal pool resources across the VPHCP Plan Area (Figure 1.1-1). As illustrated in Figure 1.1-1, the VPHCP Plan Area represents City-jurisdiction lands and generally spans from Lake Hodges in the north to Otay Mesa in the south (refer to Chapter 2.1 of the VPHCP for further detail regarding the VPHCP Plan Area).

Management and monitoring activities detailed in the VPHCP and its supplemental document, the Vernal Pool Management and Monitoring Plan (VPMMP) (City 2020), are designed to support conservation goals consistent with the United States Fish and Wildlife Service (USFWS) Recovery Plan for Vernal Pools of Southern California (USFWS 1998) (refer to Chapter 5 of the VPHCP for further details regarding conservation goals). The following five plant species and two crustacean (shrimp) species are included as covered species,¹ in addition to their associated habitat (vernal pools):

- Otay Mesa mint (*Pogogyne nudiusscula*, PONU) – FE, CE
- San Diego mesa mint (*Pogogyne abramsii*, POAB) – FE, CE
- Spreading navarretia (*Navarretia fossalis*, NAFO) – FT
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*, ERAR) – FE, CE
- California Orcutt grass (*Orcuttia californica*, ORCA) – FE, CE
- Riverside fairy shrimp (*Streptocephalus woottoni*, RFS) – FE
- San Diego fairy shrimp (*Branchinecta sandiegonensis*, SDFS) – FE

The VPHCP conservation goals for the seven covered species are intended to provide habitat-specific and species-specific objectives that meet or exceed the City's Multiple Species Conservation Program (MSCP) requirements. The VPHCP was informed by the City of San Diego 2002–2003 Vernal Pool Inventory (baseline studies) (City 2002–2003) and the available scientific data at the time of VPHCP preparation. The City recognizes that there are inherent gaps in the available scientific data, and understanding of population ecology of the covered species is constantly evolving. Therefore, it is expected that over time, as additional research is conducted and data are collected on the covered species residing within the City, the management program (triggers and/or actions) can and will be adjusted to reflect new information and understanding of population function and dynamics, providing an adaptive approach to VPHCP implementation.

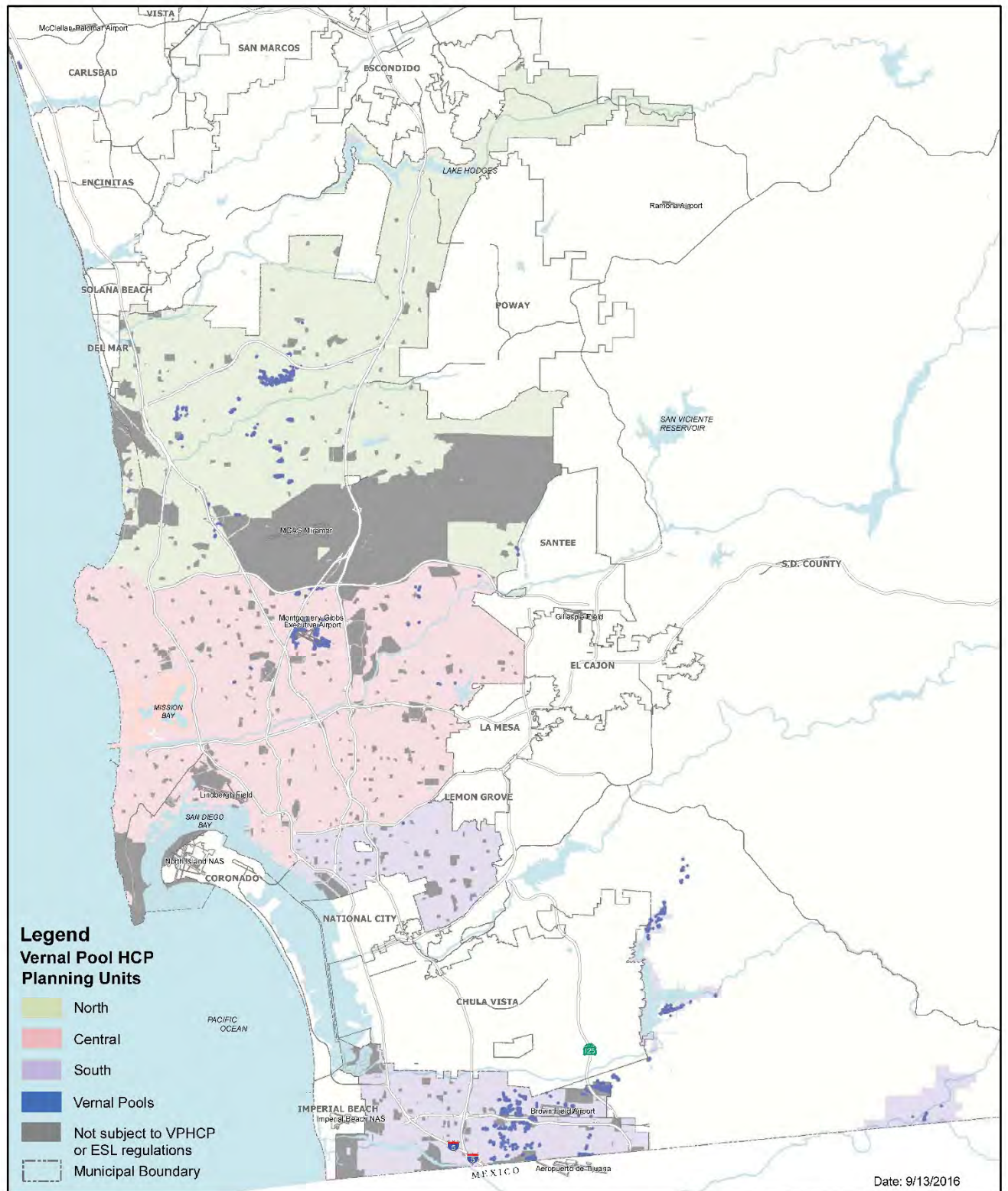
The VPMMP outlines adaptive monitoring and management strategies applicable to individual vernal pool complexes.² Appendix A of this 2025 management and monitoring annual report (2025 Annual Report) details each vernal pool complex covered under the VPHCP. The City is responsible for adhering to management and monitoring activities outlined in the VPMMP and VPHCP, and reporting on those activities annually to USFWS and the California Department of Fish and Wildlife (collectively, the Wildlife Agencies).

1.2 Reporting Requirements

The City is responsible for implementing management activities, collecting and analyzing data, tracking take, and providing an annual summary to the Wildlife Agencies (refer to Chapter 5 of the VPMMP for further details regarding data collection, analysis, and reporting). This 2025 Annual Report fulfills the City's annual VPHCP reporting requirements for the 2025 fiscal year (FY) (July 1, 2024, through June 30, 2025).

¹ Covered status for each of the species is defined as follows: FE = federally endangered, FT = federally threatened, CE = California state endangered

² A vernal pool complex is defined as a collection of vernal pools that occur in proximity, on the same soil series, and are typically biogeographically and hydrologically connected (City 2019).



THE CITY OF SAN DIEGO

Note:
Vernal pool symbols on this map have been
enlarged to help identify their locations and
are not to scale and do not represent the exact
limits of the vernal pool basins.

[illegible]

**Figure 1.1-1
Vernal Pool HCP
Plan Area**

1.3 Management and Monitoring Requirements

1.3.1 City-Owned Complexes

The City is responsible for implementing management and monitoring under the VPHCP for vernal pool complexes on City-owned lands (see the yellow sites in Appendix A). The approach to vernal pool complex management and monitoring, including monitoring methods, sampling design, and management activities, is based on a tiered three-level assignment tied to the VPMMP standards (refer to Chapter 2 and Chapter 4 of the VPMMP for further details regarding VPMMP standards and VPHCP monitoring and management strategy, respectively). The three-tiered management level approach is based on the condition of each vernal pool complex as determined during development of the VPHCP. Management levels for the existing inventory (baseline studies) of vernal pool complexes were assigned during the development of the VPHCP. For newly-identified vernal pool complexes, the management level will be assigned in coordination with the Wildlife Agencies based on the current condition of the vernal pool complex when identified (see Section 1.6.1 for details). Changes in management level are triggered by changes in the following categories: focal plant species cover, covered shrimp species cover, average weed cover, and hydrologic function. Figure 1.3-1 illustrates the relationship between management level and the VPMMP standards. Management activities, as required by management level assignment, are detailed in Table 4-6 of the VPMMP.

Per the VPHCP, minimum precipitation thresholds must be met for at least 3 years prior to management level change adoption, if warranted by performance. Minimum precipitation thresholds apply at a planning unit (north, central, and south as depicted in Figure 1.1-1) scale, and at least 3 years of data collection during adequate rainfall years (at least 55% of average total rainfall) are required to provide an analysis that would identify triggers in change of management level of an individual complex. Section 2.1.2 of this 2025 Annual Report provides an analysis of precipitation between FY 2019 and FY 2025 in relation to management and monitoring levels. In addition to precipitation minimum thresholds, a vernal pool complex must receive a minimum number of years of management activities to become eligible for a management level change. The VPHCP indicates that Level 2 and 3 vernal pool complexes are not subject to management level change until 3 and 5 years of management are fulfilled, respectively. Table 4-5 of the VPMMP provides further detail regarding management level triggers and thresholds. This annual report summarizes the seventh year of VPHCP implementation and analyzes management level performance for Years 1 through 7 for vernal pool complexes across all management levels.

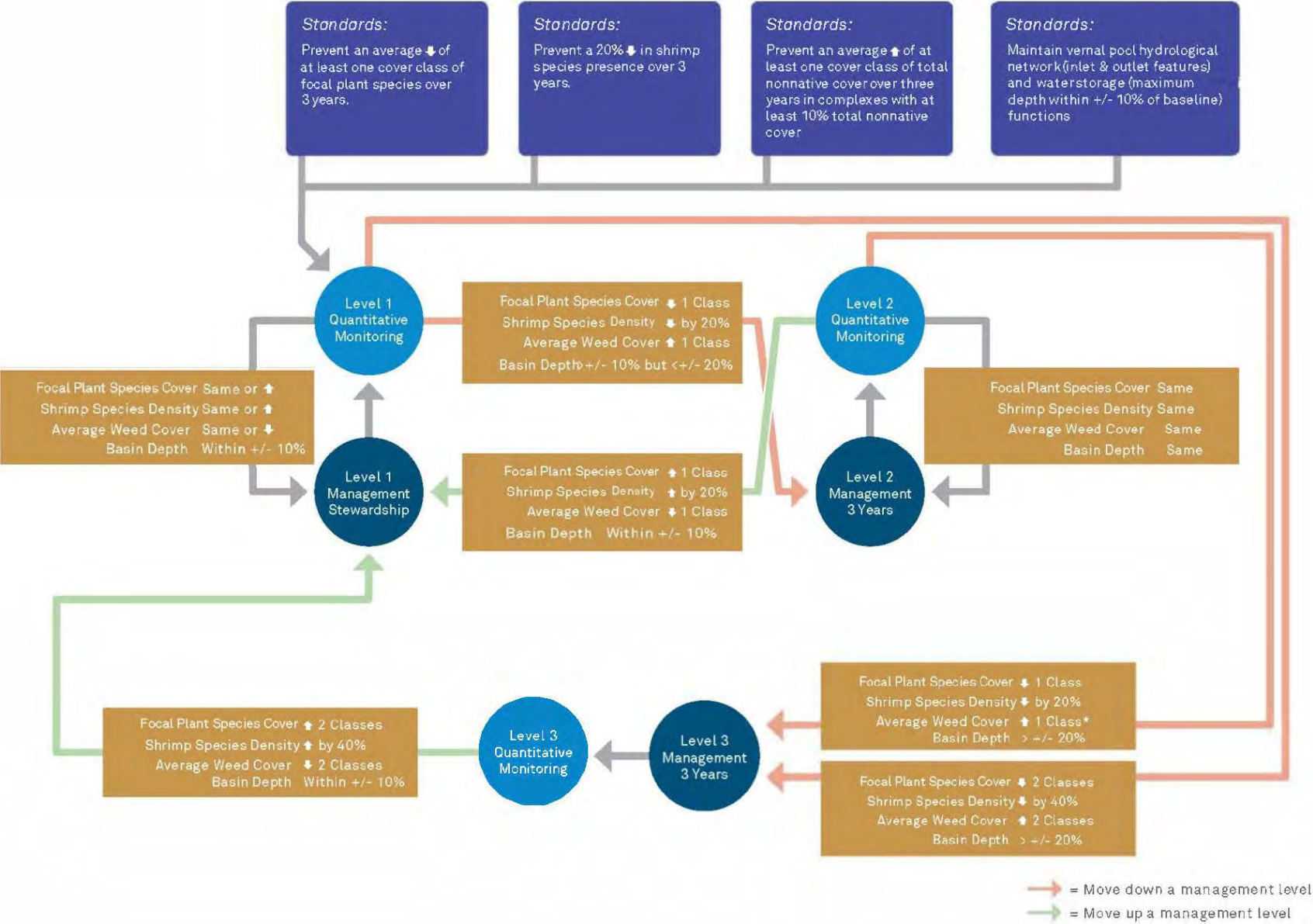
Management level changes proposed from performance during Years 1 through 7 of VPHCP implementation are discussed further in Section 2.1.2. If results trigger a change in management level for a Level 1 or Level 2 vernal pool complex, the City will coordinate with the Wildlife Agencies and will revise the VPMMP to include updated maintenance and monitoring requirements for the new management level, as determined by the Wildlife Agencies.

1.3.2 Privately-Owned and Conserved Pre-MSCP Complexes

Vernal pools located on six private properties (green sites listed in Appendix A) that were conserved prior to the adoption of the City's MSCP Subarea Plan (City 1997) are currently not managed under the City's VPMMP. These six sites are known as the "orphan sites." The City routinely conducts passive qualitative monitoring from publicly accessible vantage points for these orphan sites; however, the City is not able to capture a complete assessment of each complex's condition from these limited access points. Furthermore, the City does not have legal access or an established easement to perform a more in-depth level of monitoring.

In 2022, the City conducted site-specific research to determine current property ownership and status of orphan sites within the VPHCP Plan Area. This effort involved extensive online research to confirm current ownership of these properties as ownership may have changed since the last parcel map update. City staff will continue to engage with these six property owners to discuss the importance of vernal pool resources on their respective properties and the possibility to convey the properties to the City as funding and staff resources are identified and become available. From this effort, the City has engaged with partner organizations that are taking the lead on performing management activities at the orphan sites. During FY 2025, management activities were continued by volunteer-based organizations at the Arjons (I 1) vernal pool complex.

Figure 1.3-1. VPHCP Monitoring and Management Level Flow Chart



1.4 Private Property Reporting Enforcement

In addition to the City's obligation to perform management and monitoring for vernal pool complexes on City-owned lands within the VPHCP Plan Area, the City is also responsible for enforcing management and monitoring of vernal pool complexes on privately owned lands that are covered under the VPHCP (see the orange sites in Appendix A). Private projects listed in Appendix A were approved prior to adoption of the VPHCP and are subject to a site-specific restoration or monitoring plan. Section 2.2 of this 2025 Annual Report discusses further details regarding management and monitoring for private properties that are subject to the VPHCP.

The City developed an online portal to facilitate private property management reporting for vernal pools. The online portal streamlines submittal of required private projects' vernal pool annual reports through a centralized location that is accessible across City departments. Previously, reports were either emailed to the Development Services Department, Wildlife Agencies, or various MSCP staff members which made tracking difficult to manage. The online portal facilitates adequate reporting submissions that meet VPHCP requirements and allow for a timely response from City staff, as needed. Private party management actions and monitoring requirements are provided in Appendix E. Reports will be forwarded to the Wildlife Agencies upon request.

1.5 Take Tracking

The USFWS Section 10 Incidental Take Permit (ITP) issued to the City for the VPHCP requires tracking of take associated with covered projects and covered activities under the VPHCP. It is the City's responsibility to track incidental take associated with covered projects and covered activities on both City owned and private lands. In addition, the ITP allows extension of authorized take through granting Third Party Beneficiary status as a condition of project entitlements. A certificate of inclusion can be issued to other local jurisdictions and state agencies that engage in activities within the VPHCP Plan Area that are identified as covered activities under the plan. They are not covered under the VPHCP if they voluntarily subject themselves to the City's authority through the City's land entitlement and/or permitting process. Private property owners covered by the ITP are required to satisfy management and monitoring standards outlined in the VPHCP. Section 2.3 of this 2025 Annual Report details a running total of take across VPHCP-covered projects.

1.6 VPHCP and VPMMP Updates

Following adoption of the VPHCP, the City has encountered nuances associated with implementation of the VPHCP which warrant updates to the VPHCP and VPMMP. A description of proposed updates is described herein.

1.6.1 Newly Observed Vernal Pools and Vernal Pool Complexes

The VPHCP was based on data available at the time of the document's development. Following the adoption of the VPHCP, the City observed vernal pools and vernal pool complexes that were not captured during implementation of the baseline studies that informed the VPHCP. It was understood that comprehensive surveys were not performed for the entire planning area, and the City and Wildlife Agencies anticipated the need to incorporate additional vernal pools and vernal pool complexes as they were discovered during subsequent surveys associated with implementation of the VPHCP. Because these vernal pools were not captured during baseline studies, no management sheets were developed and, therefore, no management levels were assigned to the newly observed vernal pool complexes. In addition, management sheets for existing vernal pool complexes where newly discovered vernal pools have been identified need updates. To incorporate these new vernal pools and complexes, the City performed baseline studies in FY 2023 to document and update a total of eleven vernal pool complex management sheets (existing and new) for newly observed vernal pools. The results of 8 out of the 11 vernal pools and complexes were included in the FY 2024 Annual Report. The results of the four remaining newly discovered vernal pool complexes (Calle de Vida West, Stowe, Dormouse, and Fairbanks) will be discussed further in the FY 2026 Annual Report, following visitation to these sites by the Wildlife Agencies.

1.6.2 Vernal Pool Complexes Impacted by Wildfire

Wildfires are naturally occurring and human-induced phenomena in the Mediterranean climate of southern California; therefore, the occurrence of a localized fire burning an individual complex is a foreseeable circumstance within the VPHCP Plan Area. This section provides an update of vernal pool complexes that have been impacted by wildfire and how the City is addressing post-fire requirements per the VPHCP.

As discussed in Section 9.2 of the VPHCP, following a wildfire event, the City will implement adaptive management measures for recovery and invasion by weeds within the impacted vernal pool complex. Quantitative data will carefully evaluate short- and long-term impacts and damage to any vernal pool complexes resulting from fire suppression activities (e.g., fencing damage, vehicle tracks, contamination from fire suppressant chemicals, etc.) will be addressed. Qualitative and quantitative monitoring will be implemented to evaluate post-fire restoration success (based on pre-fire conditions). As data are gathered, adaptive management actions will be implemented and modified as needed to reduce potential threats and their adverse impacts. It is assumed that, following 5 years of post-fire restoration, a burned complex will be updated to Management Level 1. However, if the Wildlife Agencies, in coordination with the City, conclude that a burned complex has not achieved Management Level 1 status within 5 years, the City will continue management actions until Management Level 1 status is achieved or the Wildlife Agencies conclude such actions are no longer necessary or effective.

In FY 2024, one vernal pool complex (Goat Mesa) achieved Management Level 1 status following a 5-year post-fire monitoring and management period. The Goat Mesa complex was burned during the Caliente Fire in August 2019, just prior to the adoption of the VPHCP (October 2019). In FY 2024, the Goat Mesa complex was determined to have successfully met pre-fire conditions, downgrading management and monitoring to Level 1. Therefore, vernal pool covered species monitoring returned to the recommended sample size per the VPMMP in FY 2025. For reference, the most recent Goat Mesa post-fire monitoring and management report (RECON 2025a) is included as Appendix B-1.

In FY 2025, the Otay Lakes vernal pool complex was impacted by the Border 2 Fire in January. Following the event, a post-fire assessment, detailed in the Otay Lakes Post Border 2 Fire Monitoring and Management Report (RECON 2025), was conducted to evaluate the extent of the damage and identify management and monitoring actions needed to restore the complex to pre-fire conditions. Per the VPHCP, the Otay Lakes complex will enter a five-year post-fire monitoring and management period and therefore, will not be assessed for management level change. The most recent Otay Lakes (RECON 2025b) post-fire monitoring and management report (RECON 2025b) is included as Appendix B-2.

2 Reporting Summary

2.1 City Monitoring and Management

2.1.1 Qualitative Monitoring and Management Activities

Methods

During the reporting period, the City performed annual qualitative monitoring within all City-owned vernal pool complexes listed in the VPHCP, regardless of management level. The purpose of qualitative monitoring is to generate management recommendations that can be planned and conducted within an appropriate and feasible timeframe. Qualitative monitoring assessments are designed to evaluate overall disturbance of each complex and capture the following conditions and threats: fencing and signage, edge effects, fire and fire suppression, trespassing, topographic disturbance, invasive species, inundation, fairy shrimp presence, and other incidental sightings (refer to Chapter 4.1.3 in the VPMMP for further details regarding monitoring methods). Within City-owned vernal pool complexes, qualitative monitoring visits were recorded digitally through a data collection mobile application, Survey123. Similarly, and in response to qualitative monitoring recommendations, management activities were also recorded with the Survey123 form.

Results

Qualitative monitoring for the City-owned vernal pool complexes was generally conducted during the winter and spring months (February through May) of 2025. Management activities were conducted throughout the fiscal year, as feasible and in response to level of urgency (as determined by qualitative monitoring assessments). Monitoring and management activities performed at each complex are summarized in Table 2-1 which includes the total number of combined management visits recorded for each complex during FY 2025. The number of management visits for each complex is dependent on various factors such as complex size, presence of known threats, and available funding. Although not required, the City performed passive qualitative monitoring for privately owned pre-MSCP sites (“orphan sites”) in addition to monitoring of City-managed vernal pool complexes; monitoring results for these sites are summarized in Table 2-2. Appendix C-1 of this 2025 Annual Report includes datasheets detailing complex-specific monitoring and management information. Appendix D-1 includes photos captured during management visits and depicts activities such as weed control, fencing repair, and trash pickup.

2.1.2 Quantitative Monitoring and Management Level Assessment

Methods

Quantitative monitoring for vernal pool complexes includes assessments of the five covered plant species and two covered shrimp species. Monitoring requirements and sample size are based on management level assignment for each vernal pool complex, with greater level of effort associated with higher management levels. Monitoring of floral components within vernal pools includes quantitative data collection of nonnative and native species cover, including covered plant species. Cover estimates are based on a modified form of the California Native Plant Society plant cover methodology and are collected from pool margins to avoid disturbance (refer to Chapter 4.4.1 in the VPMMP for further details regarding the adaptation of California Native Plant Society cover classes). Additionally, cover estimates for native and nonnative species collected for vernal pool basins include a 6-meter buffer surrounding the individual surveyed basins. Quantitative monitoring results were recorded digitally through Survey123.

To monitor covered shrimp species, wet season and/or dry season sampling is used to estimate population density; these estimates are tracked over time to monitor changes in population size at sampled vernal pools (refer to Chapter 4.1.4 of the VPMMP for further details regarding quantitative monitoring methods for covered plant species and covered shrimp species).

Table 2-1. Qualitative Monitoring and Management Events for City of San Diego-managed Vernal Pool Complexes

Mgmt. Level ¹	Planning Unit	Complex Series	Vernal Pool Complex Name	Qualitative Monitoring Events Occurred ^{2,3}	Management Events Occurred ^{3,4}	Number of Management Events
Level 1	North	H 38	Carmel Mountain	Yes	Yes	16
		D 5-8	Carroll Canyon/Parkdale Carroll Canyon	Yes	Yes	6
		B 7-8	Crescent Heights	Yes	Yes	1
		H 1-10, 13-15, 18-26	Del Mar Mesa (City)	Yes	Yes	32
		H 39	Greystone Torrey Highlands	Yes	Yes	3
		B 7-8	Lopez Ridge (City)	Yes	Yes	1
		X 5	Nobel Drive	Yes	Yes	4
		I 12	Pueblo Lands (South)	Yes	Yes	2
	Central	U 19	Kearny Mesa Logistics	Yes	Yes	10
		Q 2	Mission Trails Regional Park (City)	Yes	Yes	6
		N 5-6	Montgomery Field	Yes	Yes	3
		KK 2	Pasatiempo	Yes	Yes	4
		N 7	Serra Mesa Library	Yes	Yes	5
	South	J 14	Anderprises (City)	Yes	Yes	1
		J 2	Cal Terraces (North) (City), Otay Mesa Road Parcels ⁵	Yes	Yes	10
		J 14	Cal Terraces (South)	Yes	Yes	4
		J 2	Clayton Parcel	Yes	Yes	5
		J 16-18	Goat Mesa (City)	Yes	Yes	9
		J 31	Hidden Trails	Yes	Yes	4
		MM 1	Marron Valley	Yes	Yes	4
		K 5	Otay Lakes ⁶	Yes	Yes	5
		R 1	Proctor Valley	Yes	Yes	16
		J 4-5	Robinhood Ridge	Yes	Yes	14
		J 32	West Otay B	Yes	Yes	5
		J 32	West Otay C	Yes	Yes	8
		J 16-18	Wruck Canyon	Yes	Yes	5
Level 2	Central	U 15	SANDER	Yes	Yes	8
Level 3	South	J 35	Brown Field ⁷	Yes	NN	0
		J 13 N	South Otay 1 acre (City)	Yes	Yes	2
		J 13 S	South Otay (City)	Yes	Yes	16
NA	North	C10-16	Winterwood (City) ^{8,9}	Yes	Yes	1
		H 42	Fairbanks Highlands	Yes	Yes	1
		H 41	Dormouse	Yes	Yes	9
		Q 4	Stowe	Yes	Yes	1
	Central	Q 2	Calle de Vida East	Yes	Yes	3
		Q 2	Calle de Vida West	Yes	Yes	2
		KK 1	Lake Murray	Yes	Yes	9
		QQ	Tecolote Canyon ⁸	Yes	Yes	2
	South	J 4-5	Attisha Trust	Yes	Yes	5
		J 37	Ocean View Hills Pkwy ¹⁰	Yes	Yes	3
		J 37	Topsail ¹⁰	Yes	Yes	2
		NC	Kelton ⁸	No	Yes	1
		M 5	Seabird Way	Yes	Yes	3

¹ Based on existing management and monitoring levels developed during baseline surveys.

² Per VPMMP, all levels require three visits to occur annually during the wet season.

³ Details regarding monitoring observations and management activities are provided in Appendix B-1. Management activities were conducted as needed within each vernal pool complex.

⁴ Key to acronyms used: **NN** = Not Needed; **NA** = Not Applicable

⁵ A portion of the vernal pool complex is under ownership by Tripoint.

⁶ Vernal pool complex was impacted by wildfire.

⁷ Site-specific restoration plan or management plan applies.

⁸ No management is required per the VPMMP.

⁹ A portion of the vernal pool complex is under ownership by San Diego Unified School District.

¹⁰ Newly identified vernal pool complex.

Table 2-2. Qualitative Monitoring and Management Events for Private Conserved Pre-MSCP Vernal Pool Complexes

Mgmt. Level	Planning Unit	Complex Series	Vernal Pool Complex Name	Passive Qualitative Monitoring Occurred ^{1, 2}
NA	North	C 17-18	Fieldstone	Yes
		H 33	East Ocean Air Drive	Yes
		I 1	Arjons	Yes
		I 6 B	Ford Leasing (Bob Baker)	Yes
		I 6 C	Facilities Development (Eastgate Miramar Associates)	Yes
	South	J 27	Empire Center	Yes

¹ Details regarding monitoring observations and management activities are provided in Appendix B-1.

² During the reporting period, right-of-entry permits to access these sites were not available to the City; therefore, City staff were only able to view the properties from the public right-of-way to conduct qualitative monitoring visits.

Results

Quantitative monitoring for City-owned vernal pool complexes was generally conducted during the spring months (February through June) of 2025. Vernal pool-specific monitoring datasheets are attached as Appendix C-2 and include comprehensive floral inventories and cover estimates for each surveyed vernal pool. Vernal pool sampling size and individual vernal pool selection (for monitoring) within each vernal pool complex are summarized in Table 2-3. Fairy shrimp monitoring was not warranted in FY 2025; therefore, no fairy shrimp monitoring results are included in this Annual Report. Generally, pool selection was determined by management level requirements and influenced by presence of focal species recorded during baseline surveys. Per the VPMMP, sample size is based on management and monitoring levels. For Level 1, 10% of occupied pools in each complex are sampled, or if a complex has less than 10 pools for each covered plant species, at least one pool for each covered species known to occur is sampled. For Levels 2 and 3, all pools in the complex with covered plant species are sampled. For complexes where newly discovered vernal pools have been identified, sample sizes will be updated when three years of data has been collected.

Table 2-4 summarizes cover class estimates for each focal species and nonnative species cover recorded in FY 2025, while Table 2-5 summarizes the three-year average change from baseline conditions (illustrated in a graduated color scale). Additionally, photos of surveyed vernal pool basins, photographed during quantitative surveys, are attached as Appendix D-2.

During FY 2025, no planning units received adequate rainfall (i.e., at least 55 percent [%] of the historic average as defined in the VPHCP); therefore, per the VPMMP, a management level change analysis for covered focal species was not conducted in this 2025 Annual Report. Rather, this Annual Report analyzes potential management level changes based on nonnative species levels. Yearly rainfall measured from July 2024 through June 2025 was compared to the historic average total annual rainfall (30 years) of two weather stations: Montgomery Field and Brown Field. Montgomery Field weather station is representative of rainfall across the north and central VPHCP planning units, while Brown Field weather station is representative of rainfall across the south VPHCP planning unit. In 2025, yearly rainfall measurements were less than at least 55% of the average rainfall benchmark throughout the north, central, and south planning units. Brown Field weather station recorded approximately 5.02 inches of rainfall in 2025, compared to the historic average of 9.60 inches and Montgomery Field weather station recorded approximately 5.32 inches of rainfall in 2025, compared to the historic average of 11.40 inches. A running annual rainfall total is detailed in Table 2-6.

Although no planning units received adequate rainfall in FY 2025, this Annual Report offers an analysis of covered focal species and nonnative species change across the current reporting year and the two most recent qualifying years for all planning units (2023, 2024, and 2025). Table 2-7 summarizes the average changes observed across all vernal pool complexes in FY 2025.

In the time since baseline conditions were documented (2003) and Year 7 of VPHCP implementation (2025), focal species have been detected at various individual vernal pools across City-owned vernal pool complexes where they were not previously detected; this is shown in Table 2-3. The City intends to work with the Wildlife Agencies to incorporate newly detected focal species locations into the baseline conditions that drive the VPMMP requirements as well as discuss the potential to adopt an acclimated baseline condition for vernal pool complexes where baseline studies coincided with the early implementation period of restoration. Newly introduced vernal pools and complexes discussed in Section 1.6 did not receive quantitative monitoring in FY 2025 and are, therefore, not included in the data summary tables. In addition, qualitative assessments of these newly observed vernal pools and complexes did not warrant quantitative monitoring of covered shrimp species. These new pools and complexes are anticipated to be included in the FY 2026 management and monitoring effort as funding allows.

Mgmt. Level	Planning Unit	Vernal Pool Complex Name - Complex Series Vernal Pool ID ¹	Total Number of Conserved Pools within Complex ² (Sample Size) ³	Total Number of Conserved Pools Occupied by Focal Species (Pools Occupied by Focal Species in Sample Size) ^{3,4} ✓ = Presence of Focal Species at Baseline Ω = Presence of Focal Species Detected at Acclimated Baseline							
				PONU	POAB	NAFO	ERAR	ORCA	RFS ⁵	SDFS ⁵	
Level 1	North	Carroll Canyon/Parkdale Carroll Canyon - D 5-8	116 (7)	0 (0)	42 (6)	2 (2)	65 (7)	0 (0)	0 (-)	5 (-)	
		Pool 1077		-	✓	✓	✓	-	-	-	
		Pool 1092		-	✓	Ω	✓	-	-	✓	
		Pool 1096		-	✓	-	✓	-	-	-	
		Pool 1109		-	✓	-	✓	-	-	✓	
		Pool 1740		-	✓	-	✓	-	-	-	
		Pool 1743		-	-	-	✓	-	-	-	
		Pool 1746		-	✓	-	✓	-	-	✓	
		Del Mar Mesa (City) - H 1-10, 13-15, 18-26	92 (6)	0 (0)	4 (2)	1 (1)	50 (6)	0 (0)	0 (-)	8 (-)	
		Pool 1255		-	-	-	✓	-	-	-	
		Pool 1260		-	Ω	Ω	✓	-	-	-	
		Pool 1264		-	-	-	✓	-	-	-	
		Pool 1272		-	-	-	✓	-	-	-	
		Pool 2441		-	-	-	✓	-	-	-	
		Pool 2468		-	-	-	✓	-	-	-	
		Greystone Torrey Highlands - H 39	26 (1) ¹	0 (0)	25 (1) ¹	0 (0)	17 (1) ¹	0 (0)	0 (-)	0 (-)	
		Pool 1177		-	✓	-	✓	-	-	Ω	
		Pool 1180		-	✓	-	-	-	-	-	
		Pool 1188		-	✓	-	✓	-	-	-	
		Lopez Ridge (City) - B 7-8	10 (2)	0 (0)	10 (2)	0 (0)	1 (1)	0 (0)	0 (-)	2 (-)	
	Pool 706		-	✓	-	✓	-	-	-		
	Pool 712		-	✓	-	-	-	-	-		
	Central	Kearny Mesa Logistics U 19	28(3)	0 (0)	1 (1)	0 (0)	2 (1)	0 (0)	0 (-)	6 (-)	
		Pool 771		-	✓	-	-	-	-	✓	
		Pool 778		-	-	-	✓	-	-	✓	
		Pool 790		-	-	-	✓	-	-	-	
		Montgomery Field - N 5-6	333 (13)	0 (0)	129 (13)	0 (0)	0 (0)	0 (0)	0 (-)	45 (-)	
		Pool 4256		-	✓	-	-	-	-	✓	
		Pool 4596		-	✓	-	-	-	-	✓	
		Pool 5352		-	✓	-	-	-	-	-	
		Pool 5355		-	✓	-	-	-	-	-	
		Pool 5356		-	✓	-	-	-	-	-	
		Pool 5358		-	✓	-	-	-	-	-	
		Pool 5363		-	✓	-	-	-	-	-	
		Pool 5369		-	✓	-	-	-	-	-	
		Pool 5371		-	✓	-	-	-	-	-	
		Pool 5388		-	✓	-	-	-	-	-	
		Pool 5423		-	✓	-	-	-	-	-	
		Pool 6351		-	✓	-	-	-	-	-	
		Pool 6384		-	✓	-	-	-	-	-	
		South	Cal Terraces (North) (City), Otay Mesa Road Parcels - J 2	331 (29) ¹	356 (29) ¹	0 (0)	83 (13) ¹	300 (29) ¹	53 (11)	93 (-)	209 (-)
			Pool 42**		✓	-	✓	✓	-	-	✓
	Pool 51**			✓	-	✓	✓	✓	-	✓	
	Pool 67			✓	-	-	✓	-	-	-	
	Pool 78			✓	-	-	✓	✓	✓	✓	
	Pool 89			✓	-	-	✓	-	-	✓	
	Pool 96			✓	-	✓	✓	-	-	✓	
	Pool 100			✓	-	✓	✓	-	-	✓	
	Pool 295			✓	-	-	✓	-	-	✓	
	Pool 301			✓	-	-	✓	-	✓	✓	
Pool 445			✓	-	Ω	✓	Ω	✓	✓		
Pool 447			✓	-	✓	✓	-	-	✓		
Pool 449			✓	-	-	✓	-	-	✓		
Pool 450			✓	-	-	✓	-	-	-		
Pool 451			✓	-	-	✓	-	✓	✓		
Pool 452			✓	-	-	✓	-	✓	✓		
Pool 459			✓	-	✓	✓	-	✓	✓		
Pool 464			✓	-	-	✓	-	✓	-		
Pool 471			✓	-	✓	✓	✓	✓	✓		
Pool 473			✓	-	✓	✓	-	✓	✓		
Pool 483			✓	-	-	✓	✓	-	✓		
Pool 484			✓	-	-	✓	✓	✓	✓		
Pool 490			✓	-	✓	✓	✓	✓	✓		
Pool 502			✓	-	✓	✓	✓	✓	✓		
Pool 509			✓	-	✓	✓	✓	✓	✓		
Pool 591			✓	-	-	✓	✓	-	✓		
Pool 1310			✓	-	✓	✓	✓	-	✓		
Pool 1321			✓	-	-	✓	-	✓	✓		
Pool 1713			✓	-	-	✓	-	✓	✓		
Pool 1724			✓	-	-	✓	-	✓	✓		
Total Number of Conserved Pools Occupied by Focal Species											

Table 2-3. Quantitative Monitoring Basins for City of San Diego-managed Vernal Pool Complexes by Management Level

		Vernal Pool Complex Name - Complex Series Vernal Pool ID ¹	Total Number of Conserved Pools within Complex ² (Sample Size) ³	(Pools Occupied by Focal Species in Sample Size) ^{3,4} ✓ = Presence of Focal Species at Baseline Ω = Presence of Focal Species Detected at Acclimated Baseline					
				PONU	POAB	NAFO	ERAR	ORCA	RFS ⁵
				63 (7)	0 (0)	10 (5)	55 (7)	6 (2)	26 (-)
Level 1	South	Cal Terraces (South) - J 14	73 (7)	63 (7)	0 (0)	10 (5)	55 (7)	6 (2)	26 (-)
		Pool 2022		✓	-	-	✓	Ω	✓
		Pool 2025		✓	-	✓	✓	-	✓
		Pool 2039		✓	-	Ω	✓	-	✓
		Pool 2043		✓	-	Ω	✓	✓	✓
		Pool 2044		✓	-	Ω	✓	-	✓
		Pool 2185		✓	-	-	✓	-	✓
		Pool 2189		✓	-	Ω	✓	-	✓
		Nobel Drive - X 5	11 (1)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (-)
		Pool 666		-	Ω	✓	-	-	✓
		Clayton Parcel - J 2	35 (1)	1 (1)	0 (0)	0 (0)	1 (1)	0 (0)	0 (-)
		Pool 876		Ω	-	-	✓	-	-
		Goat Mesa (City) - J 16-18	15 (2)	0 (0)	0 (0)	3 (3)	4 (2)	0 (0)	1 (-)
		Pool 2642		-	-	Ω	✓	-	-
		Otay Lakes - K 5	85 (5)	0 (0)	0 (0)	2 (1)	46 (5)	0 (0)	0 (-)
		Pool 208		-	-	-	✓	-	-
		Pool 656		-	-	-	✓	-	-
		Pool 891		-	-	-	✓	-	-
		Pool 892		-	-	✓	✓	-	-
		Pool 1801		-	-	-	✓	-	-
		West Otay C J 32	7 (1)	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (-)
		Pool 1545		Ω	-	-	✓	-	-
		Robinhood Ridge J 4-5	83 (5)	19 (3)	0 (0)	4 (4)	46 (5)	0 (0)	6 (-)
		Pool 1580		-	-	Ω	✓	-	-
		Pool 1598		Ω	-	Ω	✓	-	✓
		Pool 1668		✓	-	✓	✓	-	✓
		Pool 1684		✓	-	-	✓	-	✓
		Pool 1710		✓	-	✓	✓	-	✓
Level 3	South	South Otay 1 acre (City) - J 13 N	17 (2)	0 (0)	0 (0)	1 (1)	1 (1)	2 (2)	0 (-)
		Pool 1235		Ω	-	✓	Ω	✓	-
		Pool 2339		Ω	-	-	✓	Ω	-

¹ Double asterisk (**) in vernal pool ID indicates vernal pool is under ownership of Tripoint.

² Based on existing management and monitoring levels developed during baseline surveys.

³ Per VPMMP, sample size is based on management and monitoring levels; **Level 1**: 10% of occupied pools in each complex OR if complex has <10 pools for each covered plant species, survey at least one pool for each covered species known to occur; **Level 2 and 3**: All pools in complex with covered plant species. For complexes where newly discovered vernal pools have been identified, sample sizes will be updated when three years of data has been collected; these instances are identified by an exclamation point (!).

⁴ Species acronyms are defined as follows: ERAR = *Eryngium aristulatum* var. *parishii*, NAFO = *Navarretia fossalis*, ORCA = *Orcuttia californica*, POAB = *Pogogyne abramsii*, PONU = *Pogogyne nudiuscula*, RSF = Riverside fairy shrimp, SDFS = San Diego fairy shrimp.

⁵ Fairy shrimp density surveys are conducted when warranted based on qualitative survey observations, as discussed in the VPMMP.

Table 2-4. 2025 Focal Plant and Nonnative Species Cover Classes

Mgmt. Level ¹	Planning Unit	Vernal Pool Complex Name - Complex Series Vernal Pool ID ²	Focal Plant Species Cover Classes ³					Nonnative Species Cover Class	
			PONU	POAB	NAFO	ERAR	ORCA		
Cover classes are adapted from California Native Plant Society plant cover methodology and are defined as a range of estimated percentage of plant cover. The cover classes are as follows: 1 = 1-10%, 2 = >10–25%, 3 = >25–50%, 4 = >50%									
Level 1	North	Carroll Canyon/Parkdale Carroll Canyon - D 5-8							
		Pool 1077		2	1	2		1	
		Pool 1092		2	1	1		1	
		Pool 1096		1		3		1	
		Pool 1109		1		2		1	
		Pool 1740				1		1	
		Pool 1743				1		2	
		Pool 1746		1		3		1	
		Del Mar Mesa (City) - H 1-10, 13-15, 18-26							
		Pool 1255				3		1	
		Pool 1260		1		3		1	
		Pool 1264				3		1	
		Pool 1272				3		1	
		Pool 2441 [†]				1		1	
		Pool 2468				1		1	
		Greystone Torrey Highlands - H 39							
		Pool 1177		2		2		2	
		Pool 1180 [†]		2				1	
		Pool 1188 [†]		3		1		1	
		Lopez Ridge (City) - B 7-8							
		Pool 706		2				1	
		Pool 712		1				1	
		Central	Kearny Mesa Logistics - U 19						
			Pool 771		1		1		1
			Pool 778						3
			Pool 790				1		4
			Montgomery Field - N 5-6						
			Pool 4256		1				1
	Pool 4596			1				1	
	Pool 5352							1	
	Pool 5355							1	
	Pool 5356			1				1	
	Pool 5358			1					
	Pool 5363			1				1	
	Pool 5369							1	
	Pool 5371			1				1	
	Pool 5388			1				1	
	Pool 5423			1				1	
	Pool 6351			1				1	
	Pool 6384			2				1	
	South		Cal Terraces (North) (City), Otay Mesa Road Parcels - J 2						
			Pool 42 ^{**}		1				1
			Pool 51 ^{**}	1		1	1		2
			Pool 67	1			1		3
			Pool 78	1			2		3
			Pool 89	1			2		3
			Pool 96	1			3		1
			Pool 100				2		1
	Pool 295					1		2	

Table 2-4. 2025 Focal Plant and Nonnative Species Cover Classes

Mgmt. Level ¹	Planning Unit	Vernal Pool Complex Name - Complex Series Vernal Pool ID ²	Focal Plant Species Cover Classes ³					Nonnative Species Cover Class
			PONU	POAB	NAFO	ERAR	ORCA	
Cover classes are adapted from California Native Plant Society plant cover methodology and are defined as a range of estimated percentage of plant cover. The cover classes are as follows: 1 = 1-10%, 2 = >10–25%, 3 = >25–50%, 4 = >50%								
Level 1	South	Pool 301	3			1		2
		Pool 445	3			1		1
		Pool 447				1		1
		Pool 449	2			1		1
		Pool 450	1			3		2
		Pool 451				1		2
		Pool 452	1			1		1
		Pool 459				1		1
		Pool 464	1			1		2
		Pool 471	1			1		2
		Pool 473	2			1		1
		Pool 483				1		1
		Pool 484	1			1		1
		Pool 490	1			1		1
		Pool 502		1		1		1
		Pool 509	1			1		1
		Pool 591	1			2		1
		Pool 1310	1			1		1
		Pool 1321		1		1		1
		Pool 1713	1			2		1
		Pool 1724				1		1
		Cal Terraces (South) - J 14						
		Pool 2022				2		1
		Pool 2025	1			1		2
		Pool 2039	3			1		1
		Pool 2043				1		1
		Pool 2044	1			1		1
		Pool 2185	3			1		1
		Pool 2189	2			1		3
		Nobel Drive - X 5						
		Pool 666		1				1
		Clayton Parcel - J 2						
		Pool 876	2			1		1
		Goat Mesa (City) - J 16-18						
		Pool 2642				1		1
		Otay Lakes - K 5						
		Pool 208				1		4
		Pool 656				1		3
		Pool 891				1		1
		Pool 892				1		2
		Pool 1801				1		1
		West Otay C J 32						
		Pool 1545	1			1		1
		Robinhood Ridge J 4-5						
		Pool 1580				1		2
		Pool 1598	1			1		1
		Pool 1668				1		2
		Pool 1684				1		2
		Pool 1710	1			3		1

Table 2-4. 2025 Focal Plant and Nonnative Species Cover Classes

Mgmt. Level ¹	Planning Unit	Vernal Pool Complex Name - Complex Series Vernal Pool ID ²	Focal Plant Species Cover Classes ³					Nonnative Species Cover Class
			PONU	POAB	NAFO	ERAR	ORCA	
Cover classes are adapted from California Native Plant Society plant cover methodology and are defined as a range of estimated percentage of plant cover. The cover classes are as follows: 1 = 1-10%, 2 = >10–25%, 3 = >25–50%, 4 = >50%								
Level 3	South	South Otay 1 acre (City) - J 13 N						
		Pool 1235	1			1		1
		Pool 2339	1			1		1

¹ Level 3 vernal pool complexes are in Year 3 of the 5-year minimum period required prior to VPMMP standards assesment

² Double asterisk (**) in vernal pool ID indicates vernal pool is under ownership of Tripoint. For complexes where newly discovered vernal pools have been identified, sample sizes will be updated when three years of data has been collected; these instances are identified by an exclamation point (!).

³ Species acronyms are defined as follows: ERAR = *Eryngium aristulatum* var. *parishii*, NAFO = *Navarretia fossalis*, ORCA = *Orcuttia californica*, POAB = *Pogogyne abramsii*, PONU = *Pogogyne nudiuscula*, RSF = Riverside fairy shrimp, SDFS = San Diego fairy shrimp.

Table 2-5. Average Change in Focal Plant and Nonnative Species Cover Classes and Fairy Shrimp Density from Baseline

Mgmt. Level ¹	Planning Unit ²	Vernal Pool Complex Name - Complex Series Vernal Pool ID ^{3,4}	Average Focal Plant Species Cover Classes					Average Fairy Shrimp Density ⁵		Average Nonnative Species Cover Class ⁶	Vernal Pool Maximum Depth ⁷	
			PONU	POAB	NAFO	ERAR	ORCA	RFS	SDFS			
Cover classes are adapted from California Native Plant Society (CNPS) plant cover methodology and are defined as a range of estimated percentage of plant cover. The cover classes are as follows: 1 = 1–10%, 2 = >10–25%, 3 = >25–50%, 4 = >50%. Color coding: Color scale indicates the following: Blue cells = increase in cover class, White cells = no change in cover class, and Red cells = decrease in cover class; color coding is reversed for nonnative cover classes (e.g., an increase in nonnative cover is denoted by a red cell). Key to Symbolology: dash (-) = focal species not detected during baseline; forward slash (/) = vernal pool resource not evaluated.												
Level 1	North	Carroll Canyon/Parkdale Carroll Canyon - D 5-8										
		Pool 1077	0.0	1.0	1.0	1.3	0.0	/	/	0.0	/	
		Pool 1092	0.0	0.3	1.0	0.3	0.0	/	/	0.0	/	
		Pool 1096	0.0	0.0	0.0	1.7	0.0	/	/	0.0	/	
		Pool 1109	0.0	0.0	0.0	0.3	0.0	/	/	0.0	/	
		Pool 1740	0.0	0.3	0.0	0.0	0.0	/	/	0.3	/	
		Pool 1743	0.0	0.0	0.0	0.0	0.0	/	/	1.3	/	
		Pool 1746	0.0	0.0	0.0	1.7	0.0	/	/	0.0	/	
		Del Mar Mesa (City) - H 1-10, 13-15, 18-26										
		Pool 1255	0.0	0.0	0.0	1.0	0.0	/	/	0.0	/	
		Pool 1260	0.0	1.0	0.0	0.0	0.0	/	/	0.0	/	
		Pool 1264	0.0	0.0	0.0	1.0	0.0	/	/	0.0	/	
		Pool 1272	0.0	0.0	0.0	2.0	0.0	/	/	0.0	/	
		Pool 2441 ¹	0.0	0.0	0.0	0.0	0.0	/	/	0.0	/	
		Pool 2468	0.0	0.0	0.0	0.0	0.0	/	/	1.0	/	
		Greystone Torrey Highlands - H 39										
		Pool 1177	0.0	1.0	0.0	1.0	0.0	/	/	0.7	/	
		Pool 1180 ¹	0.0	0.5	0.0	0.0	0.0	/	/	0.0	/	
		Pool 1188 ¹	0.0	1.0	0.0	1.0	0.0	/	/	0.0	/	
		Lopez Ridge (City) - B 7-8										
		Pool 706	0.0	1.0	0.0	-1.0	0.0	/	/	0.0	/	
		Pool 712	0.0	0.3	0.0	0.0	0.0	/	/	0.0	/	
		Central	Kearny Mesa Logistics - U 19									
			Pool 771	0.0	0.0	0.0	0.3	0.0	/	/	-1.5	
			Pool 778	0.0	0.0	0.0	-1.0	0.0	/	/	0.0	
			Pool 790	0.0	0.0	0.0	0.0	0.0	/	/	1.0	
			Montgomery Field - N 5-6									
			Pool 4256	0.0	0.0	0.0	0.0	0.0	/	/	0.0	/
	Pool 4596		0.0	0.0	0.0	0.0	0.0	/	/	-1.0	/	
	Pool 5352		0.0	-0.3	0.0	0.0	0.0	/	/	-1.0	/	
	Pool 5355		0.0	-0.3	0.0	0.0	0.0	/	/	-1.0	/	
	Pool 5356		0.0	0.0	0.0	0.0	0.0	/	/	-2.7	/	
	Pool 5358		0.0	-1.7	0.0	0.0	0.0	/	/	-2.3	/	
	Pool 5363		0.0	-2.0	0.0	0.0	0.0	/	/	-1.7	/	
	Pool 5369		0.0	-2.3	0.0	0.0	0.0	/	/	-2.0	/	
	Pool 5371		0.0	-0.7	0.0	0.0	0.0	/	/	-2.3	/	
	Pool 5388		0.0	0.0	0.0	0.0	0.0	/	/	-1.7	/	
	Pool 5423		0.0	0.0	0.0	0.0	0.0	/	/	-2.0	/	
	Pool 6351		0.0	0.0	0.0	0.0	0.0	/	/	0.0	/	
	Pool 6384		0.0	-0.3	0.0	0.0	0.0	/	/	-2.0	/	
	South		Cal Terraces (North) (City), Otay Mesa Road Parcels - J 2									
			Pool 42**	-3.0	0.0	-0.3	-2.0	0.0	/	/	0.0	/
			Pool 51**	-2.0	0.0	-0.3	-2.0	-1.0	/	/	2.0	/
			Pool 67	-3.0	0.0	0.0	0.0	0.0	/	/	1.0	/
			Pool 78	-1.0	0.0	0.0	-0.7	-1.0	/	/	0.7	/
			Pool 89	-2.7	0.0	0.0	0.0	0.0	/	/	1.0	/
			Pool 96	-0.7	0.0	-1.0	-1.0	0.0	/	/	0.0	/
			Pool 100	-2.0	0.0	-0.3	-1.0	0.0	/	/	0.0	/
			Pool 295	-2.0	0.0	0.0	-2.0	0.0	/	/	0.3	/
			Pool 301	0.0	0.0	0.0	-2.3	0.0	/	/	0.3	/
			Pool 445	0.0	0.0	0.3	-3.0	0.3	/	/	0.0	/
			Pool 447	-2.0	0.0	-0.7	-2.7	0.0	/	/	0.0	/
			Pool 449	-0.7	0.0	0.0	-1.7	0.0	/	/	0.7	/
			Pool 450	-2.0	0.0	0.0	0.3	0.0	/	/	0.3	/
		Pool 451	-0.3	0.0	0.0	-1.0	0.0	/	/	-1.3	/	
		Pool 452	-1.0	0.0	0.0	-2.3	0.0	/	/	0.0	/	
		Pool 459	-1.7	0.0	-1.0	-2.0	0.0	/	/	0.0	/	

Table 2-5. Average Change in Focal Plant and Nonnative Species Cover Classes and Fairy Shrimp Density from Baseline

Mgmt. Level ¹	Planning Unit ²	Vernal Pool Complex Name - Complex Series Vernal Pool ID ^{3,4}	Average Focal Plant Species Cover Classes					Average Fairy Shrimp Density ⁵		Average Nonnative Species Cover Class ⁶	Vernal Pool Maximum Depth ⁷	
			PONU	POAB	NAFO	ERAR	ORCA	RFS	SDFS			
Cover classes are adapted from California Native Plant Society (CNPS) plant cover methodology and are defined as a range of estimated percentage of plant cover. The cover classes are as follows: 1 = 1–10%, 2 = >10–25%, 3 = >25–50%, 4 = >50%.												
Color coding: Color scale indicates the following: Blue cells = increase in cover class, White cells = no change in cover class, and Red cells = decrease in cover class; color coding is reversed for nonnative cover classes (e.g., an increase in nonnative cover is denoted by a red cell).												
Key to Symbolology: dash (-) = focal species not detected during baseline; forward slash (/) = vernal pool resource not evaluated.												
Level 1	South	Pool 464	-1.0	0.0	0.0	-1.0	0.0	/	/	-2.0	/	
		Pool 471	-1.3	0.0	-0.3	-1.7	-1.0	/	/	0.3	/	
		Pool 473	0.0	0.0	-2.0	-1.7	0.0	/	/	1.0	/	
		Pool 483	-1.7	0.0	0.0	-1.0	-0.3	/	/	0.0	/	
		Pool 484	-1.0	0.0	0.0	-0.7	-1.0	/	/	0.0	/	
		Pool 490	-1.0	0.0	-1.0	-0.7	-1.3	/	/	0.0	/	
		Pool 502	-1.3	0.3	-0.3	-1.0	-1.0	/	/	0.0	/	
		Pool 509	-1.0	0.0	-0.3	-1.7	0.3	/	/	0.0	/	
		Pool 591	0.0	0.0	0.0	-0.3	-1.7	/	/	0.0	/	
		Pool 1310	-0.3	0.0	0.7	-0.7	-0.3	/	/	0.0	/	
		Pool 1321	1.3	0.3	0.0	0.0	0.0	/	/	-0.3	/	
		Pool 1713	0.0	0.0	0.0	1.3	0.0	/	/	0.0	/	
		Pool 1724	-1.0	0.0	0.0	-2.0	0.0	/	/	0.7	/	
		Cal Terraces (South) - J 14										
		Pool 2022	-1.0	0.0	0.0	1.3	0.0	/	/	0.3	/	
		Pool 2025	0.0	0.0	0.0	0.0	0.0	/	/	1.0	/	
		Pool 2039	2.3	0.0	0.7	-0.7	0.0	/	/	0.0	/	
		Pool 2043	-1.0	0.0	0.3	0.0	0.0	/	/	0.0	/	
		Pool 2044	0.0	0.0	0.7	0.0	0.0	/	/	0.0	/	
		Pool 2185	-0.3	0.0	0.0	0.3	0.0	/	/	0.0	/	
		Pool 2189	1.0	0.0	0.7	0.0	0.0	/	/	0.7	/	
		Nobel Drive - X 5										
		Pool 666	0.0	0.7	0.7	0.0	0.0	/	/	0.7	/	
		Clayton Parcel - J 2										
		Pool 876	2.0	0.0	0.0	-0.3	0.0	/	/	-1.7	/	
		Goat Mesa (City) - J 16-18										
		Pool 2642	0.0	0.0	0.7	2.0	0.0	/	/	-1.0	/	
		Otay Lakes - K 5										
		Pool 208	0.0	0.0	0.0	0.0	0.0	/	/	2.0	/	
		Pool 656	0.0	0.0	0.0	0.0	0.0	/	/	0.7	/	
		Pool 891	0.0	0.0	0.0	-0.7	0.0	/	/	0.7	/	
		Pool 892	0.0	0.0	-1.0	0.3	0.0	/	/	1.3	/	
		Pool 1801	0.0	0.0	0.0	0.0	0.0	/	/	0.3	/	
		West Otay C J 32										
		Pool 1545	1.7	0.0	0.0	0.3	0.0	/	/	0.3	/	
		Robinhood Ridge J 4-5										
		Pool 1580	0.0	0.0	0.7	0.0	0.0	/	/	1.3	/	
		Pool 1598	0.7	0.0	0.0	-1.3	0.0	/	/	0.7	/	
		Pool 1668	-0.3	0.0	0.7	-1.3	0.0	/	/	0.7	/	
		Pool 1684	-1.0	0.0	0.0	0.0	0.0	/	/	0.3	/	
		Pool 1710	-0.7	0.0	0.0	-1.3	0.0	/	/	-1.0	/	
Level 3	South	South Otay 1 acre (City) - J 13 N										
		Pool 1235	0.7	0.0	0.7	0.7	-0.3	/	/	-2.7	/	
		Pool 2339	0.7	0.0	0.0	0.0	0.7	/	/	-2.7	/	

¹ Level 3 vernal pool complexes are in Year 5 of the 5-year minimum period required prior to VPMP standards assessment; however, a management level change cannot be assessed during years where the rainfall threshold is not met.

² Asterisk (*) indicates rainfall within planning unit during reporting period is adequate (55% of average rainfall) for VPMP standards assessment of focal species; triggers associated with change in cover of nonnative species are applicable regardless of rainfall.

³ Double asterisk (**) in vernal pool ID indicates vernal pool is under ownership of Tripoint.

⁴ For complexes where newly discovered vernal pools have been identified, sample sizes will be updated when three years of data has been collected; these instances are identified by an exclamation point (!).

⁵ Fairy shrimp density surveys and topographic disturbance assessments are conducted when warranted based on qualitative survey observations, as discussed in the VPMP.

⁶ Nonnative cover was not recorded during baseline studies; therefore, nonnative cover observed during the first year of VPHCP monitoring (2018) is considered "baseline conditions," per guidance in the VPMP. The one exception is Kearny Mesa Logistics, for which baseline data collected in 2003 was used.

⁷ Baseline hydrologic surveys have not been conducted as of this monitoring period. When baseline is established, maximum depth of ponding will be measured and evaluated.

Table 2-6. 2019–2025 Annual Rainfall Totals

Planning Unit	Weather Station	Mean Rainfall (30 Years) ¹	55% of Normal Rainfall ¹	Total Rainfall by Year ^{1,2}						
				2019	2020	2021	2022	2023	2024	2025
North	Montgomery Field	11.40	6.30	13.50	12.88	5.93	6.88	16.57	14.80	5.32
Central										
South	Brown Field	9.60	5.30	12.07	17.54	6.03	9.68	16.60	14.44	5.02*

Source: National Oceanic and Atmospheric Administration (NOAA) Climate Data Online (NOAA 2019–2025).

¹ Rainfall data is presented in inches for the appropriate region for the period of July through June, per the Hydrogeomorphic Model approach.

² Red cells indicate yearly totals did not meet 55% of normal rainfall.

Asterisk (*) = Rain gauge data for Brown Field was incomplete; therefore, data set was supplemented with the use of a nearby rain gauge in Chula Vista for the month of February 2025.

Based on the data available for analysis in 2025, no vernal pool complexes are subject to management level changes. One vernal pool complex, Otay Lakes, experienced wildfire (Border 2 Fire) in January 2025. A 5-year post-fire adaptive management plan will be implemented for the Otay Lakes vernal pool complex. Following the 5-year plan and with approval from the Wildlife Agencies, it is anticipated that the complex will return to Management Level 1.

Quantitative topographic disturbance assessments (referenced in Table 2-5) were not conducted during the 2025 monitoring period due to the absence of baseline hydrologic data and are discussed in further detail in Section 2.1.3 of this 2025 Annual Report. However, minor topographic disturbance is assessed qualitatively and addressed during management activities, as needed.

2.1.3 Baseline Hydrologic Surveys

Baseline hydrologic surveys have not been conducted as of this monitoring period. Per the VPMMP, baseline surveys shall be conducted for the City-owned vernal pool basins and privately owned vernal pool basins subject to the VPHCP management and monitoring criteria, regardless of management level. Baseline hydrologic data will serve as a benchmark from which topographic and hydrologic disturbance can be assessed (refer to Chapter 4.1.2 of the VPMMP for further details regarding baseline hydrologic surveys). The City gained approvals in 2024 from the Wildlife Agencies to utilize remote sensing technology (i.e., light detection and ranging [LiDAR]) to obtain the required hydrologic data for City-owned vernal pool basins. In an effort to minimize costs and support hands on learning opportunities for local college students, the City is collaborating with Southwestern Community College (Southwestern) to obtain the LiDAR data via unmanned aircraft system (UAS). The City is in the planning stages for the right of entry permits required for Southwestern staff and students to access City property. The first UAS flights are expected to take place in FY 2027.

2.2 Private Property Management and Monitoring

As discussed in Section 1.4 of this 2025 Annual Report, the City's responsibilities under the VPHCP include enforcement of management and monitoring of vernal pool complexes located within private property, consistent with the VPHCP. During FY 2025, most projects occurring on private property within VPHCP jurisdiction did not require long-term management and monitoring; rather, most private projects were still in the implementation stage of mitigation programs. One private project, Handler, was in the monitoring phase. Private property management and monitoring activities for projects predating VPHCP implementation are outlined within site-specific plans. Appendix E-1 details site-specific activities outlined within the associated plans, including requirements for maintenance, monitoring, success criteria, and reporting. Project-specific associated plans include further details regarding maintenance and monitoring requirements for each privately owned vernal pool complex. In FY 2025, the City requested private project mitigation management and monitoring report updates be provided to the City for inclusion in VPHCP annual reporting. One report was received, the Handler project, and is included as Appendix E-2. Report submittals for FY 2025 and future reporting periods would be made available upon request to the City Planning Department at biodiversesd@sanidiego.gov.

2.3 Take Summary

A yearly running total of authorized take associated with covered projects and covered activities is summarized in Table 2-8, which details the impacts to vernal pool habitat (including number of basins and total acreage), impacts to covered species, and associated mitigation activities. During the reporting period, incidental take for the Candlelight project was reported; the biological opinion for this project is included as Appendix F. Additionally, the San Diego Airparks project began construction; however, no vernal pools were impacted by the project. Therefore, no take for vernal pool basins or VPHCP focal species was reported.

Table 2-7. Proposed Management Level Change

Planning Unit ¹	Vernal Pool Complex Name - Complex Series	Proposed Management Level Change ²	Average Change in Plant Species Cover Classes					Fairy Shrimp Density ³		Average Nonnative Species Cover Class (2023–2025) ⁴	Change in Hydrologic Function ⁵
			PONU	POAB	NAFO	ERAR	ORCA	RFS	SDFS		
North	Carroll Canyon	NC	0.0	0.2	0.3	0.8	0.0	/	/	0.2	/
	Del Mar Mesa (City)	NC	0.0	0.2	0.0	0.7	0.0	/	/	0.2	/
	Greystone Torrey Highlands	NC	0.0	0.8	0.0	0.7	0.0	/	/	0.2	/
	Lopez Ridge (City)	NC	0.0	0.7	0.0	(0.5)	0.0	/	/	0.0	/
Central	Kearny Mesa Logistics	NC	0.0	0.0	0.0	(0.2)	0.0	/	/	(0.2)	/
	Montgomery Field	NC	0.0	(0.6)	0.0	0.0	0.0	/	/	(1.5)	/
South	Cal Terraces (North), Otay Mesa Road Parcels	NC	(1.1)	0.0	(0.2)	(1.2)	(0.3)	/	/	0.2	/
	Cal Terraces (South)	NC	0.1	0.0	0.3	0.1	0.0	/	/	0.3	/
	Nobel Drive	NC	0.0	0.7	0.7	0.0	0.0	/	/	0.7	/
	Clayton Parcel	NC	2.0	0.0	0.0	(0.3)	0.0	/	/	(1.7)	/
	Goat Mesa	NC	0.0	0.0	0.7	2.0	0.0	/	/	(1.0)	/
	Otay Lakes	NA	0.0	0.0	(0.2)	(0.1)	0.0	/	/	1.0	/
	West Otay C	NC	1.7	0.0	0.0	0.3	0.0	/	/	0.3	/
	Robinhood Ridge	NC	(0.3)	0.0	0.3	(0.8)	0.0	/	/	0.4	/
	South Otay 1 acre (City)	NC	0.7	0.0	0.3	0.3	0.2	/	/	(2.7)	/

Key to Management Change: **NC** = No Change; **NA** = Not Applicable

Key to Symbology: dash (-) = Focal species not detected during baseline; forward slash (/) = vernal pool resource not evaluated; parentheses () = decline in cover class; blue and red shading = indicates change in average focal species or nonnative species cover class meets VPMMP threshold(s) to trigger a management level change.

¹ Asterisk (*) indicates rainfall within planning unit during reporting period is adequate (55% of average rainfall) for VPMMP standards assessment of focal species; triggers associated with change in cover of nonnative species are applicable regardless of rainfall.

² Management level triggers are applicable only to Level 1 and Level 2 vernal pool complexes. Level 3 vernal pool complexes are analyzed for management level triggers when a minimum of 5 years of management activities are fulfilled. Additionally, for vernal pool complexes that experience a wildfire, the City will implement a 5-year post-fire adaptive management plan; during FY 2025, this applies to the Otay Lakes complex; therefore, no management level change applies.

³ Fairy shrimp density surveys and topographic disturbance assessments are conducted when warranted based on qualitative survey observations, as discussed in the VPMMP.

⁴ Nonnative species triggers apply regardless of adequate rainfall and are assessed by comparing the most recent 3-year average cover to baseline cover adopted during 2018 vernal pool monitoring; management triggers A-, B-, and C- apply to complexes with greater than 10% total nonnative cover.

⁵ Baseline hydrologic surveys have not been conducted as of this monitoring period. When baseline is established, maximum depth of ponding will be measured and evaluated.

Table 2-8. 2019-2025 Take Summary

Year	Vernal Pool Complex Name and Pool ID	Management Responsibility	Project Name	Mitigation Type ¹	Acreage of Impacted Pools ²	Proposed Mitigation ²	Recorded Presence/Absence of Focal Species within Impacted Vernal Pools						
							PONU	POAB	NAFO	ERAR	ORCA	RSF	SDFS
2019	-	-	-	-	-	-	-	-	-	-	-	-	-
2020	Rhodes Crossings												
	581	Private	Merge 56	CR	0.042 (8 basins)	0.196 (7 basins)							✓
	582												✓
	272												✓
	273												✓
	1527												✓
	2093												✓
	2094												✓
	2086												
2021	-	-	-	-	-	-	-	-	-	-	-	-	
2022	-	-	-	-	-	-	-	-	-	-	-	-	
2023	-	-	-	-	-	-	-	-	-	-	-	-	
2024	South Otay 1 acre												
	Undocumented	City	La Media Road Improvements	CR	0.51	0.648	✓		✓	✓	✓		
	Undocumented			RE	0.44 (9 basins)	0.58 (38 basins)	✓		✓		✓		✓
2025	Candlelight												
	Undocumented	Private	Candlelight	RE	0.486 (71 basins)	0.972 (56 basins)						✓	✓
				EN		0.07 (9 basin)							
	San Diego Airpark Project												
TOTAL ACREAGE:					1.478	2.466							
TOTAL NUMBER OF IMPACTED/MITIGATED BASINS:					88	110							

¹ Mitigation type is informed by associated site-specific mitigation plan. Abbreviations are defined as follows: CR = Vernal Pool Creation; EN = Enhancement; RE = Re-establishment; RES = Restoration

² Acreages of impacts and proposed mitigation are derived from site-specific mitigation plan.

3 VPHCP Funding

3.1 Spend During Reporting Period and Future Funding Sources

Fiscal year spending for VPHCP management and monitoring activities coinciding with this reporting period is detailed in Table 3-1. Table 3-2 identifies funding sources for Year 8 (FY 2026) of VPHCP implementation. Funds for implementing the VPHCP program for City Department of Parks and Recreation (P&R) and City Planning Departments come from the General Fund, while the City Economic Development Department (EDD) and Public Utilities Department (PUD) use Enterprise Funds.

Table 3-1. Spend in Current Fiscal Year (2025)

City Department ¹	Estimated Expenditure ²	
	City Staff	Contractor
PUD	\$9,473*	\$300,236*
P&R	\$218,899	\$381,647**
EDD (Airports)	\$15,000	\$47,493
Planning	\$41,496	\$24,994
Total Estimated City-Wide Expenditures	\$284,868	\$754,370

¹City department acronyms defined as follows: PUD = Public Utilities Department, P&R = Parks and Recreation, EDD = Economic Development Department

²Additional details pertaining to specific expenditures: asterisk (*) = Total expenditure includes costs for SANDER Mitigation Site Management; double asterisk (**) = Total expenditure includes grant funding and special funds.

Table 3-2. Funding Sources for Fiscal Year 2026

City Department ¹	Funding Source ²	Estimated Expenditure ³	
		City Staff	Contractor
PUD	EF	\$18,000*	\$306,539*
P&R	GF, SF	\$251,000	\$343,000**
EDD (Airports)	EF	\$15,000	\$10,000
Planning	GF, GPMF	\$38,000	\$25,000
Total Estimated City-Wide Expenditures		\$322,000	\$684,539

¹City department acronyms defined as follows: PUD = Public Utilities Department, P&R = Parks and Recreation, EDD = Economic Development Department

²Funding acronyms defined as follows: EF = Enterprise Funds, GF = General Fund, GPMF = General Plan Maintenance Fund, SF = Special Funds

³Additional details pertaining to specific expenditures: asterisk (*) = Total expenditure includes costs for SANDER Mitigation Site Management; double asterisk (**) = Total expenditure includes grant funding and special funds.

The VPHCP identified funding for the vernal pool complexes known to the City at the time of VPHCP development. During prior monitoring years, the City identified vernal pool basins and vernal pool complexes not originally identified in the 2018 VPHCP. The City anticipates additional funds will be needed to manage and monitor these and future instances under the VPHCP and will continue to coordinate with the Wildlife Agencies to determine appropriate timelines to accept and adopt new basins and complexes.

4 Progress Toward VPHCP Conservation Objectives

The biological goal of the VPHCP is to contribute to the recovery of the VPHCP covered species and promote continued persistence of the covered vernal pool species populations identified in the VPHCP. Through the implementation of the VPHCP conservation strategy, the City has made progress toward both habitat-based and species-specific objectives that are consistent with the Recovery Plan. Progress toward these objectives throughout the first 7 years of VPHCP implementation is detailed below in Tables 4-1 and 4-2. No new activities were initiated in FY 2025; rather, this section discusses the continuation of ongoing activities.

A component contributing to the progress of the VPHCP conservation objectives includes upcoming and anticipated property acquisitions with important vernal pool and other biological resources for conservation. The City is regularly approached with various opportunities for acquisition and prioritizes acceptance based on a variety of factors, including existing biological resources of the properties and endowment status. There are no acquisitions to report for FY 2025.

Table 4-1. VPHCP Habitat-Based Conservation Objectives

Vernal Pools Objectives (Habitat Based)		
Conserve	Manage ¹	Restore ²
Conserve in perpetuity at least 2,473 vernal pools (totaling approximately 38.3 acres of basin surface area) at 73 vernal pool sites (within 54 vernal pool complexes) in the MHPA in a configuration that maintains long-term viability of the VPHCP covered species.	Manage in perpetuity 62 vernal pool sites within the MHPA through implementation of the VPHCP Vernal Pool Management and Monitoring Plan or Site-Specific Management Plans (that are consistent with the VPHCP goals and objectives).	Restore 19 vernal pool sites (within 12 complexes) to a "Level 1" (stewardship) management condition within the MHPA through implementation of the VPHCP Management and Monitoring Plan or Site-Specific Management Plans (that are consistent with the VPHCP goals and objectives).
Progress toward Objectives		
All 2,473 vernal pools (totaling approximately 38.3 acres of basin surface area) at 73 vernal pool sites (within 54 vernal pool complexes) remain conserved. <u>Vernal Pool Resources Acquired</u> •Attisha Trust (formerly California Crossings) (FY 2023, 0.09 acres) •Kearny Mesa Logistics (formerly Cubic) (FY 2023, 0.37 acres) <u>Vernal Pool Resources Newly-Discovered</u> •Topsail (J 37) - 10 pools •Seabird Way (M 5) - 39 pools •Ocean View Hills Parkway (J 37) - 9 pools •3 additional sites pending introduction to the VPHCP	•All 39 city-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually per the VPMMP. •There are 7 privately-owned and managed vernal pool sites, these are listed in Appendix E. •Management logs for each fiscal year are included in the appendix of the corresponding VPHCP annual report. •The City is working with land owners of privately-owned vernal pool sites to ensure consistency with the VPHCP.	<u>City-Owned Vernal Pool Resources Restored:</u> •Robinhood Ridge (J4-5) (Level 2 to Level 1 [FY 2023]) •Clayton Parcel (J 2): Clayton Phase 1 Project (Completed in FY 2024) •West Otay C/B (J 32): Stinknet Management Project (Completed in FY 2024) •Carmel Mountain (H 38): Vernal Pool and Uplands Habitat Restoration (Completed in FY 2023) •Goat Mesa (J 16-18): Wruck Canyon Vernal Pool Complex Enhancement (Completed in FY 2024)
Status ³		
		

¹In addition to conservation, includes active management of sites at Level 1, as well as sites at Levels 2 and 3. There are 11 conserved vernal pool sites included in the conservation totals (and identified in Appendix E of the HCP and Appendix A of the VPMMP) that will not be actively managed under the VPMMP. As funding becomes available, the City may work with the owner of three of the unmanaged sites (Fieldstone, Arjons, and Empire Center) to implement the additional recommended management.

²Restoration shall occur at specific vernal pool complexes to establish populations of covered species, consistent with the Recovery Plan (USFWS 1998). Restored populations shall also be conserved and managed consistent the VPHCP objectives listed in this table.

³Key to icons: Text bubble = progress toward meeting objective is in progress; Check mark = City is meeting objective.

In addition to the restoration projects included in the tables above, the City is in various phases (e.g., planning, implementation) of multiple restoration projects that will contribute to progress toward the VPHCP objectives. Projects that are in the planning phase or are planned for upcoming implementation include Clayton Phase III, and the Del Mar Mesa Programmatic Restoration Plan. Projects in the implementation phase include Clayton Phase II and J-13 South Restoration Project. The City also continues to evaluate existing vernal pool complexes to ensure that newly discovered resources (i.e., vernal pool basins and covered species) are tracked. As discussed in Section 1.6.1 of this 2025 Annual Report, the City is updating management sheets for existing vernal pool complexes and will continue to conduct routine reviews to maintain updated records of all City-managed vernal pool complexes.

As feasible, the City is also seeking grant funding to restore vernal pool resources. In 2020, the City was awarded a \$394,000.00 grant to restore the Robinhood Ridge and Goat Mesa complexes; these projects were completed in 2024 and 2025, respectively. Robinhood Ridge was successfully restored to management level 1 in FY 2022, largely due to the additional resources funded by the grant. The City continues to evaluate opportunities for additional acquisitions that would contribute to the VPHCP objective. The following properties are potential acquisitions for the City that would come under conservation through the VPHCP: California Department of Transportation (Caltrans) Dennery Canyon Vernal Pools, Lonestar, Zamudio, West Otay A (Caltrans), and San Diego County Water Authority FRS 2. Additionally, the City anticipates receipt of endowment funding for the West Otay B and Kearny Mesa Logistics vernal pool complexes in FY 2026. Overall, the City has made significant progress toward achieving the VPHCP conservation objectives and will continue to pursue these goals.

Table 4-2. VPHCP Species-Specific Conservation Objectives

Otay Mesa mint			San Diego Mesa mint			California Orcutt grass			Riverside fairy shrimp		
Species-Specific Objectives	Progress Toward Objectives	Status ³	Species-Specific Objectives	Progress Toward Objectives	Status ³	Species-Specific Objectives	Progress Toward Objectives	Status ³	Species-Specific Objectives	Progress Toward Objectives	Status ³
Manage ¹ Conserve 370 vernal pools occupied by Otay Mesa mint within five sites.	Conservation Retention • Occupied vernal pools remain conserved under the VPHCP. • Occupied sites remain conserved under the VPHCP. Conservation Gains • 1 occupied site (Topsail) gained with species in 2 vernal pools. • 17 occupied vernal pools gained within Cal Terraces North. • 16 occupied vernal pools gained within Clayton Parcel. • 1 occupied vernal pool gained within West Otay B. • 2 occupied vernal pools gained within Robinhood Ridge. • 1 occupied vernal pool gained within Hidden Trails. • 1 occupied vernal pool gained within Wruck Canyon. • 5 occupied vernal pools gained within South Otay J13S (City).	✔	Manage ¹ Conserve 335 vernal pools occupied by San Diego mesa mint within 19 sites.	Conservation Retention • Occupied vernal pools remain conserved under the VPHCP. • Occupied sites remain conserved under the VPHCP. Conservation Gains • 1 occupied site (Kearny Mesa Logistics) gained with species in 1 vernal pool. • 16 occupied vernal pools gained within Carmel Mountain. • 1 occupied vernal pool gained within Lake Murray. • 20 occupied vernal pools gained within Greystone Torrey Highlands. • 2 occupied vernal pools gained within Serra Mesa Library. • 1 occupied vernal pool gained within Pasatiempo. • 6 occupied vernal pools gained within Nobel Drive. • 2 occupied vernal pools gained within Calle de Vida East. • 2 occupied vernal pool gained within Mission Trails Regional Park. • 1 occupied vernal pool gained within Tecolote Canyon. • 1 occupied vernal pool gained within Stowe.	✔	Manage ¹ Conserve 58 vernal pools occupied by California Orcutt grass within three sites.	Conservation Retention • Occupied vernal pools remain conserved under the VPHCP. • Occupied sites remain conserved under the VPHCP. Conservation Gains • 1 occupied vernal pool gained within Cal Terraces North. • 3 occupied vernal pools gained within Clayton Parcel. • 1 occupied vernal pool gained within Robinhood Ridge.	✔	Manage ¹ Conserve 131 vernal pools occupied by Riverside fairy shrimp within seven sites.	Conservation Retention • 120 vernal pools with target species retained • All 4 sites with target species retained Conservation Gains • 1 occupied site (Ocean View Hills Pkwy) gained with species in 1 vernal pool. • 1 occupied vernal pool gained within Wruck Canyon.	✔
Conserve ² Manage all conserved complexes/sites identified in Appendix A consistent with this VPMMP.	• All occupied City-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually. • The City is working with land owners of privately-owned occupied vernal pool sites to ensure consistency with the VPHCP.	...	Conserve ² Manage 12 sites as identified in Appendix A consistent with this VPMMP.	• All occupied City-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually. • The City is working with land owners of privately-owned occupied vernal pool sites to discuss the importance of vernal pool resources on their respective properties and the possibility to convey the properties to the City as funding and staff resources are identified and become available.	...	Conserve ² Manage all conserved complexes/sites identified in Appendix A consistent with this VPMMP.	• All occupied and conserved sites are City-owned and are managed (monitoring and/or management activities conducted if warranted) annually.	✔	Conserve ² Manage all conserved complexes/sites identified in Appendix A consistent with this VPMMP.	• All occupied City-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually. • The City is working with land owners of privately-owned occupied vernal pool sites to discuss the importance of vernal pool resources on their respective properties and the possibility to convey the properties to the City as funding and staff resources are identified and become available.	...
Restore Establish viable populations of Otay Mesa mint within the J13, J16–18, J20–21, J27, and J28 complex series.	Populations of Otay Mesa Mint have been established at the following sites and number of pools (2019–2025): • Wruck Canyon (J16-18): 1 pool • South Otay J13S (City) (J13 S): 5 pools	...	Restore Restoration is not necessary for this covered species as the populations of this species are adequately conserved under the VPHCP.	Not applicable.	Not applicable.	Restore Establish viable populations of California Orcutt grass within J11, J12, J13, J14, J16-18, J20–21, J21, J27, and J28E.	In Progress.	...	Restore Establish viable populations of Riverside fairy shrimp within J11, J12, J13, J14, J16-18, J20–21, J21, J27, and J28E.	In Progress.	...

Spreading navarretia			San Diego button-celery			San Diego fairy shrimp		
Species-Specific Objectives	Progress Toward Objectives	Status ³	Species-Specific Objectives	Progress Toward Objectives	Status ³	Species-Specific Objectives	Progress Toward Objectives	Status ³
Manage ¹ Conserve 94 vernal pools occupied by spreading navarretia within seven sites.	Conservation Retention • Occupied vernal pools remain conserved under the VPHCP. • Occupied sites remain conserved under the VPHCP. Conservation Gains • 4 occupied vernal pools gained within Cal Terraces North. • 1 occupied vernal pool gained within Wruck Canyon. • 2 occupied vernal pools gained within Robinhood Ridge. • 1 occupied vernal pool gained within Nobel Drive.	✔	Manage ¹ Conserve 756 vernal pools occupied by San Diego button-celery within 20 sites.	Conservation Retention • Occupied vernal pools remain conserved under the VPHCP. • Occupied sites remain conserved under the VPHCP. Conservation Gains • 1 occupied site (Kearny Mesa Logistics) gained with species in 2 vernal pools. • 1 occupied site (Seabird Way) gained with species in 25 vernal pools. • 1 occupied site (Dormouse) gained with species in 13 vernal pools. • 1 occupied site (Calle de Vida West) gained with species in 2 vernal pools. • 26 occupied vernal pools gained within Cal Terraces North. • 11 occupied vernal pools gained within Carmel Mountain • 12 occupied vernal pools gained within Greystone Torrey Highlands. • 31 occupied vernal pools gained within Clayton Parcel. • 2 occupied vernal pools gained within Wruck Canyon. • 26 occupied vernal pools gained within Hidden Trails. • 11 occupied vernal pools gained within West Otay B. • 1 occupied vernal pool gained within Lake Murray. • 1 occupied vernal pool gained within Serra Mesa Library. • 1 occupied vernal pool gained within Pasatiempo. • 2 occupied vernal pools gained within South Otay J13S (City). • 2 occupied vernal pools gained within Calle de Vida West. • 2 occupied vernal pools gained within Stowe.	✔	Manage ¹ Conserve 465 vernal pools occupied by San Diego fairy shrimp within 38 sites.	Conservation Retention • Occupied vernal pools remain conserved under the VPHCP. • Occupied sites remain conserved under the VPHCP. Conservation Gains • 1 occupied site (Kearny Mesa Logistics) gained with species in 6 vernal pools. • 1 occupied site (Attisha Trust) gained with species in 5 vernal pool. • 1 occupied site (Ocean View Hills Pkwy) gained with species in 2 vernal pool. • 1 occupied site (Seabird Way) gained with species in 2 vernal pool. • 1 occupied site (Calle de Vida West) gained with species in 3 vernal pools. • 1 occupied site (Stowe) gained with species in 5 vernal pools. • 2 occupied vernal pools gained within South Otay J13S.	✔
Conserve ² Manage all conserved complexes/sites identified in Appendix A consistent with this VPMMP.	• All occupied City-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually. • The City is working with land owners of privately-owned occupied vernal pool sites to discuss the importance of vernal pool resources on their respective properties and the possibility to convey the properties to the City as funding and staff resources are identified and become available.	...	Conserve ² Manage 22 sites identified in Appendix A consistent with this VPMMP.	• All occupied City-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually. • The City is working with land owners of privately-owned occupied vernal pool sites to discuss the importance of vernal pool resources on their respective properties and the possibility to convey the properties to the City as funding and staff resources are identified and become available.	...	Conserve ² Manage 33 sites as identified in Appendix A consistent with this VPMMP.	• All occupied City-owned vernal pool sites are managed (monitoring and/or management activities conducted if warranted) annually. • The City is working with land owners of privately-owned occupied vernal pool sites to discuss the importance of vernal pool resources on their respective properties and the possibility to convey the properties to the City as funding and staff resources are identified and become available.	...

	Spreading navarretia				San Diego button-celery				San Diego fairy shrimp		
	Species-Specific Objectives	Progress Toward Objectives	Status ³		Species-Specific Objectives	Progress Toward Objectives	Status ³		Species-Specific Objectives	Progress Toward Objectives	Status ³
Restore	Establish viable populations of spreading navarretia within J11, J12, J13, J16–18, J20–21, J27, J28, and R1.	Populations of spreading navarretia have been re-established at the following sites (2019-2025): • South Otay 1 Acre (J 13 N) per the La Media Road widening mitigation effort. • Wruck Canyon (J16-18): 1 pool (via Wruck Canyon Restoration Project).		Restore	Establish a viable population of San Diego button-celery within J13.	Populations of San Diego button-celery have been established at the following sites and number of pools (2019-2025): • South Otay J13S (City) (J13 S): 2 pools.		Restore	Restoration is not necessary for this covered species as the populations of this species are adequately conserved under the VPHCP.	Not Applicable	Not applicable.

¹In addition to conservation, includes active management of sites at Level 1, as well as sites at Levels 2 and 3. There are 11 conserved vernal pool sites included in the conservation totals (and identified in Appendix E of the HCP and Appendix A of the VPMMP) that will not be actively managed under the VPMMP. As funding becomes available, the City may work with the owner of three of the unmanaged sites (Fieldstone, Arjons, and Empire Center) to implement the additional recommended management.

²Restoration shall occur at specific vernal pool complexes to establish populations of covered species, consistent with the Recovery Plan (USFWS 1998). Restored populations shall also be conserved and managed consistent the VPHCP objectives listed in this table.

³Key to icons: Text bubble = progress toward meeting objective is in progress; Check mark = City is meeting objective; Growth chart icon = City is exceeding objective.

¹In addition to conservation, includes active management of sites at Level 1, as well as sites at Levels 2 and 3. There are 11 conserved vernal pool sites included in the conservation totals (and identified in Appendix E of the HCP and Appendix A of the VPMMP) that will not be actively managed under the VPMMP. As funding becomes available, the City may work with the owner of three of the unmanaged sites (Fieldstone, Arjons, and Empire Center) to implement the additional recommended management.

²Restoration shall occur at specific vernal pool complexes to establish populations of covered species, consistent with the Recovery Plan (USFWS 1998). Restored populations shall also be conserved and managed consistent the VPHCP objectives listed in this table.

³Key to icons: Text bubble = progress toward meeting objective is in progress; Check mark = City is meeting objective; Growth chart icon = City is meeting/exceeding objective.

5 References

- City of San Diego (City). 1997. *Multiple Species Conservation Program Subarea Plan*.
- City of San Diego (City). 2002–2003. *City of San Diego Vernal Pool Inventory*.
- City of San Diego (City). 2019. *Revised Final City of San Diego Vernal Pool Habitat Conservation Plan*. October.
- City of San Diego (City). 2020. *Revised Final City of San Diego Vernal Pool Management and Monitoring Plan*. February.
- RECON. 2025a. *Adaptive Management Plan Letter for the Goat Mesa Vernal Pool Complex (P.O. #4200004092; RECON Number 9856.34)*. March.
- RECON. 2025b. *Vernal Pool Habitat Conservation Plan Otay Lakes (K-5) Post-Border 2 Fire Monitoring and Management Report (P.O. #4200004092; RECON Number 9856.34)*. March.
- NOAA. 2019-2025. National Centers for Environmental Information Climate Data Online [database]. Available at: <https://www.ncei.noaa.gov/cdo-web/>. Accessed November 2025.
- United States Fish and Wildlife Service (USFWS). 1998. *Recovery Plan for Vernal Pools of Southern California*. U.S. Department of the Interior, Fish and Wildlife Service, Region One, Portland, Oregon.

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Appendix A

City of San Diego VPHCP Vernal Pool Complex Management and Monitoring Levels

Appendix A

City of San Diego VPHCP Vernal Pool Complex Management and Monitoring Levels

Complex Series	Site Name	Planning Unit	Number of Conserved Pools Occupied by Focal Species							Management Responsibility	Existing (Baseline) Management & Monitoring Level	VPHCP Required Management & Monitoring Level in VPMMP
			PONU	POAB	NAFO	ERAR	ORCA	RFS	SDFS			
B 5	Tierra Alta	North	0	0	0	0	0	0	1	Private	Level 1/SSMP	Level 1
B 6	Lopez Ridge (CDFW)	North	0	1	0	0	0	0	0	CDFW	Level 1	Level 1
B 7-8	Crescent Heights	North	0	0	0	0	0	0	1	City	Level 1/SSMP	Level 1
	Lopez Ridge (City)	North	0	10	0	1	0	0	2	City	Level 1	Level 1
B 11	Mesa Norte	North	0	12	0	10	0	0	24	Private	Level 1/SSMP	Level 1
C 10-16	Winterwood	North	0	27	0	7	0	0	2	School District	SSRP	N/A
	Winterwood (City)	North	0	0	0	0	0	0	0	City	None	None ₂
C 17-18	Fieldstone	North	0	8	0	0	0	0	0	Private	None	None ₂
C 27	Mira Mesa Market Center	North	0	1	0	0	0	0	1	Private	None	None
D 5-8	Carroll Canyon	North	0	42	1	65	0	0	5	City	Level 1/SSRP	Level 1
	Parkdale Carroll Canyon	North	0	0	0	0	0	0	0	City	Level 1/SSRP	Level 1
F 16-17	MCAS Miramar	North	0	0	0	0	0	0	0	Federal	N/A	N/A
	Menlo KM Parcel	Central	0	0	0	0	0	0	0	Private	None	Level 3
	Menlo KM Parcel	Central	0	0	0	0	0	0	0	State	N/A	N/A
H 1-10, 13-15,18-23, 24-26	Del Mar Mesa (City)	North	0	3	0	49	0	0	8	City	Level 1	Level 1
	Del Mar Mesa (County)	North	0	2	0	12	0	0	0	County	None	N/A
	Del Mar Mesa (Private)	North	0	0	0	2	0	0	1	Private	None	Level 1 ₁
	Del Mar Mesa (Caltrans)	North	0	0	1	2	0	0	1	State	None	N/A
	Del Mar Mesa (CDFW/USFWS)	North	0	56	0	122	0	0	16	CDFW/USFWS	Level 1	Level 1
	Rhodes	North	0	7	0	6	0	0	8	Private	SSRP	Level 1
	Shaw Lorenz	North	0	0	0	0	0	0	8	Private	Level 1/SSMP	Level 1
H 17	East Ocean Air Drive	North	0	0	0	2	0	0	0	Private	None	None ₂
	SDG&E Substation	North	0	0	0	4	0	0	0	Federal	N/A	N/A
H 38	Carmel Mountain	North	0	16	0	11	0	0	2	City	SSRP	Level 1
H 39	Greystone Torrey Highlands	North	0	20	0	15	0	0	4	City	Level 1/SSMP	Level 1
H 41	Dormouse	North	0	0	0	13	0	0	7	City	None	None ₅
H 42	Fairbanks Highland	North	0	0	0	0	0	0	3	City	None	None ₅
I 1	Arjons	North	0	22	0	15	0	0	1	Private	None	None ₂
I 6 B	Ford Leasing (Bob Baker)	North	0	7	0	0	0	0	3	Private	None	None ₂
I 6 C	Facilities Development (Eastgate Miramar Associates)	North	0	11	0	2	0	0	6	Private	None	None ₂
I 12	Pueblo Lands (South)	North	0	0	0	0	0	0	2	City	Level 1	Level 1
J 2	Cal Terraces (North), Otay Mesa Road Parcels	South	303	0	83	301	53	93	209	City	Level 1	Level 1*
	Clayton Parcel	South	16	0	0	32	3	0	2	City	Level 1	Level 1
	St. Jerome's	South	0	0	0	0	0	3	1	Private	None	Level 3 ₁
J 3	J3	South	0	0	0	0	0	0	0	State	None	N/A
J 4-5	Attisha Trust ₆	South	0	0	0	0	0	0	5	City	None	N/A
	Robinhood Ridge	South	20	0	6	47	1	6	41	City	Level 1	Level 1
J 11 E	Slump Block Pools	South	0	0	0	0	0	0	0	Private	None	Level 2 ₁
J 11 W	J 11 West	South	0	0	0	0	0	1	1	Private	None	Level 3 ₁
J 12	J 12	South	0	0	0	0	0	0	0	Private	None	Level 3 ₁
J 13 E	South Otay J 13 East	South	0	0	0	1	0	0	2	Private	None	Level 3 ₁
J 13 N	South Otay 1 acre (City)	South	0	0	1	1	1	0	0	City	None	Level 3
J 13 S	Bachman	South	0	0	0	0	0	0	0	Private	None	Level 3 ₁
	South Otay J 13 S	South	0	0	0	7	0	0	0	Private	None	Level 3 ₁
	South Otay J 13 S (City)	South	5	0	0	1	0	0	2	City	None	Level 3 ₁
J 14	Anderprises (Caltrans)	South	1	0	1	0	0	3	4	State	SSRP	N/A
	Anderprises (City)	South	0	0	0	0	0	0	0	City	Level 1	Level 1
	Bachman	South	0	0	0	0	0	0	0	Private	None	Level 3 ₁
	Brown Field Basins	South	0	0	0	0	0	0	0	City/Airports	None	None
	Cal Terraces (South)	South	63	0	6	55	5	26	32	City	SSRP	Level 1*
	Handler	South	0	0	0	0	0	0	0	Private	Level 1/SSMP	Level 3 ₁
J 15	Arnie's Point	South	15	0	10	61	3	30	56	Federal	SSMP	N/A
J 16-18	Goat Mesa (City)	South	0	0	0	4	0	1	0	City	Level 1	Level 1*
	Goat Mesa (Federal)	South	0	0	0	0	0	0	0	Federal	None	None
	Wruck Canyon	South	1	0	1	2	0	1	1	City	Level 1	Level 1*
J 20-21	La Media ITS	South	0	0	0	0	0	0	6	Private	None	Level 3 ₁
J 21	La Media Swale South	South	0	0	0	0	0	0	0	Private	None	Level 3 ₁
J 27	Empire Center	South	0	0	0	9	0	0	0	Private	None	None ₂
J 28 E	La Media Swale North	South	0	0	0	0	0	0	0	Private	None	Level 3 ₁
J 29	Lonestar W (Caltrans)	South	0	0	0	7	0	1	4	State	SSMP	N/A ₄
J 30	Lonestar E (Caltrans)	South	0	0	0	0	0	35	50	State	SSMP	N/A ₄
	Lonestar E (Private)	South	1	0	0	32	0	0	0	Private (County)	SSMP	Level 1
J 31	Dennery West	South	0	0	0	0	0	10	38	State	SSMP	N/A
	Hidden Trails	South	1	0	0	26	0	0	6	City	Level 1	Level 1
J 32	West Otay A (Caltrans)	South	7	0	3	1	0	1	8	State	SSRP	N/A
	West Otay A (CDFW)	South	1	0	0	2	0	0	0	CDFW	None	Level 1 ₁
	West Otay B	South	26	0	0	11	0	0	0	City	SSRP	Level 1
	West Otay C	South	3	0	0	2	0	0	0	City	Level 1	Level 1
J 33	Sweetwater High School	South	5	0	3	2	0	3	8	School District	SSRP	N/A
J 34	Bachman	South	0	0	0	0	0	0	1	Private	None	Level 3 ₁
	Candlelight	South	0	0	0	0	0	1	1	Private	SSRP	Level 1
J 35	Brown Field	South	0	0	0	0	0	0	0	City	None	Level 1/SSRP
J 36	Southview	South	0	0	0	0	0	0	8	Private	None	Level 3 ₁
J 37	Ocean View Hills Pkwy	South	0	0	0	0	0	2	1	City	None	None ₅
	Topsail	South	2	0	0	3	0	0	1	City	None	None ₅
KK 1	Lake Murray	Central	0	1	0	1	0	0	1	City	None	None

Complex Series	Site Name	Planning Unit	Number of Conserved Pools Occupied by Focal Species							Management Responsibility	Existing (Baseline) Management & Monitoring Level	VPHCP Required Management & Monitoring Level in VPMMP
			PONU	POAB	NAFO	ERAR	ORCA	RFS	SDFS			
K 5	Otay Lakes	South	0	0	2	46	0	0	6	City ₆	Level 1	Level 1
KK 2	Pasatiempo	South	0	1	0	1	0	0	0	City	Level 1	Level 1
M5	Seabird Way	South	0	0	0	25	0	0	2	City	None	None ₅
MM 1	Marron Valley	South	0	0	0	0	0	0	5	City ₆	SSRP	Level 1
N 1-4	Teledyne Ryan	Central	0	1	0	0	0	0	11	Private	None	Level 2 ₁
N 5-6	Montgomery Field	Central	0	129	0	0	0	0	24	City	Level 1	Level 1/SSRP
N 7	Serra Mesa Library	Central	0	2	0	1	0	0	2	City	Level 1	Level 1
N 8	General Dynamics	Central	0	20	0	2	0	0	6	City	Level 1/SSMP	Level 1
NC	Li Collins	North	0	0	0	0	0	0	0	Private	None	None
	Kelton	South	0	0	0	0	0	0	0	City	None	None
OO	Salk Institute	North	0	0	0	0	0	0	0	Private	Level 1/SSMP	Level 1
Q 2	Mission Trails Regional Park	Central	0	2	0	0	0	0	6	City	Level 1	Level 1
	Calle de Vida East	Central	0	2	0	2	0	0	2	City	None	N/A
	Calle de Vida West	Central	0	0	0	3	0	0	3	City	None	None ₅
Q 3	Castlerock	North	0	0	0	0	0	0	0	Private	SSRP	Level 1
Q 4	Stowe	North	0	1	0	2	0	0	5	City	None	None ₅
QQ	Tecolote Canyon	Central	0	1	0	0	0	0	0	City	None	None
R 1	Proctor Valley	South	0	0	0	0	0	0	3	City ₆	Level 1	Level 1
U 15	SANDER	Central	0	1	0	0	0	0	2	City	Level 1	Level 2 _{1,3}
U 19	Cubic	Central	0	0	0	0	0	0	0	Private	None	Level 1 ₁
	Kearny Mesa Logistics ₆	Central	0	1	0	2	0	0	6	City	Level 1	Level 1 ₅
X 5	Nobel Drive	North	0	6	2	0	0	0	6	City	Level 1	Level 1
X 7	Nobel Research	North	0	0	0	0	0	0	1	City	Level 1/SSMP	Level 1

CDFW = California Department of Fish and Wildlife; City = City of San Diego; N/A = Not Applicable; SSRP= Site-specific restoration plan; SSMP=Site-specific management plan or requirements; TBD = To Be Determined; USFWS = United States Fish and Wildlife Service

Footnotes:

1 = These sites may seek development entitlement in the future. During the development entitlement process, the City will ensure the project is consistent with the VPHCP, ESL, Biology Guidelines, and required Vernal Pool Management and Monitoring Plan (VPMMP) Management Level.

2 = As separate funding becomes available (e.g., grant funds) the City may work with the owner to implement additional recommended management as identified on the site specific VPMMP management sheet.

3 = Restoration is currently in progress as part of a separate permit requirement (not required by the Vernal Pool Habitat Conservation Plan [VPHCP]). Following completion of restoration, the site will be managed at Level 1, consistent with the VPHCP.

4 = If a Caltrans-owned complex is transferred to the City, CDFW, or USFWS, the site would be managed consistent with the VPHCP.

5 = As separate funding becomes available (e.g., grant funds) the City may work to implement additional recommended management as identified on the site specific VPMMP management sheet.

6 = Changed from Cornerstone Land to City. Attisha Trust was formerly known as California Crossings. Kearny Mesa Logistics was formerly known as Cubic.

* = The City and Wildlife Agencies will determine if Stewardship (Level 1), Enhancement (Level 2), or Restoration (Level 3) is necessary to achieve the species-specific conservation objectives based on a project level evaluation of these sites.

Yellow	City, CDFW, or USFWS owned. Subject management under VPHCP.
Tan	City owned, newly discovered Vernal Pool complex and/or vernal pools within existing complex, and not currently subject to management under VPHCP.
Orange	Privately owned and managed under VPHCP, City responsible for enforcing management.
Purple	Private-owned. Management required with development under VPHCP except for lands mitigated under County of San Diego (J 30 Lonestar [Private]).
Green	Private, conserved pre-MSCP, so no management required.
Blue	Public and conserved. No management required and none recommended; not included on management sheet in VPMMP.
Gray	Private and conserved. No management required and none recommended; not included on management sheet in VPMMP.
Pink	Not under City, CDFW or USFWS jurisdiction; not managed under the VPHCP. If a Caltrans-owned complex is transferred to the City, CDFW, or USFWS, the site would be managed consistent with the VPHCP.

Appendix B-1

Goat Mesa Post-Fire Management and Monitoring Report



An Employee-Owned Company

March 6, 2025

Ms. Kelsey Hall
City of San Diego
Public Utilities Department, EPM/Environmental
9192 Topaz Way, MS 901A
San Diego, CA 92123

Reference: Adaptive Management Plan Letter for the Goat Mesa Vernal Pool Complex
(P.O. #4200004092; RECON Number 9856.34)

Dear Ms. Hall:

This letter summarizes the adaptive management plan for Goat Mesa for the City of San Diego (City) Public Utilities Department's management of the Goat Mesa Vernal Pool Complex. The purpose of this report is to present monitoring results and data that support the conclusion that of the five pools impacted by the Caliente Fire in the Goat Mesa Vernal Pool Complex, one (vernal pool 1775) should remain at a Management Level 3, while four of the pools (vernal pools 1141, 1142, 1189, and 1920) should be upgraded to Management Level 1. Quantitative monitoring should continue at vernal pool 1775 until it is upgraded to a Management Level 1 through Vernal Pool Management and Monitoring Plan trigger C+. This would require seeding covered species within this pool, in addition to continual non-native invasive species management to lower the non-native cover class within the pool.

1.0 PROJECT BACKGROUND

Goat Mesa is a conserved site on three City-owned parcels (totaling 99 acres) in the Spring Canyon area of Otay Mesa between State Route 905 and the international border, west of Siempre Viva Road and Cactus Court (Figures 1 through 4). The site is within the MHPA and is designated open space. The 15 vernal pools on the City-owned and acquired private portion of Goat Mesa were identified by the adopted Recovery Plan for Vernal Pools of Southern California (Recovery Plan; U.S. Fish and Wildlife Service 1998) and contain populations of the following endangered and threatened species: San Diego button-celery (*Eryngium aristulatum* var. *parishii*), spreading navarretia (*Navarretia fossalis*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), and Riverside fairy shrimp (*Streptocephalus woottoni*). Restoration—including topographic recontouring, fencing, signage, dethatching, and species and cyst bank reintroduction—was conducted in 2008 to 2009 on a portion of the pools in this complex as part of a San Diego Association of Governments TransNet grant (AECOM 2010). Following restoration, the site was maintained at Management Level 1 consistent with the Vernal Pool Monitoring and Management Plan (VPMMP) as described in the Vernal Pool Habitat Conservation Plan (VPHCP; City of San Diego 2017). In August 2019, the Caliente Fire impacted five vernal pools (vernal pools 1189, 1175, 1920, 1141, and 1142) within the Goat Mesa Vernal Pool Complex (Figure 5). An additional vernal pool, vernal pool 1190, was impacted by the Caliente Fire; however, the vernal pool is not located within the Goat Mesa complex and therefore no qualitative or quantitative data was collected for this pool during the five-year maintenance and management period.

The VPHCP is intended to provide an effective framework to protect, enhance, and restore vernal pool resources in specific areas of the city of San Diego, while improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools. Management and monitoring of the vernal pool resources must be both proactive and continuous to achieve the goal and objectives of the VPHCP. The biological goal of the VPHCP is to contribute to the recovery of the VPHCP covered species and ensure continued

persistence of the covered vernal pool species populations identified in the VPHCP. This goal will be achieved by implementing the VPHCP conservation strategy, which includes both habitat-based and species-specific objectives that are consistent with the Recovery Plan. The VPMMP outlines the management and monitoring methods to achieve the goals and objectives within the VPHCP (City of San Diego 2020a).

The VPMMP uses a tiered, three-level approach to adaptive monitoring and management that is applied to individual vernal pool complexes. Levels of monitoring and maintenance are assigned at the complex level based on evaluation of the existing habitat conditions and population status of the seven covered species within a complex. The objectives of complex wide management and monitoring at each level as described in the VPHCP are as follows:

- Level 1 – *maintain* existing habitat conditions and covered species populations within conserved complexes (as defined in Table 4-1 of Appendix D of the VPHCP). This level is considered Stewardship.
- Level 2 – *stabilize* covered species population status by enhancing habitat conditions to a level that can support existing populations to achieve the VPHCP habitat and species-specific objectives (as defined in Table 4-1 of Appendix D of the VPHCP).
- Level 3 – *restore* habitat conditions to a level that can increase covered species populations identified in the species-specific objectives (as defined in Table 4-1 of Appendix D of the VPHCP).

Per the VPMMP, if a vernal pool complex experiences a fire, the site is downgraded from Management Level 1 to Level 3 (City of San Diego 2020a). Although the VPMMP recommends downgrading a site from a Management Level 1 to a Level 3 post-fire, based on the level of impacts that occurred, it was recommended that the Goat Mesa complex as a whole remain a Management Level 1, while the five pools impacted be managed at a Management Level 3. To return to a Management Level 1 from a Level 3, VPMMP management trigger C+ must occur. Table 1 describes the VPMMP management trigger C+ below (City of San Diego 2020a).

Table 1 VPMMP Management Trigger C+ Conditions		
Management Trigger	Monitored Vernal Pool Resource	Monitoring Observation Compared to VPMMP Standards
C+ (Level 3 to Level 1)	Covered Plant Species	An average increase of two cover classes for ALL target covered plant species present in the pools assessed over 3 years with adequate rainfall, OR An average decrease of one cover class in combined nonnative cover in the vernal pools over 3 years, regardless of rainfall
	Covered Shrimp Species	A 40% increase in species density in the covered shrimp species present in the pools assessed over 3 years with at least 55% of average rainfall.
	Hydrologic Function	Through active restoration and enhancement (i.e., topographic recontouring), a reestablishment of the baseline vernal pool hydrological network and water storage function to within +/-10% of the baseline recorded for the basin.
SOURCE: City of San Diego 2020a		

Following the Caliente Fire, maintenance and monitoring activities occurred for the five burned pools (vernal pools 1141, 1142, 1920, 1175, 1189) according to the management actions described in the VPMMP for Level 3 sites. Additionally, water quality monitoring sampling occurred within pools impacted by fire retardant (see Figure 5). Maintenance and monitoring visits are outlined in Table 2 and were collected from the VPHCP Annual Reports from

2019 through 2023 (City of San Diego 2019, 2020b, 2021, 2022, and 2023) and the Goat Mesa and Otay Lakes 2024 Monitoring Report (HELIX Environmental Planning 2025).

Table 2 Maintenance and Monitoring at Goat Mesa Vernal Pool Complex August 2019–November 2024	
Date	Activity
August 23, 2019	Water Quality Monitoring, Qualitative Monitoring
November 19, 2019	Water Quality Monitoring, Qualitative Monitoring
December 03, 2019	Water Quality Monitoring, Qualitative Monitoring
January 1, 2020	Qualitative Monitoring
January 9, 2020	Water Quality Monitoring, Qualitative Monitoring
April 1, 2020	Qualitative Monitoring
May 11, 2020	Qualitative Monitoring, Quantitative Monitoring
January 5, 2021	Qualitative Monitoring
January 15, 2021	Qualitative Monitoring
March 9, 2021	Qualitative Monitoring
March 24, 2021	Maintenance
April 22, 2021	Qualitative Monitoring
April 23, 2021	Qualitative Monitoring
May 14, 2021	Qualitative Monitoring
May 18, 2021	Maintenance and Restoration
May 19, 2021	Maintenance and Restoration
June 8, 2021	Qualitative Monitoring, Quantitative Monitoring
March 1, 2022	Qualitative Monitoring
March 9, 2022	Qualitative Monitoring
March 14, 2022	Maintenance
May 19, 2022	Qualitative Monitoring, Quantitative Monitoring
July 26, 2022	Qualitative Monitoring
August 10, 2022	Qualitative Monitoring
August 22, 2022	Maintenance and Restoration
September 29, 2022	Qualitative Monitoring
November 15, 2022	Qualitative Monitoring
April 7, 2023	Qualitative Monitoring
April 27, 2023	Maintenance
May 24, 2023	Maintenance
June 9, 2023	Quantitative Monitoring
June 29, 2023	Qualitative Monitoring
March 6, 7, and 8, 2024	Maintenance
April 12, 2024	Maintenance
May 2, 2024	Qualitative Monitoring
May 15, 2024	Qualitative Monitoring
September 9, 2024	Maintenance
September 11, 12, and 13, 2024	Maintenance
September 12, 2024	Qualitative Monitoring
November 6, 2024	Maintenance
SOURCE: City of San Diego 2019, 2020b, 2021, 2022, and 2023; HELIX Environmental Planning 2025	

2.0 CURRENT CONDITIONS

On January 22, 2025, qualitative monitoring occurred to document site conditions after five years of maintenance and monitoring since the Caliente Fire. Vernal pools and the associated uplands that function as a buffer to prevent impacts to the vernal pools were monitored. The associated uplands within the Caliente Fire burn scar have relatively low vegetative cover; however, vegetative cover was comparable to the surrounding habitat within the areas not impacted by the fire. The uplands and pool edges within the burned area contained desiccated California centaury (*Zeltnera venusta*), clustered tarplant (*Deinandra fasciculata*), California sagebrush (*Artemisia californica*) and establishing jojoba (*Simmondsia chinensis*) individuals. The vegetation within the pools was comparable to the percent cover in pools unaffected by the Caliente Fire. Species present in the vernal pools consisted of dwarf woolly marbles (*Psilocarphus brevissimus* var. *brevissimus*), and San Diego button-celery. Although the qualitative survey was conducted outside of the ideal survey season for vernal pool plant species, cover of desiccated plant material was still present in all pools. Each affected pool is described below. Attachment 1 contains photographs of each vernal pool.

Vernal Pool 1141

Vernal pool 1141 was indirectly affected by the Caliente Fire by the use of fire retardant. It was highly vegetated with last season's vernal pool species including dwarf woolly marbles, toad rush (*Juncus bufonius*), San Diego button-celery, as well as clustered tarplant and California centaury. Non-native species cover within the vernal pool was less than one percent. The surrounding uplands had a low native species cover consisting primarily of jojoba. Non-native species were not observed within the associated uplands (see Photograph 1).

Vernal Pool 1142

Vernal pool 1142 was directly affected by the Caliente Fire. It was highly vegetated with last season's vernal pool species including dwarf woolly marbles and pale spike-rush (*Eleocharis macryostachya*), it also contained a large population of clustered tarplant. Non-native species cover within the vernal pool was less than one percent and while the surrounding uplands had a low native species cover, non-native species were not observed within the associated uplands (see Photograph 2).

Vernal Pool 1189

Vernal pool 1189 was directly affected by the Caliente Fire. It was dominated by dwarf woolly marbles and San Diego button-celery. Non-native species were not observed within the vernal pool. The associated uplands were generally free of non-native species and had sparse native cover (see Photograph 3).

Vernal Pool 1775

Vernal pool 1775 was directly affected by the Caliente Fire. It was vegetated entirely by dwarf woolly marbles, with a small population of San Diego button-celery and flowering-quillwort (*Triglochin scilloides*). Non-native species were not observed within the upland associated uplands or the vernal pool (see Photograph 4). The associated uplands consisted primarily of jojoba.

Vernal Pool 1920

Vernal pool 1920 consisted solely of dwarf woolly marbles with no non-native species observed within the vernal pool or associated uplands (see Photograph 5). The pool is adjacent to the access road and the associated uplands consist of sparse California sagebrush and jojoba.

Vernal Pool 2642

Vernal pool 2642 is the reference pool for the Goat Mesa vernal pool complex and has been monitored annually for the VPHCP Annual Report. Vernal pool 2642 was not impacted by the Caliente Fire; however, qualitative and quantitative data was collected annually from 2019 to 2024. Within the pool there are populations of dwarf woolly marbles, San Diego button-celery, clustered tarplant, jojoba, and California centaury. The associated uplands contain a higher percent cover of jojoba than the pools affected by the Caliente Fire (see Photograph 6).

3.0 DATA ANALYSIS

3.1 Qualitative Survey Results

Qualitative monitoring occurred from 2019 through 2024 to document site conditions. Qualitative monitoring included documenting trash and dumping, non-native species presence in associated uplands, invasive species presence within vernal pools, barrier integrity, trespassing and unauthorized use, impacts from edge effects, impacts to hydrological functionality, erosion, fire occurrence impacts, and general maintenance needs throughout the entire Goat Mesa vernal pool complex. Qualitative monitoring observations are summarized in Attachment 2.

Prior to the Caliente Fire in August 2019, fairy shrimp and listed plant species were observed within the Goat Mesa vernal pool complex, there was little to no trash on-site, fences and signs were in acceptable conditions, and no trespassing was observed. However, there was a significant population of non-native species within the vernal pools and surrounding uplands that required non-native species control and dethatching. Fairy shrimp were observed in 2020 and 2022 and although ponding occurred in 2023, no fairy shrimp were observed. Additionally, listed plant species were observed in 2020, 2021, 2022, and 2023. Although listed species were observed in 2021, no ponding occurred due to drought conditions during this sampling year; therefore, no fairy shrimp were observed.

Water quality monitoring took place for vernal pool 1141, which was exposed to fire retardant, vernal pool 1189, which was burned, and vernal pool 2642, that acted as a control. Water quality monitoring documented the pH, ammonia levels within each pool. The effects to water quality were not seen to be long-lasting and were naturally remediated. Results of water quality monitoring are displayed in Table 3.

Table 3 Water Quality Monitoring Results				
Date	Last Rain (days)	Inundated	pH	NH3 (ppm)
Vernal Pool 1141 – Fire Retardant Exposure				
08/23/19	15+	No	N/A	N/A
11/19/19	15+	No	N/A	N/A
12/03/19	1–5	Yes	6.5	1.0
01/09/20	6–15	Yes	7.0	0.5–0.75
04/01/20	6–15	No	N/A	N/A
05/11/20	15+	No	N/A	N/A
Vernal Pool 1189 - Burned				
08/23/19	15+	No	N/A	N/A
11/19/19	15+	No	N/A	N/A
12/03/19	1–5	Yes	7.0	0
01/09/20	6–15	Yes	7.0	0
04/01/20	6–15	Yes	9.0	0
05/11/20	15+	No	N/A	N/A

Table 3 Water Quality Monitoring Results				
Date	Last Rain (days)	Inundated	pH	NH3 (ppm)
Vernal Pool 2642 – No Impact				
08/23/19	15+	No	N/A	N/A
11/19/19	15+	No	N/A	N/A
12/03/19	1–5	Yes	7.0	0
01/09/20	6–15	Yes	9.0	0
04/01/20	6–15	No	N/A	N/A
05/11/20	15+	No	N/A	N/A
ppm = parts per million; N/A = not applicable				

Problems with non-native species were not specific to the burn scar but throughout the site. The site had occasional issues with trespassing and off-highway vehicle use, trash and debris presence, and fence and sign damage.

3.2 Quantitative Survey Results

Following the Caliente Fire, quantitative monitoring occurred from 2020 to 2024 in all impacted vernal pools as well as vernal pool 2642. No fairy shrimp surveys occurred during quantitative monitoring. Attachment 3 displays quantitative data collected during this period with data taken from the VPHCP Annual Monitoring and Management Reports (City of San Diego 2019, 2020b, 2021, 2022, 2023) as well as the Goat Mesa and Otay Lakes 2024 Monitoring Report (HELIX Environmental Planning 2025).

Overall, percent cover of native species within all impacted vernal pools increased. Native species richness within all impacted vernal pools increased from 2020 to 2024. Non-native cover within the impacted vernal pools increased or remained the same. Vernal pools 1141 and 1775 saw an increase in non-native cover, compared to 2020 and 2024; however, vernal pool 1141 saw a decrease in non-native cover from 2023 to 2024. Non-native cover in vernal pool 1141 was 25 to 50 percent in 2023 and decreased to 10 to 35 percent in 2024. Non-native species richness decreased for vernal pool 1141 and remained the same for vernal pools 1142 and 1920. Non-native species richness increased for vernal pools 1189 and 1775. Native species in the upland buffer increased for vernal pools 1141, 1142, 1775, and 1920, and decreased around pool 1189; however, native species in the upland surrounding 1189 was still high (12 species observed in 2023, compared to 16 species observed in 2020). Non-native species in the upland buffer increased or remained the same for all impacted vernal pools.

Data collected for reference vernal pool 2624 showed similar trends to the impacted vernal pools. Vernal pool 2624 saw an increase in native percent cover within the pool from 2020 to 2024. Additionally, native species richness within the pool increased and non-native percent cover decreased. Non-native species richness decreased within the vernal pool. Native species within the upland buffer saw a slight decrease and non-native species within the upland buffer saw a minimal decrease.

It is likely all pools experienced an increase of both native and non-native cover in 2022, 2023, and 2024 due to increased rainfall (National Weather Service 2024). Average rainfall for the area is 9.67 inches from October to September. Previous years (2020 and 2021) experienced below average rainfall, which likely resulted in lower cover of all species. Table 4 depicts rainfall totals per year from 2020 to 2024.

Table 4 Annual Rainfall Totals	
Year (October 1 to September 30)	Rainfall Total (Inches)
2019-2020	17.51
2020-2021	6.09
2021-2022	9.89
2022-2023	17.76
2023-2024	13.09
SOURCE: National Weather Service 2025	

Additionally, per the VPMMP, cover class of species is used to determine management level changes. Tables 5 through 7 display the cover class of San Diego button-celery, spreading navarretia, and non-natives species within the six vernal pools from 2020 until 2024.

Table 5 Cover Class of San Diego Button-celery from 2020 until 2024					
Vernal Pool	Year				
	2020	2021	2022	2023	2024
1141 ¹	2	1	2	3	4
1142 ¹	1	1	1	1	2
1189 ¹	3	2	3	3	5
1775	1	1	1	1	1
1920 ¹	0	0	0	0	0
2642*	5	4	4	6	6
*Vernal pool was not impacted by the Caliente Fire ¹ Recommended management level change SOURCES: City of San Diego 2020b, 2021, 2022, and 2023; HELIX Environmental Planning 2025					

Over the past three years, percent cover of San Diego button-celery increased by one cover class for vernal pools 1142 and 2642 and increased by two cover classes for vernal pools 1141 and 1189. Within vernal pools 1775 and 1920, the San Diego button-celery cover class has remained consistent. No San Diego button-celery was observed in vernal pool 1920 during quantitative monitoring events.

Table 6 Cover Class of Spreading Navarretia Species from 2020 until 2024					
Vernal Pool	Year				
	2020	2021	2022	2023	2024
1141 ¹	1	0	0	1	2
1142 ¹	1	0	0	1	1
1189 ¹	0	0	0	0	0
1775	0	0	0	0	0
1920 ¹	0	0	0	0	0
2642*	2	0	0	1	3
*Vernal pool was not impacted by the Caliente Fire ¹ Recommended management level change SOURCES: City of San Diego 2020b, 2021, 2022, and 2023; HELIX Environmental Planning 2025					

Over the past three years, spreading navarretia cover class has increased by one cover class in vernal pool 1142, and by two cover classes in vernal pools 1141 and 2642. No spreading navarretia was observed in vernal pools 1189, 1775, and 1920.

Table 7 Cover Class of Non-Native Species from 2020 until 2024					
Vernal Pool	Year				
	2020	2021	2022	2023	2024
1141 ¹	3	2	3	5	4
1142 ¹	2	2	4	4	2
1189 ¹	2	1	2	2	2
1775	2	2	3	4	4
1920 ¹	2	2	2	2	2
2642*	3	1	4	2	2
*Vernal pool was not impacted by the Caliente Fire ¹ Recommended management level change SOURCES: City of San Diego 2020b, 2021, 2022, and 2023; HELIX Environmental Planning 2025					

Non-native cover has decreased by two cover classes in vernal pools 1142, and 2642. Within the last three years, non-native cover has remained the same in vernal pools 1189 and 1920. Non-native cover over the last three years has increased by one cover class for vernal pools 1141 and 1775.

4.0 RECOMMENDATIONS

Per the VPMMP, vernal pool complexes are to be downgraded from a Management Level 1 to a Management Level 3 post-fire; however, the entire Goat Mesa Vernal Pool complex remained at a Management Level 1 and only the vernal pools impacted by the Caliente Fire were downgraded to a Management Level 3. Based on the results from the qualitative and quantitative monitoring conducted for the impacted vernal pools, management recommendations are provided in Table 8. Additionally, Table 8 includes recommendations for a Management Level change for each vernal pool, based on the data collected from 2020-2024.

Table 8 Adaptive Management Recommendations			
Vernal Pool	Management Level Change	Justification	Management Action
1141	3 to 1	Trigger C+: An average increase of two cover classes for ALL target covered plant species present in the pools assessed over three years with adequate rainfall.	Maintenance and monitoring as a Management Level 1
1142	3 to 1	Trigger C+: An average decrease of one cover class in combined non-native cover in the vernal pools over three years, regardless of rainfall.	Maintenance and monitoring as a Management Level 1
1189	3 to 1	Trigger C+: An average increase of two cover classes for ALL target covered plant species present in the pools assessed over three years with adequate rainfall	Maintenance and monitoring as a Management Level 1

Table 8 Adaptive Management Recommendations			
Vernal Pool	Management Level Change	Justification	Management Action
1775	No change	No change in sensitive species cover class within the last three years. Non-native cover class has increased in the last three years.	Maintenance and monitoring as a Management Level 3. Non-native invasive species maintenance as discussed in the VPMMP for Management Level 3 recommended. Seeding sensitive species recommended.
1920	3 to 1	Trigger C+ not met; however, based on high native percent cover and low non-native cover within the vernal pool, upgrade from Management Level 3 to 1 is recommended.	Maintenance and monitoring as a Management Level 1

Based on the quantitative data collected from 2020 to 2024, vernal pools 1141, 1142, 1189, and 1920 are recommended to be upgraded to a Management Level 1 and follow the recommended maintenance and monitoring protocols defined in the VPMMP for Management Level 1 vernal pools. Although a Trigger C+ has not occurred in vernal pool 1920, it is recommended the vernal pool be upgraded to a Management Level 1. Based on the quantitative data collected from 2020 to 2024, the vernal pool has seen an annual increase in native percent cover. Native percent cover within the vernal pool is high (greater than 75 percent for 2023 and 2024). Additionally, while non-native cover has not changed from 2020 to 2024, non-native cover remains low within the vernal pool for all five years of data collection (one to five percent). Lastly, sensitive species cover did not change during quantitative monitoring (zero percent cover for San Diego button-celery and spreading navarretia); however, no sensitive plant species were observed from 2020 to 2024; therefore, it is assumed that sensitive plant species were not present within the vernal pool prior to the Caliente Fire and cover of sensitive species is not anticipated to change. Due to the increase in non-native cover and no increase in sensitive species cover within the vernal pool, vernal pool 1775 is recommended to remain at a Management Level 3. Based on the non-native cover within vernal pool 1775, continued maintenance within these vernal pools is recommended until the vernal pools show a decrease in non-native cover. Supplemental seeding of San Diego button celery is recommended within vernal pool 1775, as cover has remained the same over the past five years of maintenance and monitoring. The recommended management actions are anticipated to result in an upgrade from a Management Level 3 to a Management Level 1 by Trigger C+.

Please contact Jade Woll at jwoll@reconenvironmental.com or (619) 308-9333 extension 117 if you have any questions or require further information pertaining to the contents of this letter.

Sincerely,



Jacob Dioli
Restoration Analyst

JRD:jg

Attachments

5.0 REFERENCES CITED

AECOM

- 2010 City of San Diego Vernal Pool And Quino Habitat Restoration Project Implementation Report. January 2010.

HELIX Environmental Planning

- 2025 Monitoring Report for the 2024 Covered Plant Surveys Conducted at Goat Mesa and Otay Lakes, in Accordance with the City of San Diego Vernal Pool Habitat Conservation Plan. Helix Environmental Planning. February 2025.

National Weather Service

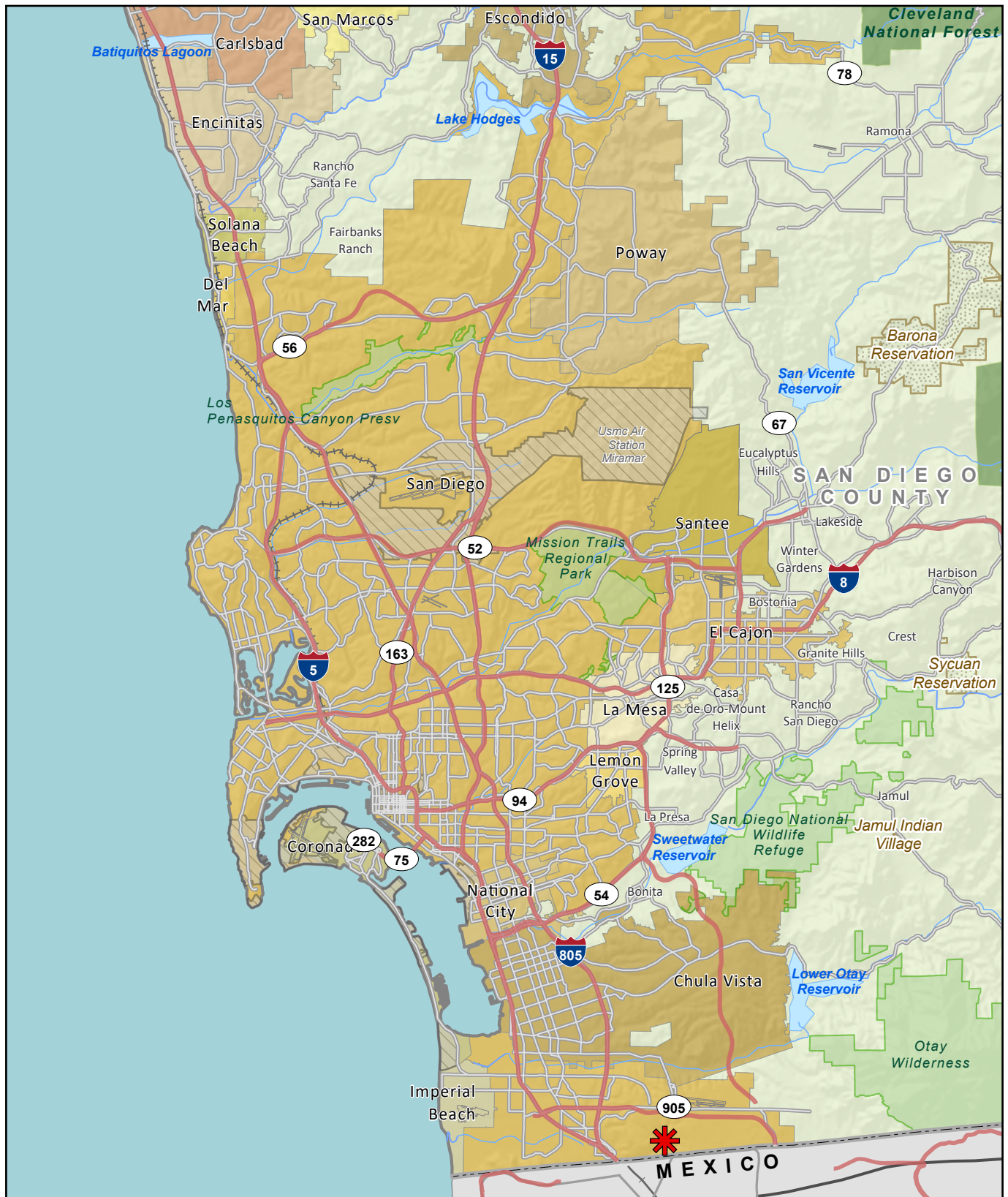
- 2025 San Diego Climate Data. <https://www.weather.gov/wrh/Climate?wfo=sgx>.

San Diego, City of

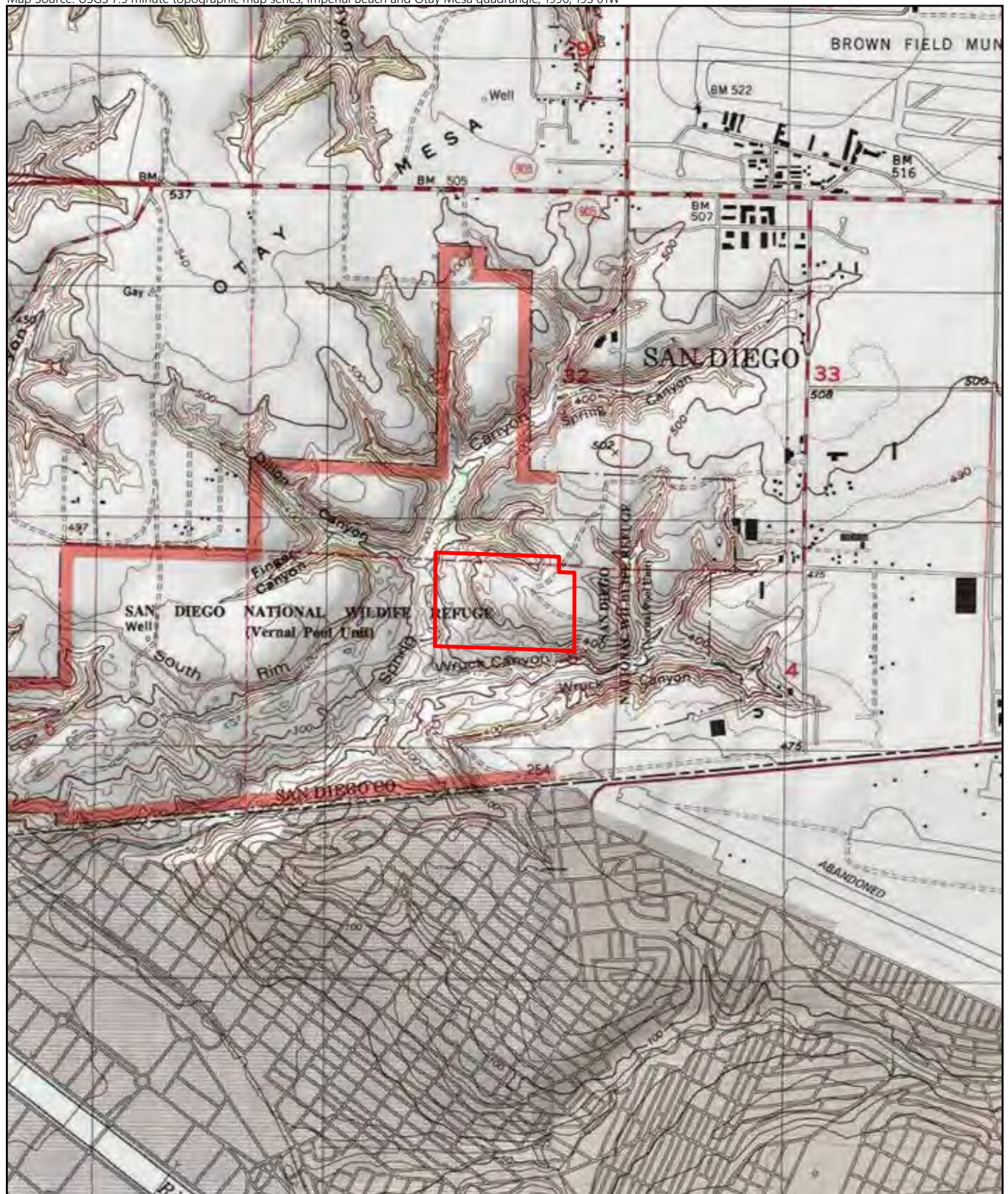
- 2017 City of San Diego Vernal Pool Habitat Conservation Plan. October 2017.
- 2020a Revised Final City of San Diego Vernal Pool Habitat Conservation Plan – Vernal Pool Management and Monitoring Plan. January.
- 2020b 2020 Vernal Pool Habitat Conservation Plan (VPHCP) Annual Monitoring and Management Report. Prepared by AECOM. November 23, 2021.
- 2021 2021 Vernal Pool Habitat Conservation Plan (VPHCP) Annual Monitoring and Management Report. Prepared by AECOM. October 26, 2022.
- 2022 2022 Vernal Pool Habitat Conservation Plan Management and Monitoring Annual Report. Prepared by AECOM. November 2023.
- 2023 2023 Vernal Pool Habitat Conservation Plan Management and Monitoring Annual Report. Prepared by AECOM. June 2024.

U.S. Fish and Wildlife Service

- 1998 Recovery Plan for Vernal Pools of Southern California. U.S. Department of the Interior, Fish and Wildlife Service, Region One, Portland, Oregon.

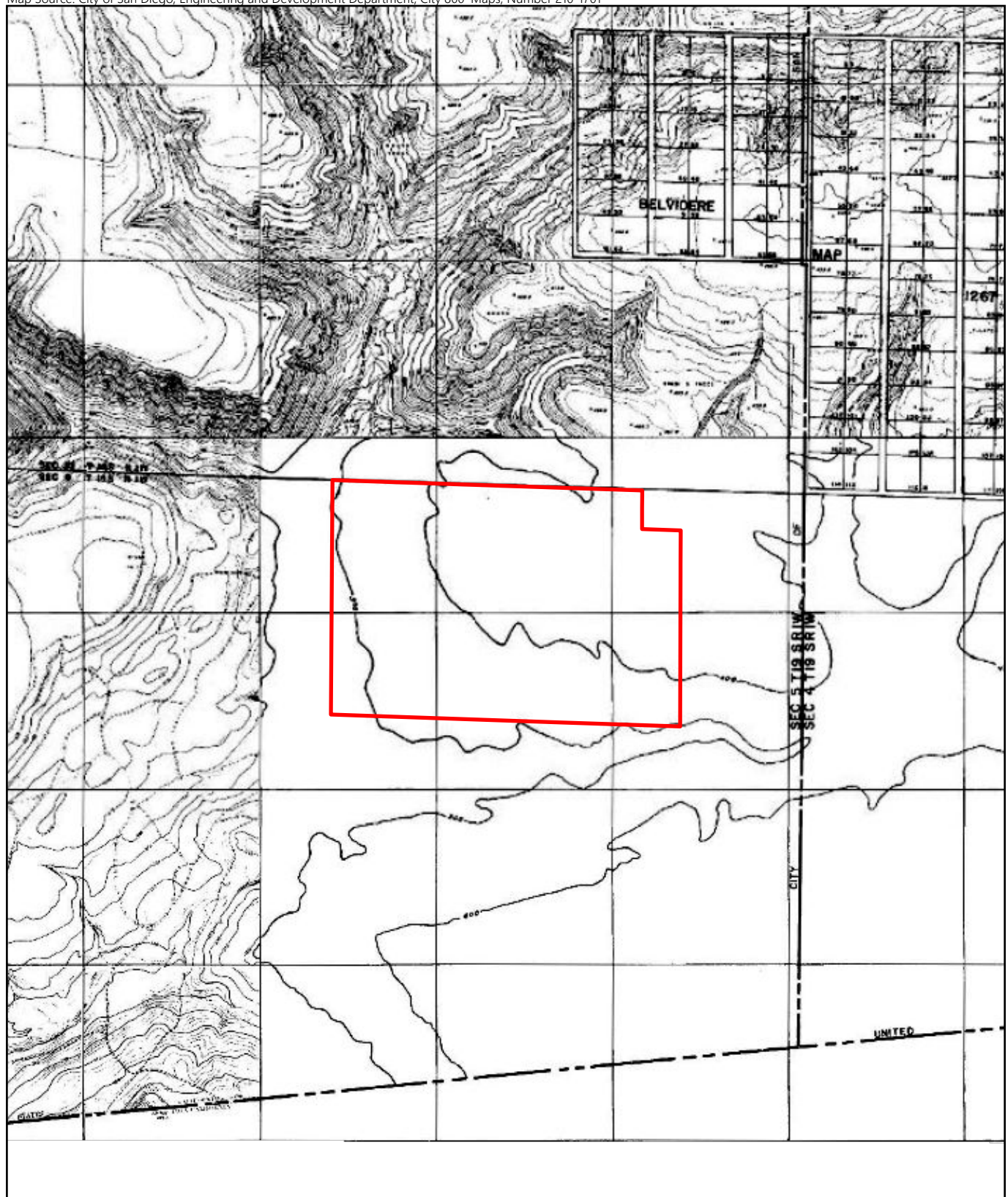


 Project Location



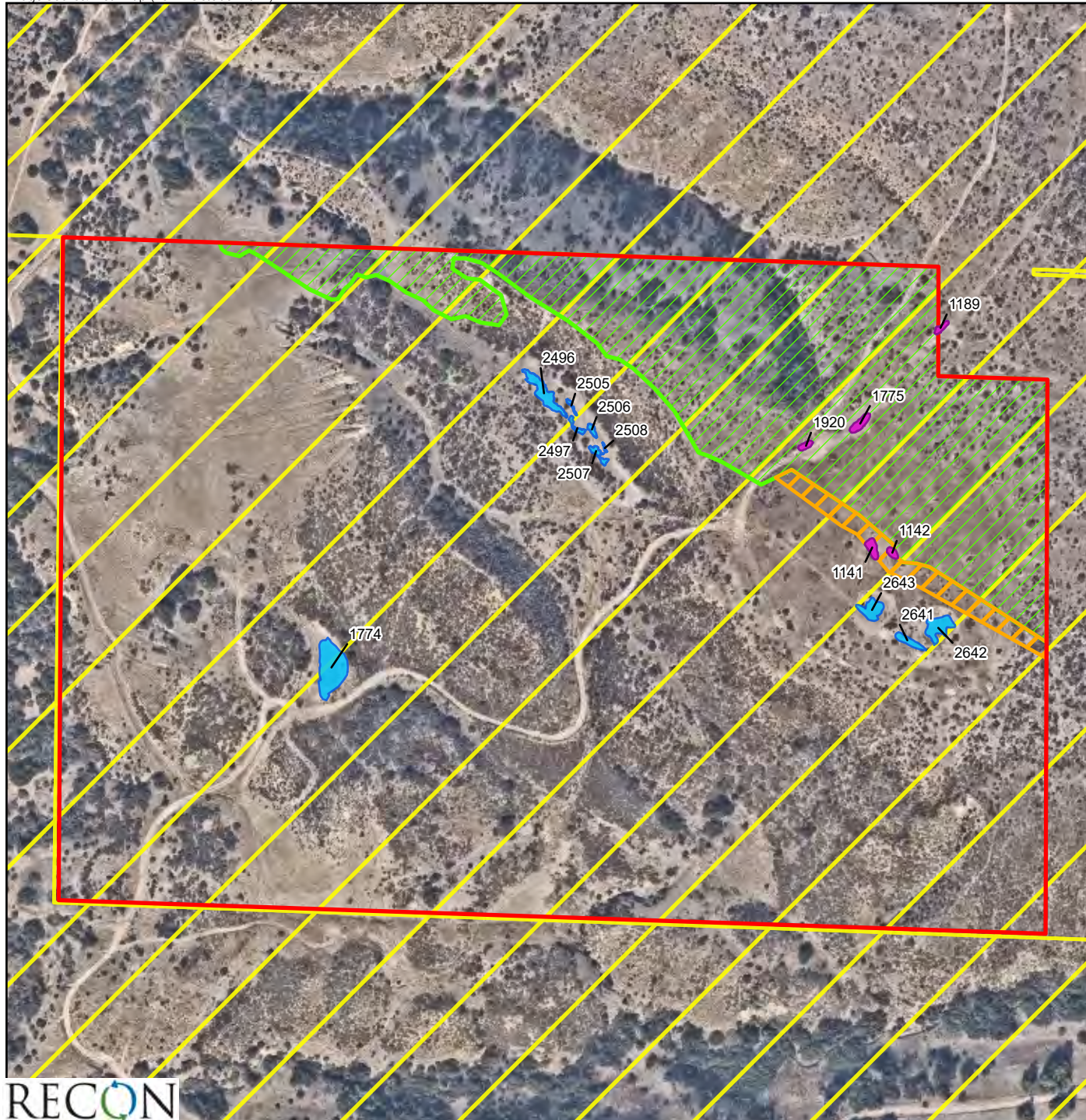
Goat Mesa Complex Boundary

0 Feet 2,000 



0 Feet 800

Goat Mesa Complex Boundary



-  Goat Mesa Complex Boundary
-  Caliente Fire 2019
-  Fire Retardant (Estimated)
-  SD City Vernal Pools (not impacted by fire)
-  SD City Vernal Pools (impacted by fire)
-  City of San Diego Multi-Habitat Planning Area

NOTE: Vernal Pools 1141, 1142, 1189, 1775, 1920, and 2642 are identified as pools where quantitative data was collected from 2020 to 2024.

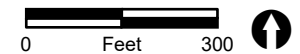
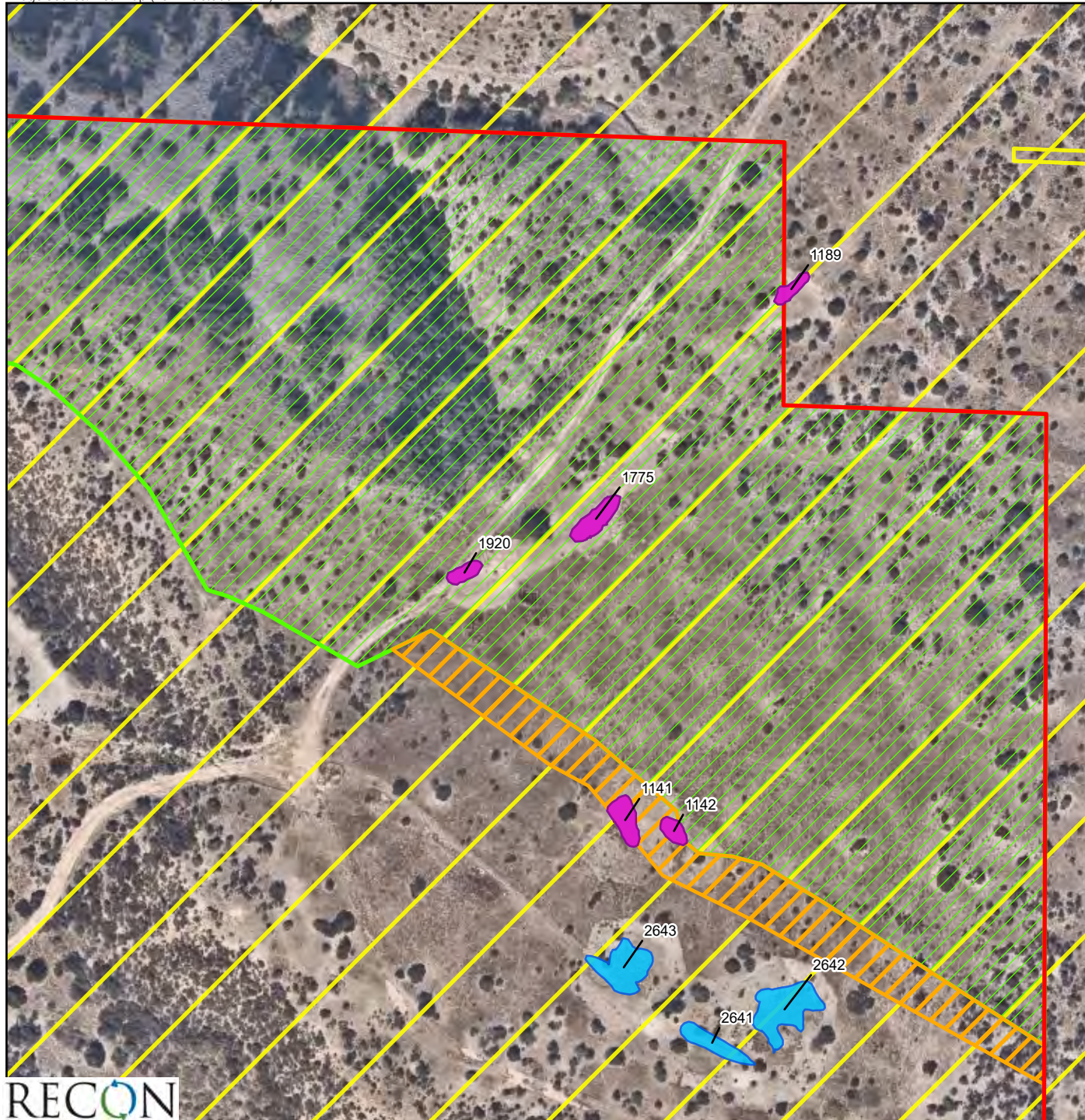
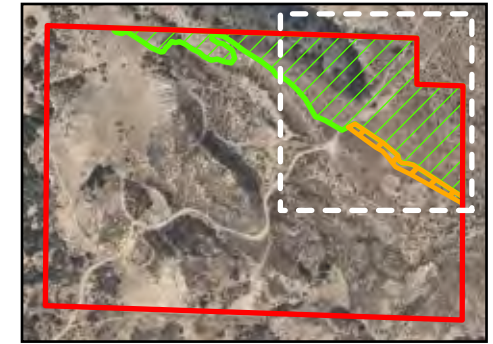


FIGURE 4
Project Location on
Aerial Photograph



RECON



- Goat Mesa Complex Boundary
- Caliente Fire 2019
- Fire Retardant (Estimated)
- SD City Vernal Pools (not impacted by fire)
- SD City Vernal Pools (impacted by fire)
- City of San Diego Multi-Habitat Planning Area

NOTE: Vernal Pools 1142, 1141, 1189, 1775, 1920, and 2642 are identified as pools where quantitative data was collected from 2020 to 2023.

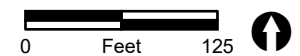


FIGURE 5
Goat Mesa
Vernal Pool Survey Area

ATTACHMENTS

ATTACHMENT 1

Photographs



PHOTOGRAPH 1
Overview of Vernal Pool 1141, Taken on January 22, 2025



PHOTOGRAPH 2
Overview of Vernal Pool 1142, Taken on January 22, 2025



PHOTOGRAPH 3
Overview of Vernal Pool 1189, Taken on January 22, 2025



PHOTOGRAPH 4
Overview of Vernal Pool 1775, Taken on January 22, 2025



PHOTOGRAPH 5
Overview of Vernal Pool 1920, Taken on January 22, 2025



PHOTOGRAPH 6
Overview of Vernal Pool 2642, Taken on January 22, 2025

ATTACHMENT 2

Qualitative Monitoring Observations at Goat Mesa
2019 to 2024

Attachment 2
Qualitative Monitoring Observations at Goat Mesa
2019 to 2024

Date	Surveyors	Fairy Shrimp Present	Listed Plants Present	Trash	Damage to Fence/ Signs	Invasive Species in Pool	Invasive Species in Buffer	Trespass	Fire	Management Needs	Notes
February 7, 2019*	Cheryl Jenkins, Jason Allen	Yes	Yes	-	-	Yes	Yes	-	-	Weed control, dethatching, revegetation, patrol	-
April 2, 2019*	Cheryl Jenkins, Jason Allen	No	Yes	-	-	Yes	Yes	-	-	Weed control, dethatching	Vernal Pool 1774 is very weedy. Upper mesa contains erodium mixed with natives in uplands.
April 29, 2019	Cheryl Jenkins	-	Yes	-	-	Yes	Yes	-	-	Weed control, dethatching	Access road requires maintenance.
January 9, 2020*	Cheryl Jenkins	Yes	Wrong time	-	Yes	Yes	Yes	-	Yes	Weed control, dethatching, fence repair, additional monitoring in response to fire.	Water samples taken to monitor pH and ammonia levels in pools affected by fire and fire retardant.
April 1, 2020*	Cheryl Jenkins	Yes	Yes	-	Yes	Yes	Yes	-	Yes	Weed control, dethatching, fence repair	Water samples taken to measure pH and ammonia in burned pools.
May 11, 2020	Cheryl Jenkins	-	Yes	-	Yes	Yes	Yes	-		Weed control, dethatching, fence repair, sign replacement	Post fire recovery doing well. Fire scar barely visible now.
January 5, 2021	Jason Allen	-	-	-	-	-	-	-	-		City staff performed Qualitative monitoring.
January 15, 2021	Jason Allen	-	-	-	-	-	-	-	-	-	City staff performed Qualitative monitoring.
March 9, 2021	Cheryl Jenkins	-	Yes	-		Yes	Yes	-	-	Weed control, dethatching	-
April 22, 2021	Cheryl Jenkins	-	Yes	-	Yes	Yes	Yes	-	-	Weed control, fence repair	-
April 23, 2021	Jason Allen	-	-	-	-	-	-	-	-	-	City staff performed Qualitative monitoring.

Attachment 2
Qualitative Monitoring Observations at Goat Mesa
2019 to 2024

Date	Surveyors	Fairy Shrimp Present	Listed Plants Present	Trash	Damage to Fence/ Signs	Invasive Species in Pool	Invasive Species in Buffer	Trespass	Fire	Management Needs	Notes
May 14, 2021	Jason Allen	-	-	-	-	-	-	-	-	-	City staff performed Qualitative monitoring.
June 8, 2021	Cheryl Jenkins	-	Yes	-	Yes	Yes	Yes	-	-	Weed control, fence repair	
March 1, 2022	Cheryl Jenkins, Travis Whitney	-	Yes	-	-	Yes	Yes	-	-	Weed control	Weeding recently completed in and around the pools.
March 9, 2022*	Jason Allen	Yes	Yes	-	-	Yes	Yes	-	-	Weed control, restoration/revegetation, regular patrols recommended, grading/recontouring, fence install	Road pool has ponded and has fairy shrimp in it.
May 19, 2022	Jade Woll, JR Sundberg	-	Yes	-	-	Yes	Yes	-	-	-	-
July 26, 2022	Kelsey Hall, Travis Whitney	-	Wrong time	-	-	-	-	-	-	-	-
August 10, 2022	Jason Allen		Yes	-	-	Yes	Yes	-	-	Weed control, dethatching, restoration/revegetation, regular patrols recommended	Annual weeds and grasses present.
September 29, 2022	Jason Allen	-	Yes	-	-	Yes	Yes	Yes	-	Weed control, dethatching, restoration/revegetation, regular patrols recommended	Dry grass and annual weeds around and in pools. Motorcycle track along main dirt road.
November 11, 2022*	Jason Allen	No	Wrong time	-	-	Yes	Yes	-	-	weed control, dethatching	Two pools on upper mesa are inundated. Annual weeds coming up everywhere.

Attachment 2
Qualitative Monitoring Observations at Goat Mesa
2019 to 2024

Date	Surveyors	Fairy Shrimp Present	Listed Plants Present	Trash	Damage to Fence/ Signs	Invasive Species in Pool	Invasive Species in Buffer	Trespass	Fire	Management Needs	Notes
April 7, 2023*	Jason Allen	No	No	-	-	Yes	Yes	-	-	Weed control, dethatching, restoration/ revegetation, regular patrols recommended	Annual weeds and grasses in and around pools.
April 27, 2023*	Jason Allen	No	Yes	Yes	-	Yes	Yes	-	-	Weed control, dethatching, trash pickup, regular patrols recommended	Annual weeds and grasses in and around pools. Some old trash present.
June 29, 2023	Darin Busby, Andrew Kort	-	Yes	Yes	-	Yes	Yes	Yes	-	Weed control, dethatching, trash pickup	Annual weeds and grasses in and around pools and burned area.
May 2, 2024	Andrew Kort	No	Yes	-	No	Yes	Yes	-	-	Weed control, dethatching	-
May 15, 2024	-	No	Yes	-	-	Yes	Yes	-	-	Weed control, dethatching	-
September 12, 2024	-	No	-	Yes	Yes	Yes	Yes	-	-	Weed control, dethatching, fence repair, trash pickup	-

NOTE: The table only includes qualitative monitoring categories that were observed at least once from 2019 to 2024.

- = Blank in data sheets or not mentioned in reports or email summaries. Assumed to mean not observed.

* = Ponding observed during this visit

ATTACHMENT 3

Quantitative Monitoring Results

Attachment 3 Quantitative Monitoring Results									
Vernal Pool	Monitoring Year ²	ERAR Cover	NAFO Cover	Other Native Cover	Other Native Richness	Non-native Cover	Non-native Richness	Native Species in Upland Buffer	Non-Native Species in Upland Buffer
1141	2020	1-5%	<1%	25-50%	7	5-10%	6	6	5
	2021	<1%	0	1-5%	2	1-5%	3	3	2
	2022	1-5%	0	1-5%	2	5-10%	3	3	2
	2023	5-10%	<1%	25-50%	11	25-50%	5	7	6
	2024	10-25%	1-5%	50-75%	N/A	10-25%	N/A	N/A	N/A
1142	2020	<1%	<1%	10-25%	8	1-5%	4	3	8
	2021	<1%	0	5-10%	2	1-5%	3	1	3
	2022	<1%	0	5-10%	2	10-25%	3	1	3
	2023	<1%	<1%	25-50%	10	10-25%	4	5	8
	2024	1-5%	<1%	50-75%	N/A	1-5%	N/A	N/A	N/A
1189	2020	5-10%	0	25-50%	8	1-5%	1	16	7
	2021	1-5%	0	50-75%	2	<1%	4	7	1
	2022	5-10%	0	50-75%	2	1-5%	4	7	1
	2023	5-10%	0	50-75%	10	1-5%	6	12	8
	2024	25-50%	0	50-75%	N/A	1-5%	N/A	N/A	NA
1775	2020	<1%	0	10-25%	11	1-5%	4	9	4
	2021	<1%	0	50-75%	4	1-5%	5	7	3
	2022	<1%	0	50-75%	4	5-10%	5	8	3
	2023	<1%	0	25-50%	12	10-25%	8	14	6
	2024	<1%	0	25-50%	N/A	10-25%	N/A	N/A	N/A
1920	2020	0	0	10-25%	7	1-5%	4	7	6
	2021	0	0	10-25%	3	1-5%	5	4	3
	2022	0	0	25-50%	3	1-5%	5	4	3
	2023	0	0	>75%	9	1-5%	4	11	7
	2024	0	0	>75%	N/A	1-5%	N/A	N/A	N/A
2624 ¹	2020	25-50%	1-5%	10-25%	11	5-10%	7	8	11
	2021	10-25%	0	1-5%	4	<1%	3	4	3
	2022	10-25%	0	1-5%	4	1-5%	3	4	2
	2023	50-75%	<1%	>75%	12	1-5%	4	6	10
	2024	50-75%	5-10%	>75%	N/A	1-5%	N/A	N/A	N/A

Attachment 3
Quantitative Monitoring Results

ERAR = San Diego button-celery; NAFO = Spreading Navarretia; N/A= Not Available

¹VPHCP Reference Pool- quantitative data collected annually.

²Baseline surveys were conducted in 2003 for ERAR. Only data was collected for 1141 and 2624. ERAR cover for vernal pools 1141 and 2624 was 1% and 5%, respectively.

NOTE: Data retrieved from Vernal Pool Habitat Conservation Plan Annual Reports (City of San Diego 2019-2023) and Monitoring Report for the 2024 Covered Plant Surveys Conducted at Goat Mesa and Otay Lakes, in Accordance with the City of San Diego Vernal Pool Habitat Conservation Plan (HELIX 2025).

Appendix B-2

Otay Lakes Post-Fire Management and Monitoring Plan



An Employee-Owned Company

March 10, 2025

Ms. Kelsey Hall
City of San Diego
Public Utilities Department, EPM/Environmental
9192 Topaz Way, MS 901A
San Diego, CA 92123

Reference: Vernal Pool Habitat Conservation Plan Otay Lakes (K-5) Post-Border 2 Fire Monitoring and Management Report (P.O. #4200004092; RECON Number 9856.34)

Dear Ms. Hall:

This letter report summarizes the monitoring and management recommendations for Otay Lakes (K-5) for the City of San Diego's (City) Public Utilities Department following the Border 2 Fire. The purpose of this report is to present preliminary qualitative monitoring results and recommendations for the Otay Lakes vernal pool complex in preparation of the adaptive management plan following the Border 2 Fire. Twenty-one vernal pools were directly or indirectly impacted as a result of the Border 2 Fire.

PROJECT BACKGROUND

Otay Lakes is a conserved site on City-owned parcels (totaling 632 acres) and is located south of the Lower Otay Reservoir and east of State Route 125 (Figures 1 through 4). The Otay Lakes vernal pool site is managed by the City's Public Utilities Department. Eighty-five vernal pools occur at the Otay Lakes complex. Upland vegetation is characterized by chamise chaparral with herbaceous non-native cover such as storksbill (*Erodium* spp.), and the vernal pools support populations of the endangered/threatened plants species San Diego button-celery (*Eryngium aristulatum* var. *parishii*) and spreading navarretia (*Navarretia fossalis*). Restoration, including additional signage installation, seed bulking, weeding, and dethatching, was conducted in 2008–2009 on a portion of the pools in this complex as part of a San Diego Association of Governments TransNet grant to restore vernal pool and Quino checkerspot butterfly (*Euphydryas editha quino*) habitat (AECOM 2010).

The City's Public Utilities Department owns and manages a number of parcels identified in the Vernal Pool Habitat Conservation Plan (VPHCP; City of San Diego 2017). Management of the Otay Lakes complex includes continued annual maintenance to remove trash and debris, repair fencing or address trespassing, control non-native species present within the vernal pools and their associated upland buffers as described in the Vernal Pool Maintenance and Monitoring Plan (VPMMP; City of San Diego 2020). Measures described within this letter are in accordance with the Final VPHCP and VPMMP (City of San Diego 2017). The VPHCP was finalized in October 2017 and is intended to provide an effective framework to protect, enhance, and restore vernal pool resources in specific areas of the city of San Diego, while improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools. The management and monitoring of the vernal pool resources must be both proactive and continuous to achieve the goals and objectives of the VPHCP. The biological goal of the VPHCP is to contribute to the recovery of the VPHCP covered species and ensure the continued persistence of the covered vernal pool species populations identified in the VPHCP. This goal will be achieved by implementing the VPHCP conservation strategy, which includes both habitat-based (vernal pool) and species-specific objectives that are consistent with the U.S. Fish and Wildlife Service Recovery Plan for Vernal Pools of Southern California (U.S. Fish and Wildlife Service 1998).

This VPMMP uses a tiered three-level approach to adaptive monitoring and management that is applied to individual vernal pool complexes. Levels of monitoring and maintenance are assigned at the complex level based on evaluation of the existing habitat conditions and population status of the seven covered species within a complex. The objectives of complex-wide management and monitoring at each level are as follows:

- Level 1 – *maintain* existing habitat conditions and covered species populations within conserved complexes (as defined in Table 4-1 of Appendix D of the VPHCP). This level is considered stewardship.
- Level 2 – *stabilize* covered species population status by enhancing habitat conditions to a level that can support existing populations to achieve the VPHCP habitat and species-specific objectives (as defined in Table 4-1 of Appendix D of the VPHCP).
- Level 3 – *restore* habitat conditions to a level that can increase covered species populations identified in the species-specific objectives (as defined in Table 4-1 of Appendix D of the VPHCP).

This report includes the results of qualitative monitoring, conducted on January 21, February 3, and February 11, 2025, within the Otay Lakes Vernal Pool Complex (K5).

PRE-FIRE CONDITIONS

Qualitative Observations

A qualitative site visit was performed by RECON Environmental, Inc. biologists on January 21, 2025. No pools were ponded during the qualitative site visit. Scattered trash and debris were observed throughout the site and consisted primarily of balloons settled in the area and abandoned backpacks. While non-native species were present within the vernal pool buffers, the majority of the non-native species observed were desiccated and consisted primarily of thatch from the previous season. The non-native species consisted primarily of tocalote (*Centaurea melitensis*), non-native grasses, and storksbill. Additionally, an isolated population of the invasive plant stinkwort (*Dittrichia graveolens*) was observed near the southeastern boundary of the site, adjacent to the access road. The vernal pool basins were generally free of weeds, except for vernal pools 139, 258, 657, and 658 (see Figure 4). Native species cover within most pools was low and consisted of the previous season's populations of dwarf woolly marbles (*Psilocarphus brevissimus* var. *brevissimus*), toad rush (*Juncus bufonius*), pale spike-rush (*Eleocharis macrostachya*) and annual hair grass (*Deschampsia danthonioides*). Repairs to the fencing and signs were not needed, and no off-highway vehicle activity or trespassing was noted. No observations warranted the downgrading of the site from Management Level 1.

Quantitative Observations

Prior to the Border 2 Fire, vernal pools 208, 656, 891, 892, and 1801 (see Figure 4) were regularly monitored for the VPHCP annual reports. The quantitative monitoring data prior to the fire was collected on May 14, 2024. Vernal pool 1801 was the only quantitatively monitored pool directly affected by the Border 2 Fire. Vernal pool 1801 had less than one percent cover of San Diego button-celery, native cover of one to five percent, and non-native cover was estimated to be greater than 75 percent during the 2024 quantitative survey.

POST-FIRE CONDITIONS

On January 23, 2025, the Border 2 Fire burned approximately 6,625 acres of the Otay Mountain Wilderness and surrounding areas, including 231 acres of the Otay Lakes vernal pool complex (Figures 4 and 5a through 5c).

Firefighters fought the wildfire using the standard practices of cutting fuel breaks, spraying water, and targeted fire-retardant drops.

An initial assessment of the burn scar was conducted by RECON Environmental, Inc. biologists on February 3 and February 11, 2025. The majority of the uplands within the burn area were impacted by the fire (Photograph 1). Additionally, a fire line had been established in the eastern portion of the site, which impacted soil crusts and ashy spike-moss (*Selaginella cinerascens*; Photograph 2). The Border 2 Fire primarily burned native species including chamise (*Adenostoma fasciculatum*) and California buckwheat (*Eriogonum fasciculatum*); however, there were also large stands of burned non-native species including tocalote and non-native grasses (Photograph 3). Geographic Information Systems mapping provided by the National Interagency Fire Center (2025) and ground truthing of this data during the post-fire site visits determined that 21 vernal pools were within the Border 2 Fire burn scar. Of these, 18 were determined to be directly impacted by the fire and three were indirectly impacted (see Figures 5a through 5c; Photographs 4 through 24). The three vernal pools indirectly impacted (vernal pools 900, 904, and 1798) had cut material from the fuel break placed around the vernal pool basins, no cut material was present in the basins (see Figure 5a and Photographs 21 through 24). Additionally, three vernal pools located within the burn scar were considered not impacted by the fire. Two of these pools (vernal pools 910 and 913) are highly degraded road ruts, with no vegetation within or surrounding the vernal pools (Photographs 25 and 26). While they were within the burn scar, it is unlikely impacts occurred to the pools from the fire as the pools are highly degraded. Additionally, vernal pool 1796 is within the burn scar; however, the surrounding upland habitat was not burned. Therefore, it is assumed the fire did not move through the pool and no impacts occurred (Photograph 27). No fire retardant was observed within the site and no ash was observed in the surrounding pools outside of the burn scar. Table 1 discusses each pool within the Border 2 Fire burn scar and includes their associated impacts and post-fire strategy recommendations.

Table 1			
Pool Number	Listed Species Observed	Impact	Post-Fire Strategy ¹
207	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
898	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
900	--	Indirect (material cut for fuel break placed around pool, fire adjacent)	Monitor for erosion, non-native species, and indicator species recovery; remedial restoration if necessary
904	--	Indirect (material cut for fuel break placed around pool, fire adjacent)	Monitor for erosion, non-native species, and indicator species recovery; remedial restoration if necessary.
907	--	Direct	Fence installation, active restoration within the associated upland and vernal pool. Include in annual quantitative monitoring.
908	--	Direct	Fence installation, active restoration within the associated upland and vernal pool. Annual quantitative monitoring.

Table 1 Vernal Pools Within the Border 2 Fire at Otay Lakes (K5) Burn Scar and Associated Impacts			
Pool Number	Listed Species Observed	Impact	Post-Fire Strategy ¹
909	--	Direct	Fence installation, active restoration within the associated upland and vernal pool. Include in annual quantitative monitoring.
910	--	Not impacted	While this pool is within the burn scar, it is heavily degraded due to being in the road. Consider utilizing this opportunity to fence this pool and redirect the road.
911	--	Direct	Fence installation, active restoration within the associated upland and vernal pool. Include in annual quantitative monitoring.
912	--	Direct	Fence installation, active restoration within the associated upland and vernal pool. Include in annual quantitative monitoring.
913	--	Not impacted	While this pool is within the burn scar, it is heavily degraded due to being in the road. Consider utilizing this opportunity to fence this pool and redirect the road.
1792	--	Direct	Active upland and vernal pool restoration. Include in annual quantitative monitoring.
1793	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
1794	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
1795	--	Direct	Active upland and vernal pool restoration. Include in annual quantitative monitoring.
1796	--	Not impacted	This vernal pool is within the burn scar, but the surrounding upland vegetation was not burned and it is assumed that this pool was not impacted by the fire.
1797	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
1798	--	Indirect (material cut for fuel break placed around pool, fire adjacent)	Monitor for erosion, non-native species, and indicator species recovery; remedial restoration if necessary.
1801 ²	ERAR*	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Continue annual quantitative monitoring.
1802	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.

Table 1 Vernal Pools Within the Border 2 Fire at Otay Lakes (K5) Burn Scar and Associated Impacts			
Pool Number	Listed Species Observed	Impact	Post-Fire Strategy ¹
1803	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
1804	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring
1805	--	Direct	Fence installation, upland and vernal pool active restoration, include in annual quantitative monitoring
2318	--	Direct (surrounding upland burned but pool largely undisturbed)	Monitor for erosion, non-native species, and indicator species recovery. Consider active restoration within associated buffer and vernal pool seeding if necessary. Include in annual quantitative monitoring.
¹ Active restoration is defined by native container plant installation and seed installation within or around impacted vernal pools. ² Vernal pools that receive annual quantitative sampling per VPHCP. *ERAR = San Diego button-celery -- = Data not collected			

DISCUSSION AND RECOMMENDATIONS

Continued monitoring is necessary to observe how the impacted vernal pools naturally recover following the Border 2 Fire. Additionally, immediate weed treatment and fencing is recommended. The threat of non-native species invading recently burned areas is high and should be closely monitored and managed (Photographs 28 and 29). Fencing is recommended around vernal pools 907, 908, 909, and 1805 (see Figure 4; Photograph 30). Fencing near vernal pools 911 and 912 is also recommended to prevent access to the site from the access road (see Figure 4; Photograph 31). Per the VPHCP, any damage resulting from fire suppression (fencing damage, vehicle damage, contamination from fire suppressant chemicals, etc.) will be addressed immediately (City of San Diego 2017).

Per the VPHCP, if a vernal pool complex experiences a fire, the site is downgraded from Level 1 to Level 3 (City of San Diego 2017). Coordination with the City and Wildlife Agencies will determine if the Otay Lakes Complex should be downgraded from a Level 1 to a Level 3 complex. Additionally, per the VPHCP (City of San Diego 2017), after a changed and unforeseen circumstances occur the following will occur:

Within 30 days of a fire, City staff biologists and/or Preserve manager(s) will make a preliminary assessment of the effects of the fire within the Preserve areas. Based on the extent and severity of fire damage, as determined by City staff biologists and/or Preserve manager(s) with concurrence of the Wildlife Agencies, the City will develop and implement specific adaptive management tasks in accordance with the VPMMP and/or Resource Management Plans for specific preserve areas. Restoration, maintenance, and management activities are assumed similar to those described under Level 3 Management to restore covered species (see Chapter 7).

Within 90 days of a fire, City staff biologists and/or preserve manager(s) will initiate management of burned Preserve areas, including: monitoring of natural regrowth within the damaged area for a period of 5 years, implementing measures to minimize the invasion by exotic species, and assessing potential for and implementing measures to prevent excessive soil erosion and/or changes to hydrology (i.e., recontouring may be needed to repair impacts from emergency vehicles).

Qualitative and quantitative monitoring will be implemented to evaluate post-fire restoration success (based on pre-fire conditions). As data are gathered, adaptive management actions will be implemented and modified as needed to reduce potential threats and their adverse impacts. It is assumed that, following 5 years of post-fire restoration, a burned complex will be elevated to Stewardship (i.e., Management Level 1) monitoring and management, as described in Chapter 7. However, if the Wildlife Agencies, in coordination with the City, conclude that a burned complex has not achieved Management Level I status within 5 years, the City will continue management actions until Management Level I status is achieved or the Wildlife Agencies conclude such actions are no longer necessary or effective.

Additional monitoring visits will help determine how the site is naturally recovering and how active restoration is improving site conditions. Following qualitative and quantitative monitoring, an adaptive management plan should be created to address restoration needs if the site is not recovering naturally and to indicate if the Otay Lakes complex management level is to be lowered to Management Level 3.

Monitoring should be performed for the 21 vernal pools directly and indirectly impacted. Qualitative monitoring should occur four times a year, following the guidelines identified in the VPHCP, to assess the recovery of these pools and their associated uplands, as well as other conditions and threats.

Qualitative Monitoring Methods

General site assessment information will be collected, including current or potential threats (e.g., non-native plants, dumping, off-highway vehicle activity, and trampling), as well as observations for changes in hydrology and vernal pool plant and animal species presence. This data will be compared to pre-fire observations. Recommendations for management will be generated consistent with the VPHCP.

Quantitative Monitoring Methods

Quantitative monitoring involves estimation of vernal pool covered plants species cover and population size/density. Quantitative monitoring shall be consistent with the VPHCP Management and Monitoring Plan Table 7-1 for Management Level 1. Currently, annual quantitative plant data is only being collected for vernal pools 208, 656, 891, 892, and 1801 within Otay Lakes. In addition to these vernal pools, annual quantitative data will be collected within all vernal pools in the complex with covered plant species directly and indirectly impacted by the Border 2 Fire. If quantitative data was not previously collected for the vernal pools impacted by the Border 2 Fire and no covered species data is available, discussions with the City and the Wildlife Agencies will occur to determine if quantitative monitoring is needed. Additionally, the city and the Wildlife Agencies will determine if fairy shrimp surveys will be conducted within impacted pools.

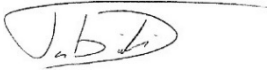
Reporting

Post-fire monitoring observations will be included in the annual data set and report along with recommendations of adaptive management needed if vernal pools do not appear to be recovering to pre-fire conditions.

Ms. Kelsey Hall
Page 7
March 10, 2025

Please contact Jade Woll at jwoll@reconenvironmental.com or (619) 308-9333 extension 117 if you have any questions or require further information pertaining to the contents of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Dioli', enclosed within a hand-drawn oval.

Jacob Dioli
Restoration Analyst

JRD:JCW:jg

REFERENCES CITED

AECOM

- 2010 City of San Diego Vernal Pool And Quino Habitat Restoration Project Implementation Report. Prepared for the City of San Diego. January.
https://sdmmp.com/view_article.php?cid=SDMMP_CID_187_61608741ab554.

National Interagency Fire Center

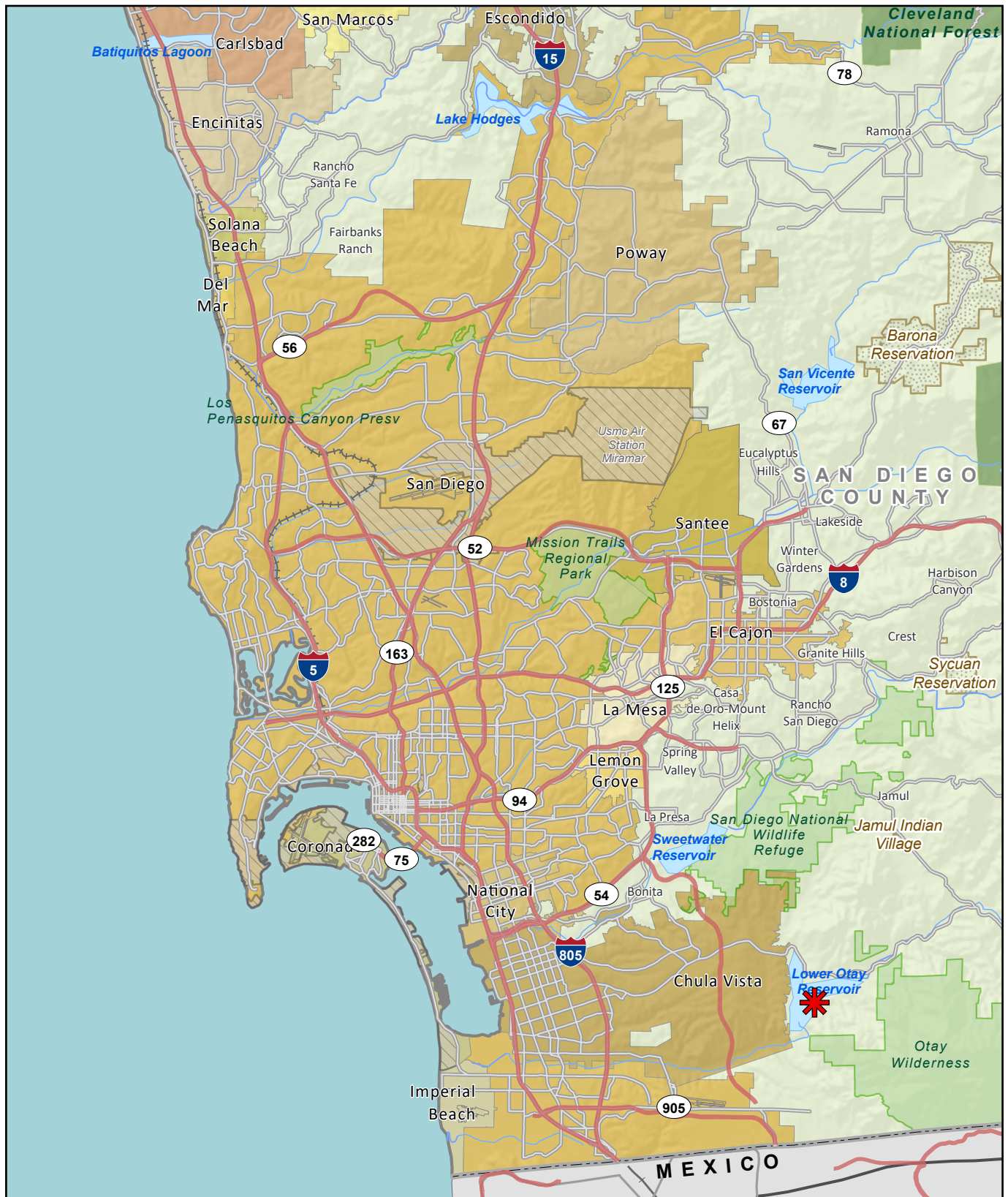
- 2025 Incident Management Report Map. Accessed on February 14, 2025. <https://www.nifc.gov/fire-information/maps>.

San Diego, City of

- 2017 *City of San Diego Vernal Pool Habitat Conservation Plan*. October 2017.

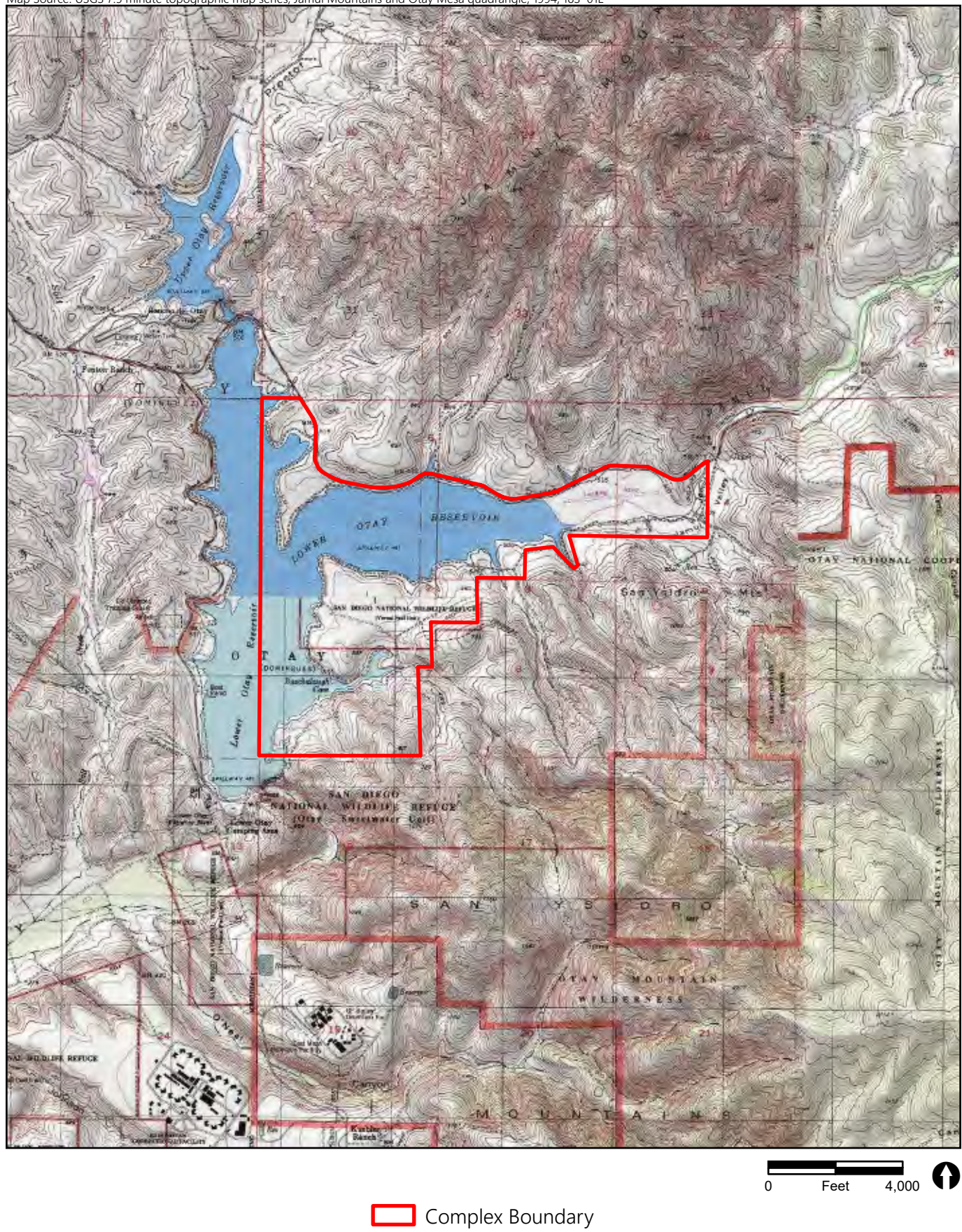
U.S. Fish and Wildlife Service

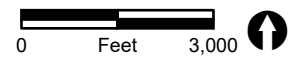
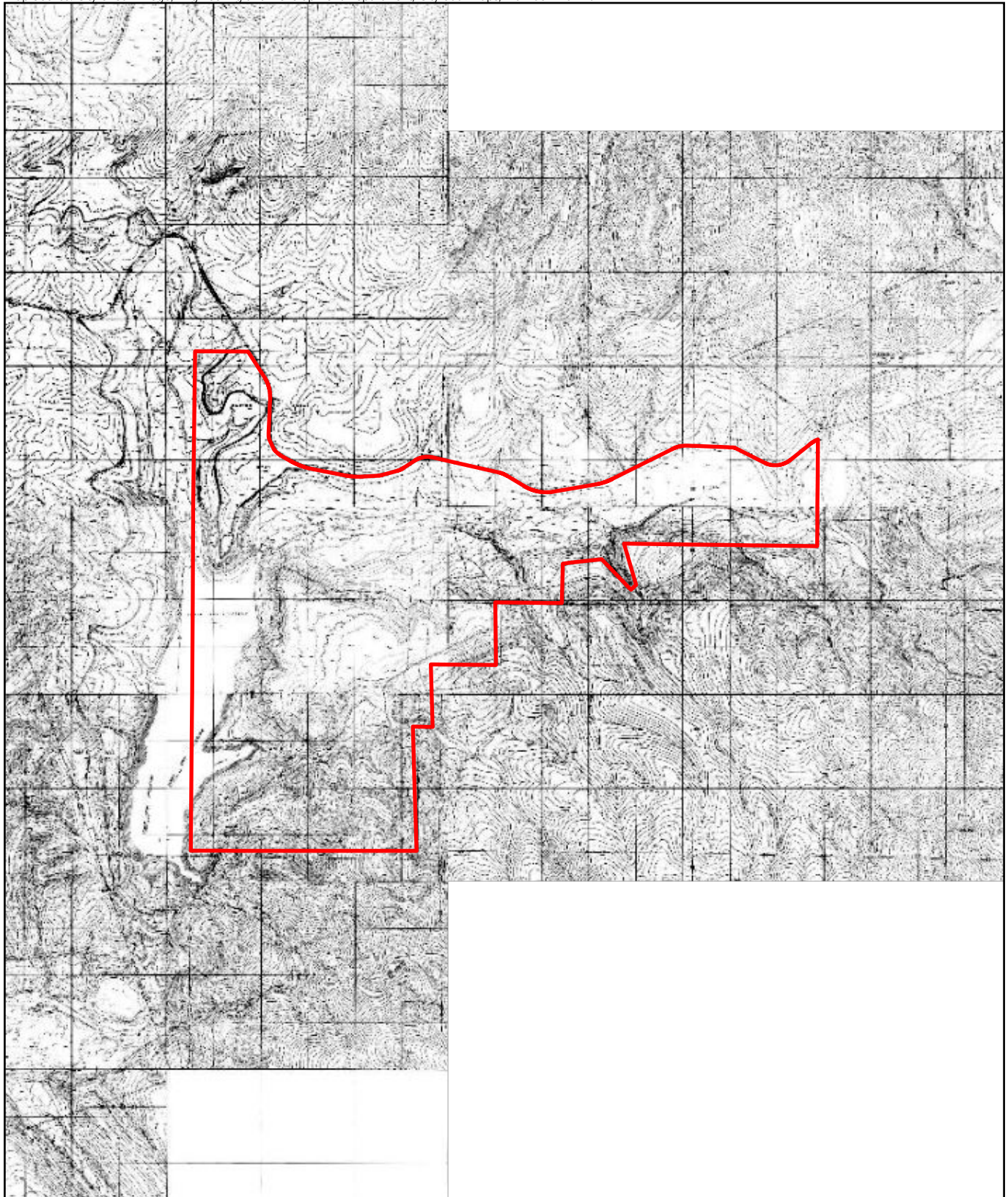
- 1998 *Recovery Plan for Vernal Pools of Southern California*. U.S. Department of the Interior, Fish and Wildlife Service, Region One, Portland, Oregon.



 Project Location

FIGURE 1
Regional Location





 Complex Boundary

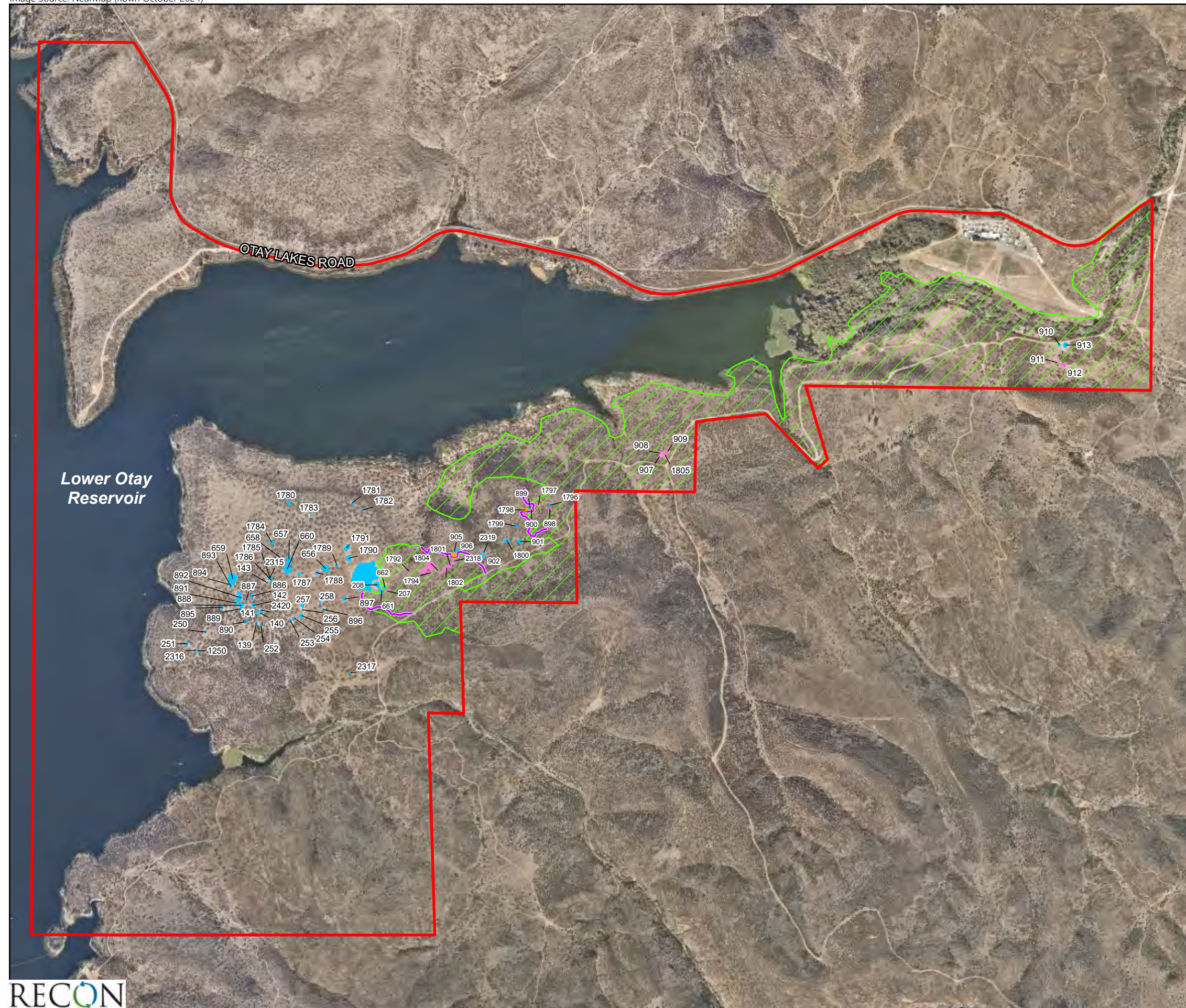
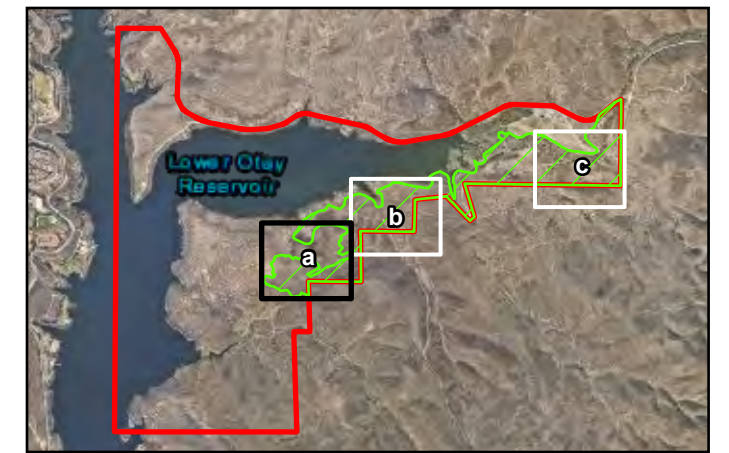
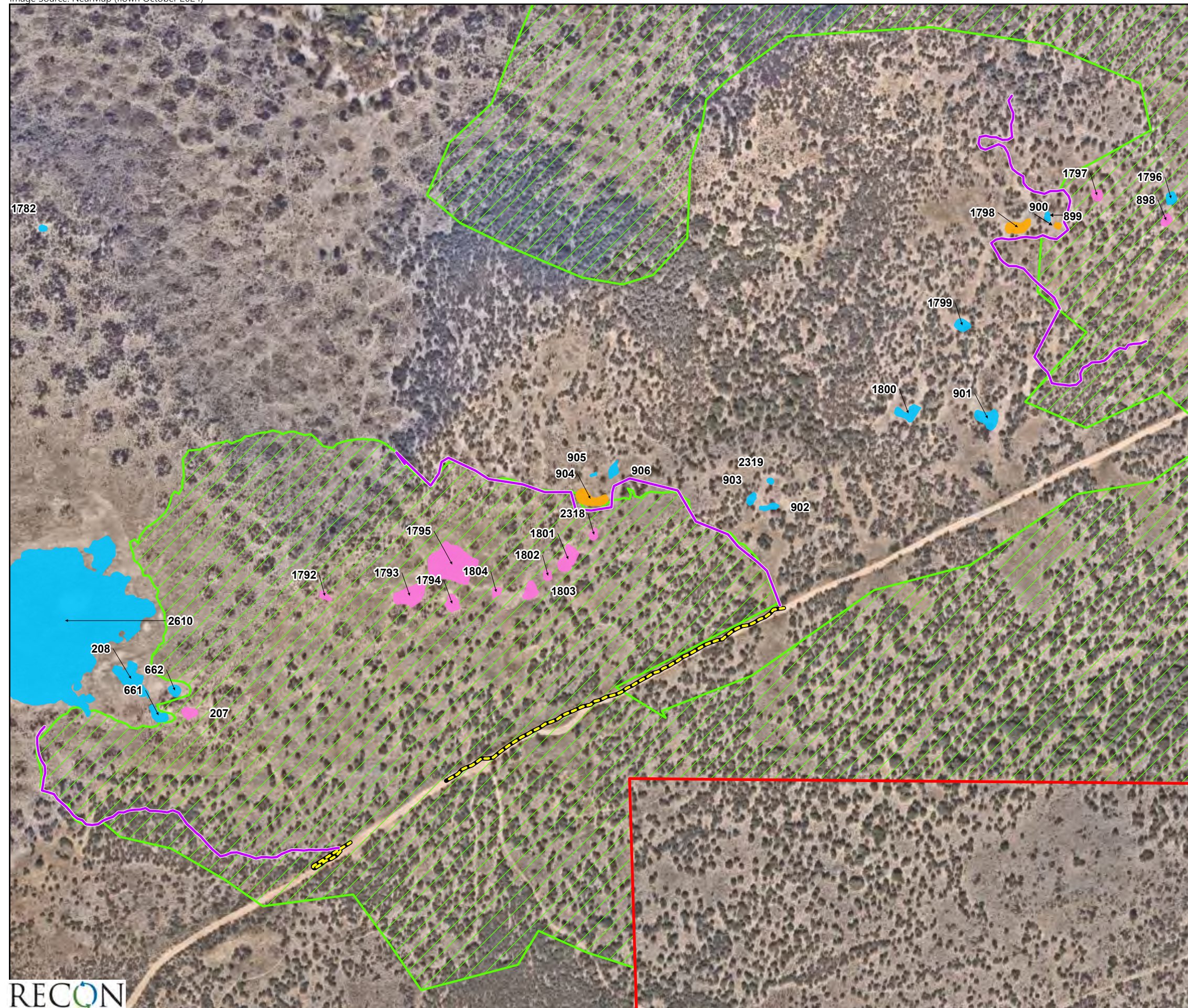


FIGURE 4
Project Location on Aerial Photograph



- ▬ Complex Boundary
- ▨ Border 2 Wildfire (235 acres)
- ▬ Fuel Break (3,116 Total Linear Feet)
- ▬ Recommended Fencing (1,661 Total Linear Feet)
- SD City Vernal Pools Not Impacted by Border 2 Fire
- SD City Vernal Pools Indirectly Impacted by Border 2 Fire
- SD City Vernal Pools Directly Impacted by Border 2 Fire

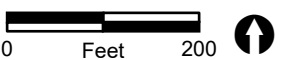
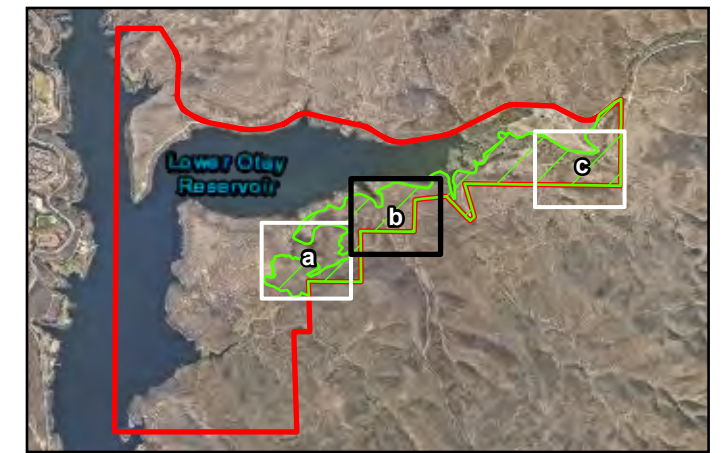


FIGURE 5a
Close-up of Burn Scar Area



- Complex Boundary
- Border 2 Wildfire (235 acres)
- Fuel Break (3,116 Total Linear Feet)
- Recommended Fencing (1,661 Total Linear Feet)
- SD City Vernal Pools Directly Impacted by Border 2 Fire

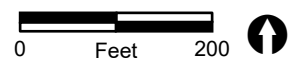
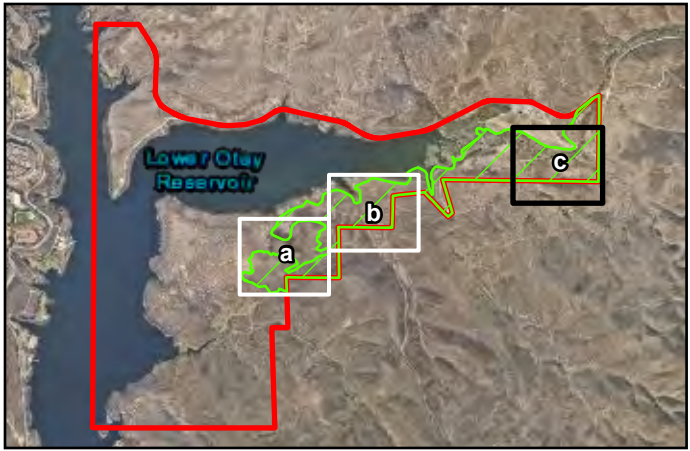
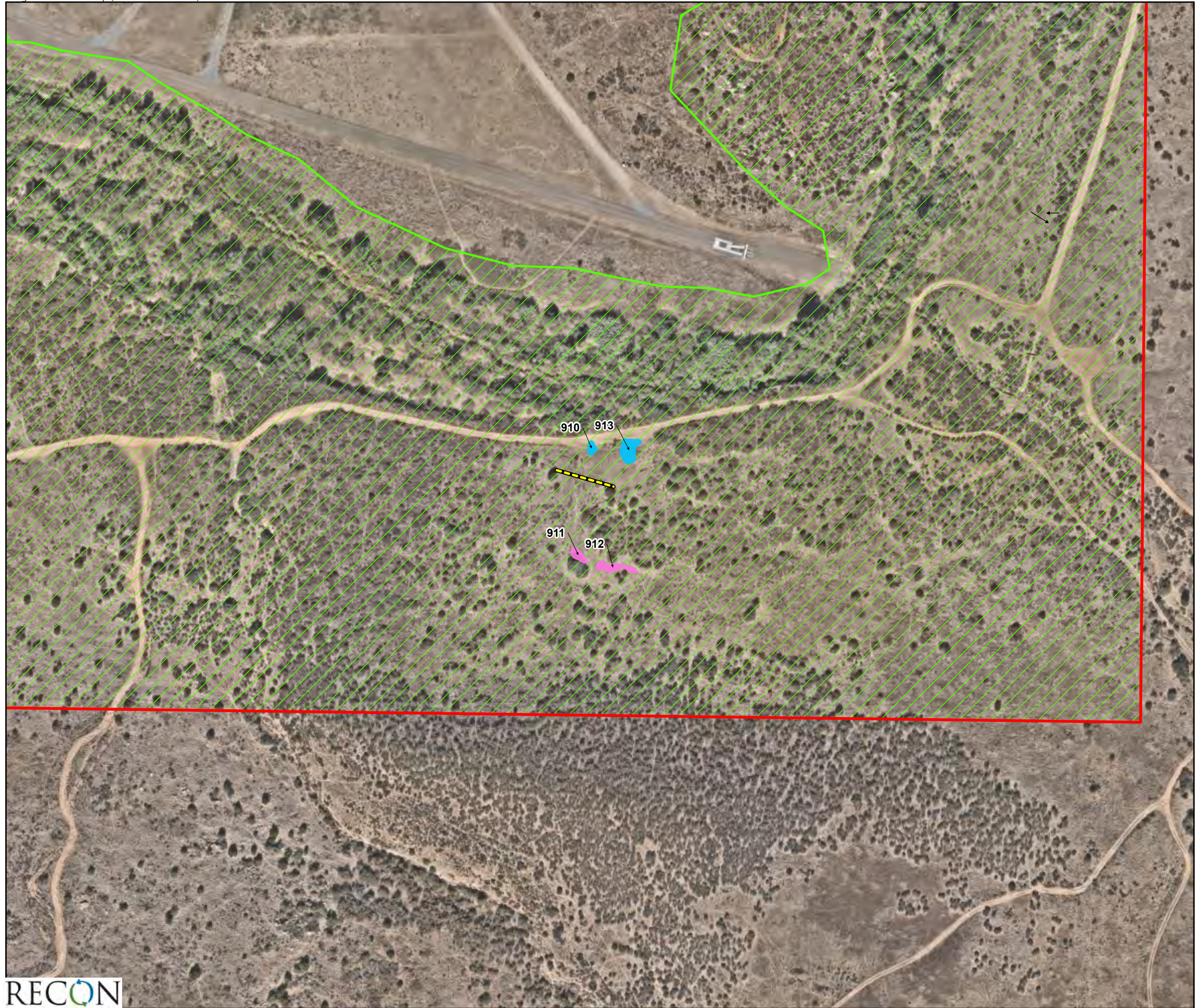


FIGURE 5b
Close-up of Burn Scar Area



- Complex Boundary
- Border 2 Wildfire (235 acres)
- Fuel Break (3,116 Total Linear Feet)
- Recommended Fencing (1,661 Total Linear Feet)
- SD City Vernal Pools Not Impacted by Border 2 Fire
- SD City Vernal Pools Directly Impacted by Border 2 Fire

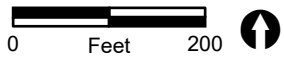


FIGURE 5c
Close-up of Burn Scar Area



PHOTOGRAPH 1
Cut Chamise Piled Along the Fire Line



PHOTOGRAPH 2
Disturbed Soil Crust and Mosses as a Result of the Fire Line



PHOTOGRAPH 3

Overview of a Burned and Unburned Upland Habitat Depicting the Non-native Species that were Present Prior to the Border 2 Fire



PHOTOGRAPH 4

Overview of Vernal Pool 207 Following the Border 2 Fire



PHOTOGRAPH 5
Overview of Vernal Pool 898 Following the Border 2 Fire



PHOTOGRAPH 6
Overview of Vernal Pool 907 Following the Border 2 Fire



PHOTOGRAPH 7
Overview of Vernal Pool 908 Following the Border 2 Fire



PHOTOGRAPH 8
Overview of Vernal Pool 909 Following the Border 2 Fire



PHOTOGRAPH 9
Overview of Vernal Pool 911 Following the Border 2 Fire



PHOTOGRAPH 10
Overview of Vernal Pool 912 Following the Border 2 Fire



PHOTOGRAPH 11
Overview of Vernal Pool 1792 Following the Border 2 Fire



PHOTOGRAPH 12
Overview of Vernal Pool 1793 Following the Border 2 Fire



PHOTOGRAPH 13
Overview of Vernal Pool 1794 Following the Border 2 Fire



PHOTOGRAPH 14
Overview of Vernal Pool 1795 Following the Border 2 Fire



PHOTOGRAPH 15
Overview of Vernal Pool 1797 Following the Border 2 Fire



PHOTOGRAPH 16
Overview of Vernal Pool 1801 Following the Border 2 Fire



PHOTOGRAPH 17
Overview of Vernal Pool 1802 Following the Border 2 Fire



PHOTOGRAPH 18
Overview of Vernal Pool 1803 Following the Border 2 Fire



PHOTOGRAPH 19
Overview of Vernal Pool 1804 Following the Border 2 Fire



PHOTOGRAPH 20
Overview of Vernal Pool 1805 Following the Border 2 Fire



PHOTOGRAPH 21
Overview of Vernal Pool 2318 Following the Border 2 Fire



PHOTOGRAPH 22
Overview of Vernal Pool 900 Following the Border 2 Fire



PHOTOGRAPH 23
Overview of Vernal Pool 904 Following the Border 2 Fire



PHOTOGRAPH 24
Overview of Vernal Pool 1798 Following the Border 2 Fire



PHOTOGRAPH 25
Overview of Vernal Pool 910 Following the Border 2 Fire



PHOTOGRAPH 26
Overview of Vernal Pool 913 Following the Border 2 Fire



PHOTOGRAPH 27
Overview of Vernal Pool 1796 Following the Border 2 Fire



PHOTOGRAPH 28
Non-native Species Growing Within Vernal Pool 1797



PHOTOGRAPH 29
Non-native Species Growing Within the Associated Uplands



PHOTOGRAPH 30
Open Access to Vernal Pools 907, 908, 909, and 1805
Where Fencing is Recommended



PHOTOGRAPH 31
Open Access to the Vernal Pool Complex Along the Dirt Road
Where Fencing is Recommended

Appendix C-1

2025 Vernal Pool Qualitative Monitoring and Management Datasheets

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Anderprises (J14)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 6/26/2025

Start Time: 1:53 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: trash pickup, Weed control, dethatching, Restoration/Revegetation, fence install, Regular patrols recommended, erosioncontrol, Grading/Recontouring, Recontouring pools

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present.

Management Actions Completed

Visit Date: 6/26/2025

Start Time: 1:56 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup

Notes: City staff performed trash pickup.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Attisha Trust / California Crossing (J4-5)

Planning Unit: South

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: N/A

Qualitative Monitoring Data

Visit Date: 11/20/2024 Start Time: 10:04 AM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Regular patrols recommended, reveg restore site maint, Restoration/Revegetation

Other Management Needs:

Additional Management Actions Recommended: Continuned dry season watering of restoration site.

Notes:

Visit Date: 1/17/2025 Start Time: 12:29 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Installed plants struggling because of dry conditions. Burrowing owl seen in burrows onsite near restoration site.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Attisha Trust / California Crossing (J4-5)

Visit Date: 3/7/2025 Start Time: 1:32 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

Visit Date: 6/27/2025 Start Time: 1:37 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. Burrowing owl dens need maintenance.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Attisha Trust / California Crossing (J4-5)

Management Actions Completed

Visit Date: 10/3/2024 Start Time: 3:55 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint
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Notes:

Visit Date: 11/25/2024 Start Time: 10:33 AM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint
--

Notes:

Visit Date: 3/7/2025 Start Time: 1:44 PM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control
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Notes: City staff performed weed control.
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Visit Date: 4/17/2025 Start Time: 7:48 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 6/27/2025 Start Time: 1:42 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup
--

Notes: City staff performed trash pickup.
--

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Brown Field (J35)

Planning Unit: South

City or Other? City

Managing Department: Airports

VPHCP Required Management and Monitoring Level: Level 3

Qualitative Monitoring Data

Visit Date: 2/24/2025 Start Time: 8:30 AM

Surveyors: Frank Santana, Isaac Israel, Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing? ongoing

Management Needs: trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: The vernal pools at brown field are of low quality and are mowed regularly to meet FAA regulations. City maps for this complex are somewhat inaccurate, occasionally indicating the presence of vernal pools where none occur. Future work should assess.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Calle de Vida East / Mission Trails Regional Park (Q2)

Planning Unit: Central

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: N/A

Qualitative Monitoring Data

Visit Date: 11/22/2024 Start Time: 12:07 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some trash present. SD mesa mint and SD button celery dry biomass present.

Visit Date: 3/13/2025 Start Time: 4:30 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 0

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old concrete blocks.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Calle de Vida East / Mission Trails Regional Park (Q2)

Visit Date: 6/6/2025 **Start Time:** 4:12 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint in both pools. SD button celery in one pool.

Management Actions Completed

Visit Date: 12/12/2024 **Start Time:** 4:18 PM

Surveyors: Adam Skinner

Action(s) Completed: Weed control

Notes: Continued weed control needed.

Visit Date: 2/26/2025 **Start Time:** 1:05 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, Fence repair, regularpatrolsrecommended

Notes: Contracted crew performed weed control, dethatching and fence repair.

Visit Date: 6/6/2025 **Start Time:** 4:15 PM

Surveyors: Jason Allen

Action(s) Completed: reveg restore site maint

Notes: City staff performed restoration site maintenance plant protector installation.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Calle de Vida West

Planning Unit: Central

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 11/22/2024 Start Time: 11:49 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Fence repair, Regular patrols recommended, accesscontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. New trail on outer edge of fence and fence post bent.

Visit Date: 2/26/2025 Start Time: 1:32 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: new

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trash in pool.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Calle de Vida West

Visit Date: 3/13/2025 Start Time: 4:07 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 0

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash onsite.

Visit Date: 4/22/2025 Start Time: 3:50 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD button celery in a few pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Calle de Vida West

Management Actions Completed

Visit Date: 12/9/2024 **Start Time:** 2:15 PM

Surveyors: Adam Skinner

Action(s) Completed: Weed control

Notes:

Visit Date: 12/11/2024 Start Time: 3:00 PM Surveyors: Adam Skinner Action(s) Completed: Weed control Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 8/2/2024 Start Time: 1:28 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present.

Visit Date: 10/9/2024 Start Time: 8:17 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

Visit Date: 3/18/2025 Start Time: 12:56 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present. SD button celery and Otay mesa mint present.

Visit Date: 5/21/2025 Start Time: 3:27 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

Management Actions Completed

Visit Date: 8/6/2024 **Start Time:** 11:26 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup

Notes: City staff performed weed control and trash pickup.

Visit Date: 8/12/2024 **Start Time:** 1:23 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, trash pickup

Notes: Contracted crew performing weed control, trash pickup and dethatching in Southern preserve.

Visit Date: 8/15/2024 **Start Time:** 1:51 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, gaterepair, Fence repair, trash pickup

Notes: Contracted crews performed weed control and dethatching. City staff performed gate repair, fence repair and trash pickup.

Visit Date: 8/20/2024 **Start Time:** 1:26 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 8/21/2024 **Start Time:** 1:48 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 12/19/2024 **Start Time:** 3:24 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup

Notes: City staff performed trash pickup.

Visit Date: 2/28/2025 **Start Time:** 9:37 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 4/29/2025 **Start Time:** 7:18 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 5/23/2025 **Start Time:** 7:23 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

Visit Date: 6/9/2025

Start Time: 11:51 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: City staff performed weed control.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 2/24/2025 Start Time: 12:04 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, gaterepair, dump cleanup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Large dump outside gate. Some trash inside. SD button celery sprouting. Pool 2022 holding some water. No fairy shrimp present.

Visit Date: 3/18/2025 Start Time: 12:02 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trash washed in from the street.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

Visit Date: 4/8/2025 Start Time: 11:57 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts: new

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, add replace lock, trash pickup, Regular patrols recommended, accesscontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Illegal discharge of mud at entrance to preserve. Some new trash and entrance. Annual weeds and grasses in and around pools. Lock was cut and gate was open.

Visit Date: 4/17/2025 Start Time: 11:26 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 0

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts: ongoing

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, add replace lock, Fence repair, gaterepair, sign install, trash pickup, Regular patrols recommended, erosioncontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trash at entrance and on slopes. Lock missing. Fence cut behind rental lots. Back gate needs repair.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

Management Actions Completed

Visit Date: 3/20/2025 Start Time: 8:47 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup
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Notes: Contracted crew performed weed control and trash pickup.
--

Visit Date: 4/17/2025 Start Time: 11:23 AM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup, add replace lock
--

Notes: City staffed performed weed control, lock replacement and trash pickup.

Visit Date: 5/6/2025 Start Time: 7:48 AM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup, dethatching

Notes: Contracted crew performed weed control, trash pickup and dethatching.

Visit Date: 5/19/2025 Start Time: 9:10 AM

Surveyors: Jason Allen

Action(s) Completed: trash pickup, Weed control, dethatching

Notes: Contracted crew performed weed control, trash pickup and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Carmel Mountain (H38)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 9/6/2024 Start Time: 12:46 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended, Recontouring pools

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trail through road rut pool in SDGE access road.

Visit Date: 5/15/2025 Start Time: 11:06 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: ongoing

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Fence repair, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some fence sections need repair. SD mesa mint and SD button celery in many pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Carmel Mountain (H38)

Management Actions Completed

Visit Date: 7/30/2024 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Education Program/Tour Notes: City staff performed education program/tour.
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Visit Date: 8/6/2024 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Education Program/Tour Notes: City staff performed education program/tour.

Visit Date: 8/20/2024 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Maintenance Notes: City staff performed site maintenance.

Visit Date: 8/27/2024 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Patrol Notes: City staff patrolled the complex.

Visit Date: 12/24/2024 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Patrol Notes: City staff patrolled the complex.
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Visit Date: 12/30/2024 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Maintenance Notes: City staff performed site maintenance.
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Visit Date: 1/1/2025 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Patrol Notes: City staff patrolled the complex.
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Visit Date: 1/6/2025 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Maintenance Notes: City staff performed site maintenance.
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Visit Date: 1/8/2025 Start Time: Surveyors: Melanie Fontana Action(s) Completed: Maintenance Notes: City staff performed site maintenance.
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VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Carmel Mountain (H38)

Visit Date: 1/14/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Maintenance	
Notes: City staff performed site maintenance.	
Visit Date: 2/3/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Maintenance	
Notes: City staff performed site maintenance.	
Visit Date: 3/17/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Maintenance	
Notes: City staff performed site maintenance.	
Visit Date: 3/18/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Maintenance	
Notes: City staff performed site maintenance.	
Visit Date: 4/20/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 4/27/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 5/20/2025	Start Time:
Surveyors: Jesus Reyes	
Action(s) Completed: Weed control, dethatching	
Notes: City staff performed weed control and dethatching.	

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Carroll Canyon/Parkdale Carroll Canyon (D5-8)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 8/7/2024 Start Time: 3:07 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present.

Visit Date: 3/14/2025 Start Time: 11:32 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 0

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trash thrown over fence into preserve. Spadefoot toads seen in pool.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Carroll Canyon/Parkdale Carroll Canyon (D5-8)

Visit Date: 4/18/2025

Start Time: 3:13 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Carroll Canyon/Parkdale Carroll Canyon (D5-8)

Management Actions Completed

Visit Date: 8/9/2024 Start Time: 9:12 AM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 8/16/2024 Start Time: 12:02 PM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted staff performed weed control and dethatching.
--

Visit Date: 9/16/2024 Start Time: 3:44 PM

Surveyors: Adam Skinner

Action(s) Completed: Weed control
--

Notes:

Visit Date: 3/14/2025 Start Time: 9:35 AM

Surveyors: Jason Allen

Action(s) Completed: trash pickup, educational program tour
--

Notes: City staff performed an educational tour for a school group and picked up trash.
--

Visit Date: 4/18/2025 Start Time: 3:22 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup
--

Notes: City staff performed weed control and trash pickup.

Visit Date: 5/21/2025 Start Time: 8:13 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Clayton Parcel (J2)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 3/17/2025 Start Time: 11:20 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Water in some pools. Otay mesa mint and SD button celery sprouting.

Visit Date: 5/23/2025 Start Time: 3:52 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Clayton Parcel (J2)

Management Actions Completed

Visit Date: 8/6/2024 Start Time: 2:29 PM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup
--

Notes: City staff performed weed control and trash pickup.

Visit Date: 8/15/2024 Start Time: 2:08 PM

Surveyors: Jason Allen

Action(s) Completed: Graffiti removal from interpretive kiosk.

Notes: City staff removed graffiti from interpretive kiosk.
--

Visit Date: 3/17/2025 Start Time: 11:25 AM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 4/8/2025 Start Time: 12:18 PM

Surveyors: Jason Allen

Action(s) Completed: dethatching, Weed control

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 5/20/2025 Start Time: 9:22 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Crescent Heights (B7-8)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 4/15/2025

Start Time: 2:53 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended, Grading/Recontouring

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some trash present.

Management Actions Completed

Visit Date: 11/15/2024

Start Time: 11:21 AM

Surveyors: Jason Allen

Action(s) Completed: sign install, gaterepair, Weed control

Notes: New gate installed. Signs installed. Weeds removed from outside fence edge. Trash picked up.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 9/4/2024 Start Time: 10:15 AM

Surveyors: Andrew Kort

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes: Pool lies within a trail. There is evidence of foot and bicycle traffic through the pool. NAV HAM dominant. Spot hand pulling and herbicide in buffer, no management in pool. The barrier built by Maya was destroyed, and biologists built it back to the best

Visit Date: 1/23/2025 Start Time: 9:15 AM

Surveyors: Jacob Dioli, Margaret Thompson

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: fence install

Other Management Needs:

Additional Management Actions Recommended: Fence or barrier installation to prevent mountain bikes from riding through the vernal pool. Approximately 30 linear feet of wire and 6 t-posts would be needed.

Notes: Recent development 65 meters from the pool may increase edge effects. Access to the site is now further south on Camino del Sur. The pool is largely unvegetated and may benefit from seeding, however this may just be because of seasonality.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

Visit Date: 3/24/2025 Start Time: 8:31 AM

Surveyors: Jade Woll

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs:

Other Management Needs:

Additional Management Actions Recommended: Minimal vegetation (native and non-native) as present within the pools. No non-native control or fence repairs are recommended at this time.

Notes: Ponded pool observed outside of City PUD parcel. Recommend expanding silt fencing to block off access in this area- even though the pool is outside of PUD management area. Silt fencing previously installed appears intact and effective in deterring access.

Visit Date: 5/14/2025 Start Time: 8:52 AM

Surveyors: Jade Woll

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: fence install

Other Management Needs:

Additional Management Actions Recommended: Install additional fencing to replace the cobble placed outside of pool.

Notes: Fencing installed to deter access appears in good conditions and no signs of trespassing were observed. The pool contained minimal vegetation and minimal native or non-native species were present within the pool.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

Management Actions Completed

Visit Date: 7/24/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Education Program/Tour, Enforcement Control

Notes: City staff performed education program/tour and enforcement control.

Visit Date: 8/8/2024 **Start Time:** 11:10 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, reveg restore site maint

Notes: City staff performed restoration site watering maintenance.

Visit Date: 8/22/2024 **Start Time:** 2:20 PM

Surveyors: Jason Allen

Action(s) Completed: reveg restore site maint, accesscontrol

Notes: City staff performed restoration site watering maintenance and access control.

Visit Date: 8/26/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: weed control, access control

Notes: City staff performed weed control and access control.

Visit Date: 9/2/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Weed control

Notes: City staff performed weed control.

Visit Date: 9/2/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Education Program/Tour, Enforcement Control

Notes: City staff performed education program/tour and enforcement control.

Visit Date: 9/4/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Education Program/Tour, Enforcement Control

Notes: City staff performed education program/tour and enforcement control.

Visit Date: 9/16/2024 **Start Time:** 10:32 AM

Surveyors: Oscar Elias

Action(s) Completed: Weed control, dethatching

Notes: Line-trimmed and spot sprayed non-natives within the vernal pool buffer.

Visit Date: 9/25/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Education Program/Tour

Notes: City staff performed education program/tour.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

Visit Date: 9/26/2024 **Start Time:** 3:34 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 11/11/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Patrol

Notes: City staff patrolled the complex.

Visit Date: 11/26/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: access control

Notes: City staff performed access control.

Visit Date: 11/27/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: access control

Notes: City staff performed access control.

Visit Date: 12/1/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: access control

Notes: City staff performed access control.

Visit Date: 12/8/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Education Program/Tour

Notes: City staff performed education program/tour.

Visit Date: 12/18/2024 **Start Time:**

Surveyors: Melanie Fontana

Action(s) Completed: Education Program/Tour, Enforcement Control

Notes: City staff performed education program/tour and enforcement control.

Visit Date: 1/4/2025 **Start Time:**

Surveyors: Roberto Bejar

Action(s) Completed: Enforcement Control

Notes: City staff performed enforcement control and issued citations.

Visit Date: 1/8/2025 **Start Time:**

Surveyors: Roberto Bejar

Action(s) Completed: Enforcement Control

Notes: City staff performed enforcement control and issued citations.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

Visit Date: 1/15/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Education Program/Tour	
Notes: City staff performed education program/tour.	
Visit Date: 1/19/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Education Program/Tour	
Notes: City staff performed education program/tour.	
Visit Date: 1/22/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Education Program/Tour	
Notes: City staff performed education program/tour.	
Visit Date: 2/3/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 2/21/2025	Start Time: 1:00 PM
Surveyors: Jarett Jones, Nick Diaz	
Action(s) Completed: fence install	
Notes:	
Visit Date: 2/28/2025	Start Time:
Surveyors: Roberto Bejar	
Action(s) Completed: Enforcement Control	
Notes: City staff performed enforcement control and issued citations.	
Visit Date: 2/28/2025	Start Time: 12:26 PM
Surveyors: Jason Allen	
Action(s) Completed: restreveg, reveg restore site maint	
Notes: City staff performed habitat restoration plant installation.	
Visit Date: 3/1/2025	Start Time:
Surveyors: Roberto Bejar	
Action(s) Completed: Enforcement Control	
Notes: City staff performed enforcement control and issued citations.	
Visit Date: 3/9/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

Visit Date: 4/1/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 4/1/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: access control	
Notes: City staff performed access control.	
Visit Date: 4/2/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: access control	
Notes: City staff performed access control.	
Visit Date: 4/20/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 4/27/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 5/6/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Patrol	
Notes: City staff patrolled the complex.	
Visit Date: 5/14/2025	Start Time:
Surveyors: Melanie Fontana	
Action(s) Completed: Education Program/Tour	
Notes: City staff performed education program/tour.	

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Dormouse

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 1/30/2025

Start Time: 4:05 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: trash pickup, Weed control, dethatching

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present.

Visit Date: 3/14/2025

Start Time: 8:41 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 0

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: gaterepair, Weed control, dethatching

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Fence was pulled back at the gate.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Dormouse

Visit Date: 4/22/2025 Start Time: 3:01 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD button celery in some pools.

Visit Date: 5/15/2025 Start Time: 2:54 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, Regular patrols recommended, Fence repair, gaterepair

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds in and around pools. Fence needs repair. SD button celery present in some pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Dormouse

Management Actions Completed

Visit Date: 8/8/2024 **Start Time:** 1:04 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, reveg restore site maint

Notes: City staff performed weed control, trash pickup and habitat resoration site watering maintenance.

Visit Date: 9/6/2024 **Start Time:** 3:57 PM

Surveyors: Jason Allen

Action(s) Completed: reveg restore site maint

Notes: City staff performed restoration site watering maintenance.

Visit Date: 9/26/2024 **Start Time:** 3:33 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 11/27/2024 **Start Time:** 3:00 PM

Surveyors: Adam Skinner

Action(s) Completed: regularpatrolsrecommended, reveg restore site maint

Notes:

Visit Date: 12/13/2024 **Start Time:** 7:38 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 1/14/2025 **Start Time:** 3:07 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 2/28/2025 **Start Time:** 1:58 PM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: City staff performed habitat restoration plant installation.

Visit Date: 3/14/2025 **Start Time:** 8:34 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: Contracted crew performed weed control.

Visit Date: 4/22/2025 **Start Time:** 3:04 PM

Surveyors: Jason Allen

Action(s) Completed: Fence repair

Notes: City staff performed fence repair near entry gate.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Fairbanks Highlands

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 2/21/2025

Start Time:

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation

Other Management Needs:

Additional Management Actions Recommended:

Notes:

Management Actions Completed

Visit Date: 2/25/2025

Start Time: 11:24 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performing weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Goat Mesa (J16-18)

Planning Unit: South

City or Other? City

Managing Department: Public Utilities

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 9/5/2024 Start Time: 8:30 AM

Surveyors: Andrew Kort

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: ongoing

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Fence repair, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Fence damaged near pool 1920. Trash observed in buffer of pool 2505. Recommend spot hand pulling, herbicide, and line trimming.

Visit Date: 1/22/2025 Start Time: 8:15 AM

Surveyors: Jacob Dioli, Jade Woll

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching, Fence repair, trash pickup

Other Management Needs:

Additional Management Actions Recommended: Dethatching of Maltese star-thistle and non-native grasses in uplands greater than 20ft from pools. Remove rebar within pools 1141 and 2642. Repair approx. 120 linear ft of 3-strand fence.

Notes: San Diego button-celery from previous season were observed. Pools were largely free of weeds and diverse in native species. Western burrowing owl sign observed. Uplands >20-ft from pools could benefit from dethatching and seeding or revegetation.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Goat Mesa (J16-18)

Visit Date: 3/31/2025 Start Time: 8:15 AM

Surveyors: JR Sundberg, Katie Raffaini

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, add replace lock

Other Management Needs:

Additional Management Actions Recommended: City gate locks were locked out of chain on multiple gates.

Notes: San Diego button-celery was present in most pools. Invasives (Erodium/ non-native grasses) were present within or surrounding all pools. Treatment priorities (pools with most non-native cover within pool) include 1774, 2507, 2508, 2506, 2497, 1141, 1142

Visit Date: 5/28/2025 Start Time: 8:59 AM

Surveyors: Jade Woll, Margaret Thompson, Katie Raffiani

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: ongoing

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Fence repair

Other Management Needs:

Additional Management Actions Recommended: Conduct dethatching effort in fall. Repair fencing once restoration activities are completed.

Notes: All pools but 1920 contained San Diego button-celery. Invasives (Erodium/ non- native grasses) present in or around all pools to some degree. Vernal pool plants present in all pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Goat Mesa (J16-18)

Management Actions Completed

Visit Date: 8/20/2024 **Start Time:** 12:50 PM

Surveyors: Jason Allen

Action(s) Completed: Fence repair

Notes: City staff performed fence repair.

Visit Date: 9/9/2024 **Start Time:** 10:35 AM

Surveyors: Stephen Steward

Action(s) Completed: Seed collection of button celery (*Eryngium aristulatum* var. *parishii*).

Notes:

Visit Date: 9/13/2024 **Start Time:** 10:31 AM

Surveyors: Juan Echeverria

Action(s) Completed: Weed control, dethatching

Notes: Line-trimmed and spot sprayed non-natives within the vernal pool buffer.

Visit Date: 10/15/2024 **Start Time:** 2:36 PM

Surveyors: Jason Allen, Adam Skinner

Action(s) Completed: reveg restore site maint, gaterepair

Notes: City staff repaired gate and installed flags for marking plants.

Visit Date: 4/8/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 4/9/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 4/15/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 4/17/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 6/5/2025 **Start Time:** 4:11 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 2/21/2025 Start Time: 11:56 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Fence repair, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Fence section needs to be added.

Visit Date: 2/25/2025 Start Time: 11:47 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Fairy shrimp in pool 1185.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

Visit Date: 5/15/2025 **Start Time:** 5:05 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint and SD button celery present in many pools.

Management Actions Completed

Visit Date: 2/27/2025 **Start Time:** 1:18 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 5/15/2025 **Start Time:**

Surveyors: Jesus Reyes

Action(s) Completed: Weed control, dethatching

Notes: City staff performed weed control and dethatching.

Visit Date: 5/22/2025 **Start Time:** 7:19 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Hidden Trails (J31)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 3/7/2025 Start Time: 10:28 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, sign install, trash pickup, Regular patrols recommended, accesscontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Illegal trimming of branches on edge of vernal pool preserve. Some old trash present. SD button celery sprouting.

Visit Date: 4/25/2025 Start Time: 2:16 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD button celery in most pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Hidden Trails (J31)

Visit Date: 6/27/2025 **Start Time:** 3:41 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

Management Actions Completed

Visit Date: 7/30/2024 **Start Time:** 1:34 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 3/7/2025 **Start Time:** 10:26 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: City staff performed weed control.

Visit Date: 3/17/2025 **Start Time:** 8:12 AM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: Contracted crew performed habitat restoration plant installation.

Visit Date: 4/25/2025 **Start Time:** 2:21 PM

Surveyors: Jason Allen

Action(s) Completed: add replace chain

Notes: City staff added chain to gate.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

Planning Unit: Central

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 8/12/2024 Start Time: 11:10 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present.

Visit Date: 2/21/2025 Start Time: 3:52 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, sign install, trash pickup, dump cleanup, Regular patrols recommended, accesscontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. New bottles and shopping cart in preserve. Old bricks and trash present. Fairy shrimp in pool 312 SDFS. SDMM seedlings in pool 771.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

Visit Date: 3/13/2025 Start Time: 3:19 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 0

Fairy Shrimp Visible: Absent

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash onsite. Pools filled with water so could not identify any focal plant species.

Visit Date: 3/21/2025 Start Time: 10:19 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present. SD button celery and SD mesa mint sprouting.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

Visit Date: 4/7/2025 Start Time: 12:42 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, dump cleanup, trash pickup, Grading/Recontouring, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash and dumps present. Water in large NW pool. SD button celery and SD mesa mint present.

Visit Date: 5/15/2025 Start Time: 3:37 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash. SD button celery and SD mesa mint present in some pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

Management Actions Completed

Visit Date: 11/27/2024 **Start Time:** 10:00 AM

Surveyors: Adam Skinner

Action(s) Completed: Weed control, regular patrols recommended

Notes: Double bagged dittrichia graveolens was left on site to solarize the seed. One bag was left at the far northern side of the site as not to spread seed through the complex.

Visit Date: 2/22/2025 **Start Time:** 4:07 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup

Notes: Shopping cart and surrounding trash removed from the preserve.

Visit Date: 3/14/2025 **Start Time:** 1:33 PM

Surveyors: Jason Allen

Action(s) Completed: restreveg, trash pickup

Notes: City staff performed trash pickup and restoration.

Visit Date: 3/17/2025 **Start Time:** 7:13 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: Contracted crew performed weed control.

Visit Date: 3/21/2025 **Start Time:** 10:01 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup

Notes: Contracted crew performed weed control and trash pickup.

Visit Date: 5/1/2025 **Start Time:** 12:36 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: City staff performed weed control and dethatching.

Visit Date: 5/27/2025 **Start Time:** 10:56 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: City staff performed weed control and dethatching.

Visit Date: 5/28/2025 **Start Time:** 12:35 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: City staff performed weed control and dethatching.

Visit Date: 6/2/2025 **Start Time:** 12:30 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: City staff performed weed control.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

Visit Date: 6/10/2025

Start Time: 11:54 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: City staff performed weed control.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lake Murray (KK1)

Planning Unit: Central

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level:

Qualitative Monitoring Data

Visit Date: 7/24/2024

Start Time: 2:11 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pool. Some trash in pool.

Visit Date: 9/9/2024

Start Time: 8:20 AM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? wrong_time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lake Murray (KK1)

Visit Date: 10/17/2024 Start Time: 2:04 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? wrong_time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

Visit Date: 11/11/2024 Start Time: 10:45 AM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Regular patrols recommended, Restoration/Revegetation, Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lake Murray (KK1)

Visit Date: 12/23/2024 Start Time: 10:26 AM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: reveg restore site maint, Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes:

Visit Date: 2/4/2025 Start Time: 2:56 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. New trash present. Installed native plants are surviving.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lake Murray (KK1)

Visit Date: 2/7/2025 Start Time: 12:45 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses around pools. Some new trash present.

Visit Date: 3/19/2025 Start Time: 3:30 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present. Hundreds of fairy shrimp in pool. SD button celery present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lake Murray (KK1)

Visit Date: 5/8/2025 Start Time: 11:40 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pool. SD mesa mint and SD button celery present in pool.

Visit Date: 6/6/2025 Start Time: 3:11 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, fence install, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint and SD button celery present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lake Murray (KK1)

Management Actions Completed

Visit Date: 7/18/2024 **Start Time:** 1:06 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 8/5/2024 **Start Time:** 9:45 AM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 8/19/2024 **Start Time:** 1:46 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 9/12/2024 **Start Time:** 4:11 PM

Surveyors: Adam Skinner

Action(s) Completed: Weed control

Notes:

Visit Date: 9/24/2024 **Start Time:** 10:00 AM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 12/2/2024 **Start Time:** 10:02 AM

Surveyors: Adam Skinner

Action(s) Completed: Fence repair, reveg restore site maint

Notes:

Visit Date: 1/14/2025 **Start Time:** 11:15 AM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 2/7/2025 **Start Time:** 12:39 PM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: City staff installed 30 upland native plants.

Visit Date: 3/20/2025 **Start Time:** 8:55 PM

Surveyors: Jesus Reyes

Action(s) Completed: Weed control, dethatching, trash pickup

Notes: City staff performed weed control, dethatching and trash pickup.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 4/15/2025

Start Time: 3:28 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present.

Visit Date: 5/21/2025

Start Time: 9:12 AM

Surveyors: Sara Allen, Maya Holdren, Sarah McCutcheon

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Fence repair

Other Management Needs:

Additional Management Actions Recommended:

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

Management Actions Completed

Visit Date: 5/22/2025 Start Time: 8:17 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Marron Valley (MM1)

Planning Unit: South

City or Other? City

Managing Department: Public Utilities

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 1/30/2025 Start Time: 9:00 AM

Surveyors: Jacob Dioli, J.R. Sundberg

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: new

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Pools 915 and 914 are adjacent to the road and may be impacted by vehicles, fence installation could be implemented to prevent impacts. Erodium is germinating within the pools, primarily 2646.

Notes: The site is well maintained with numerous native vernal pool species. Pools 918 & 1147 contain small populations of *Lythrum hyssopifolium* that can be hand removed, however it has already dropped seed. Hand removal of individuals should be done in spring.

Visit Date: 3/31/2025 Start Time: 12:00 PM

Surveyors: JR Sundberg, Katie Raffaini

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: (Spadefoot tadpoles present in a ponding rut in the road, but not in official vernal pool/ no official pools were ponded)

Notes: Non-natives (erodium and non-native grasses) present in or around all pools. Pools 2649, 2647, 2648 were dominated by non-natives, no vernal pool species present, and didn't seem likely to pond. Vernal pool plants present at most pools, no rare plants.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Marron Valley (MM1)

Visit Date: 6/2/2025 **Start Time:** 9:21 AM

Surveyors: Jade Woll, Jacob Dioli

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching

Other Management Needs:

Additional Management Actions Recommended: Conduct dethatching event in fall prior to wet season.

Notes: Non-natives are present in the upland buffer of pools and primarily consist of non-native grasses and erodium. Native vernal pool species were observed in many pools; however, there is dense thatch of non-native species.

Management Actions Completed

Visit Date: 9/6/2024 **Start Time:** 8:00 AM

Surveyors: Andrew Kort and Thomas Grigolite

Action(s) Completed: dethatching, Weed control, trash pickup

Notes: Met maintenance crew and provided management recommendations. Some pools did not require maintenance, some had NN grasses and required spot line trimming. Trash was removed from a few pools. After maintenance, pools were in very good condition.

Visit Date: 9/10/2024 **Start Time:** 10:29 AM

Surveyors: Juan Echeverria

Action(s) Completed: Weed control, dethatching

Notes: Line-trimmed and spot sprayed non-natives within the vernal pool buffer.

Visit Date: 4/18/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 4/21/2025 **Start Time:** 2:59 PM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Mission Trails Regional Park (Q2)

Planning Unit: Central

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 8/28/2024 Start Time: 3:44 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Restoration/Revegetation, dethatching, Weed control, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

Visit Date: 11/13/2024 Start Time: 12:23 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Fence repair, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pool. Fence needs repair.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Mission Trails Regional Park (Q2)

Visit Date: 12/11/2024 Start Time: 3:45 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. New plants need some maintenance.

Visit Date: 1/8/2025 Start Time: 1:19 PM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Mission Trails Regional Park (Q2)

Visit Date: 2/18/2025 Start Time: 1:27 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching, Weed control, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Installed natuve plants doing good.

Visit Date: 3/9/2025 Start Time: 3:25 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Absent

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pool.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Mission Trails Regional Park (Q2)

Visit Date: 6/6/2025

Start Time: 2:27 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint present in the pool near Fieldstation.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Mission Trails Regional Park (Q2)

Management Actions Completed

Visit Date: 11/17/2024 Start Time: 12:15 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, restreveg
--

Notes: Volunteer group performed weed control, dethatching and habitat restoration planting and seeding.

Visit Date: 11/21/2024 Start Time: 11:41 AM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: Contracted crew performing habitat restoration plant installation.
--

Visit Date: 12/19/2024 Start Time: 4:06 PM
--

Surveyors: Jason Allen, Adam Skinner

Action(s) Completed: reveg restore site maint
--

Notes: City staff performed habitat restoration site maintenance.
--

Visit Date: 2/26/2025 Start Time: 12:35 PM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: City staff and volunteers performed weed control and dethatching.

Visit Date: 3/9/2025 Start Time: 3:21 PM
--

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: Educational group installed 100 native upland plants around the vernal pool.
--

Visit Date: 6/6/2025 Start Time: 2:32 PM
--

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, reveg restore site maint

Notes: City staff performed weed control, dethatching and habitat restoration site watering maintenance.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

Planning Unit: Central

City or Other? City

Managing Department: Airports

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 7/8/2024 Start Time: 7:00 AM

Surveyors: Frank Santana, Isaac Israel

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, sign replacement, Fence repair, trash pickup, Recontouring pools, other

Other Management Needs:

Additional Management Actions Recommended:

Notes: Scott recomened pulling doveweed and vinegarweed from vernal pool basins.

Visit Date: 7/17/2024 Start Time: 7:30 AM

Surveyors: Frank Santana, Isaac Israel

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching, Fence repair

Other Management Needs:

Additional Management Actions Recommended: Possible improved dethatching. Continued herbicide treatments.

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

Visit Date: 8/5/2024 Start Time: 7:00 AM

Surveyors: Frank Santana, Isaac Israel

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Apply herbicide to affected areas as needed.

Notes: RECON weed whipped within 100ft buffer of all sentinel pools. Areas were observed after treatment and affected spots are now cleared.

Visit Date: 8/7/2024 Start Time: 7:00 AM

Surveyors: Frank Santana, Isaac Israel

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Apply herbicide to affected areas as needed.

Notes: RECON weed whipped within 100ft buffer of all sentinel pools. Areas were observed after treatment and affected spots are now cleared.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

Visit Date: 3/24/2025 **Start Time:** 1:45 PM

Surveyors: Frank Santana, Isaac Israel

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Recon preforming herbicide treatment in april 2025.

Notes: Most vernal pools were not inundated, however handful were inundated to high level.

Management Actions Completed

Visit Date: 7/8/2024 **Start Time:** 8:01 AM

Surveyors: Frank Santana, Isaac Israel, Jacob Dioli

Action(s) Completed: Weed control, dethatching

Notes: RECON began a weed control activity under airports as needed environmental contract TO 10. Focus was on herbicide treatment on perimeter roads and non-native weed whipping in a buffer around all 13 sentinel pools.

Visit Date: 1/27/2025 **Start Time:** 8:51 AM

Surveyors: Frank Santana, Isaac Israel

Action(s) Completed: trash pickup

Notes: Drove the perimeter airport road in all MHPA areas to remove trash. The first major storm of the wet season had passed through recently but the rainfall was insufficient to fill the vernal pools .

Visit Date: 2/18/2025 **Start Time:** 12:49 PM

Surveyors: Frank Santana, Isaac Israel

Action(s) Completed: trash pickup, Fence repair

Notes: We evaluated the current condition of the vernal pools in the field between the hotel and Coast. Pools 7289 and 7290 were inundated and had fairy shrimp present. We notified the Hotel operators to repair the fence.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Nobel Drive (X5)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 11/13/2024 Start Time: 11:26 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, fence install, sign install, trash pickup, Regular patrols recommended, accesscontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. New fences need to be completed. Trail runs through pool.

Visit Date: 12/9/2024 Start Time: 2:58 PM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: reveg restore site maint, Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Nobel Drive (X5)

Visit Date: 1/21/2025 Start Time: 9:34 AM

Surveyors: Jason Alleb

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, accesscontrol, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trail goes through a road pool.

Visit Date: 4/7/2025 Start Time: 10:32 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Water in one pool. SD mesa mint present in a few pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Nobel Drive (X5)

Visit Date: 5/15/2025 Start Time: 10:02 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint present in many pools. Navarretia present in one pool.

Management Actions Completed

Visit Date: 11/19/2024 Start Time: 2:10 PM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: Contracted crew performed habitat restoration plant installation.

Visit Date: 11/22/2024 Start Time: 1:01 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, fence install

Notes: Contracted crew completed fence installation, performed weed control and dethatching

Visit Date: 4/7/2025 Start Time: 10:41 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 4/8/2025 Start Time: 9:12 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Ocean View Hills Parkway

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 3/19/2025

Start Time: 8:26 AM

Surveyors: Sara Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes:

Visit Date: 4/9/2025

Start Time: 8:37 AM

Surveyors: Sara Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes: Ambrosia pumila found in buffer of vernal pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Ocean View Hills Parkway

Visit Date: 5/8/2025 **Start Time:** 8:26 AM

Surveyors: Sara Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended:

Notes:

Management Actions Completed

Visit Date: 3/19/2025 **Start Time:** 8:34 AM

Surveyors: Sara Allen

Action(s) Completed: Weed control

Notes:

Visit Date: 4/9/2025 **Start Time:** 8:35 AM

Surveyors: Sara Allen

Action(s) Completed: Weed control

Notes:

Visit Date: 5/9/2025 **Start Time:** 8:34 AM

Surveyors: Sara Allen

Action(s) Completed: Weed control

Notes: Ambrosia pumila in buffer of vernal pools is expanding.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

Planning Unit: South

City or Other? City

Managing Department: Public Utilities

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 8/28/2024 Start Time: 7:00 AM

Surveyors: Andrew Kort and Thomas Grigolite

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Non-native grass regrowth is minimal. Some stinkwort in buffers. Spot line trimming, hand pulling, and herbicide needed.

Visit Date: 1/21/2025 Start Time: 8:00 AM

Surveyors: Jacob Dioli, Jade Woll

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching, trash pickup

Other Management Needs:

Additional Management Actions Recommended: Recommended management actions include dethatching non-native grasses and Maltese star-thistle within 20-ft of vernal pools and within uplands, removing trash, and managing weeds by dethatching/hand

Notes: Vernal pools contain sparse non-native vegetation with minimal weed maintenance necessary within pools, however the uplands could benefit from dethatching. Isolated populations of stinkwort observed nearby Pool 902. Western burrowing owl observed.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

Visit Date: 2/3/2025 Start Time: 8:10 AM

Surveyors: Jacob Dioli, Margaret Thompson

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression: new

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: new

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, sign replacement, fence install, dump cleanup

Other Management Needs:

Additional Management Actions Recommended: Install approximately 900 LF of fencing along road, replace 3 signs, consider seeding or planting in burn scar, treat germinating weeds.

Notes: Approximately 16.6 acres of upland habitat and vernal pools burned including pools 1792, 1793, 1795. Pools 1794, 1804, 1803, 1802, 1801, 2318, 904 are within the burn scar but were not heavily affected. No "red" from fire retardant was observed.

Visit Date: 2/11/2025 Start Time: 11:00 AM

Surveyors: Jacob Dioli

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression: new

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, fence install, sign install

Other Management Needs:

Additional Management Actions Recommended: This was a followup from last visit. Treat weeds within pools and buffers (erodium and grasses). Post fire report will contain management recommendations.

Notes: Pools missed last visit. Not burned but impacted by veg clearing: 900, 1798, 207, 904 Burned near but not within burn scar: 899, 1796, 662, 661 Pools within burn scar but largely undisturbed: 1797, 898 Burned, needs rest act: 907, 908, 909, 1805, 911, 912

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

Visit Date: 3/26/2025 Start Time: 8:30 AM

Surveyors: Jade Woll, Katie Raffaini

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Spot spraying in upland and hand weeding in pools is recommended for most pools. Could be beneficial to wait a few weeks to treat, when the Erodium grows taller and spraying/ hand pulling is easier.

Notes: Non-natives (Erodium and non-native grasses) observed in most pool basins and surrounding the pools. San Diego button celery observed in several pools, and vernal pool plants present in most pools.

Visit Date: 6/4/2025 Start Time: 11:00 AM

Surveyors: Jacob Dioli

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression: ongoing

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching

Other Management Needs:

Additional Management Actions Recommended: Recommend hand weeding bromus and erodium, as well as other non-natives within most pools, targeting pools with SS species first. Linetrim buffers that contain bromus and tocalote.

Notes: San Diego button-celery observed drying up in numerous pools. Bromus and erodium has already gone to seed. Many pools contain flowering fascicled tarplant.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

Management Actions Completed

Visit Date: 9/5/2024 Start Time: 10:27 AM

Surveyors: Luis Elias

Action(s) Completed: Weed control, dethatching

Notes: Line-trimmed and spot sprayed non-natives within the vernal pool buffer.
--

Visit Date: 4/24/2025 Start Time: 2:48 PM

Surveyors: Emerson Peluso

Action(s) Completed: Weed control
--

Notes: Observed some native species Button Celery, Woolly Marbles, Dodder, Great horned Lizard.
--

Visit Date: 4/28/2025 Start Time: 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control
--

Notes:

Visit Date: 5/5/2025 Start Time: 8:00 AM
--

Surveyors: Lucas Corbo

Action(s) Completed: Weed control
--

Notes:

Visit Date: 5/7/2025 Start Time: 8:00 AM
--

Surveyors: Lucas Corbo

Action(s) Completed: Weed control
--

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pasatiempo (KK2)

Planning Unit: Central

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 7/24/2024 Start Time: 2:42 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, Regular patrols recommended, Fence repair

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds in and around pools. Small fence repair needed.

Visit Date: 10/17/2024 Start Time: 3:14 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds around pools. Broom baccharis invading into pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pasatiempo (KK2)

Visit Date: 11/13/2024 Start Time: 3:47 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Fence repair, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Fence needs repair. Weedy natives in pools need to be removed.

Visit Date: 12/12/2024 Start Time: 4:01 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds in and around pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pasatiempo (KK2)

Visit Date: 2/4/2025 Start Time: 3:25 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, trash pickup, Regular patrols recommended, Fence repair

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Installed plants looking good. Small section of fence needs repair.

Visit Date: 3/19/2025 Start Time: 2:43 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Present

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD button celery and SD mesa mint observed in one pool. Two fairy shrimp observed in pool.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pasatiempo (KK2)

Visit Date: 4/22/2025 Start Time: 5:48 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water:

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, Fence repair

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds in and around pools. Fence needs repair. Habitat restoration site needs maintenance. SD button celery and SD mesa mint present in one pool.

Visit Date: 6/3/2025 Start Time: 5:47 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint and SD button celery abundant in one pool.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pasatiempo (KK2)

Management Actions Completed

Visit Date: 11/21/2024 Start Time: 9:56 AM
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Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: Contracted crew performing habitat restoration plant installation.
--

Visit Date: 12/12/2024 Start Time: 8:22 AM
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Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, erosioncontrol

Notes: Contracted crew performed weed control, dethatching and erosion control.
--

Visit Date: 3/20/2025 Start Time: 10:59 AM
--

Surveyors: Jesus Reyes

Action(s) Completed: Weed control, dethatching

Notes: City staff performed weed control and dethatching.
--

Visit Date: 6/4/2025 Start Time: 12:31 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control
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Notes: City staff performed weed control.
--

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Proctor Valley (R1)

Planning Unit: South

City or Other? City

Managing Department: Public Utilities

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 1/28/2025 Start Time: 8:00 AM

Surveyors: Jacob Dioli, Margaret Thompson

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects: new

Invasive Species in Buffer: new

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Fence repair, add replace lock, add replace chain, trash pickup

Other Management Needs:

Additional Management Actions Recommended: Replace approx. 100LF of fencing (300 more to fence 2802 - 2799). Remove baccharis from within pools. Add approx 10 locks to gates. Add 1 chain to gate near 2748. Weed 2700, 2578, 151, 2837, 2838, 1766,

Notes: Erodium seed in pools, but no live plants. Dirtbike tracks at 200. Pools are generally bare, with only PSIBRE- could be seasonality. Stinkwort and artichoke thistle are not in 20ft, but nearby. SD button-celery at pools 2822 & 2813.

Visit Date: 4/4/2025 Start Time: 9:02 AM

Surveyors: Jade Woll, Jacob Dioli

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 6-15

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, trash pickup

Other Management Needs:

Additional Management Actions Recommended: Hand weeding of non-native species in pools. Line trim flowering non-natives in vernal pool uplands. Pools 2675, 2766, 2767, 2768 appear need upland buffer treated. Remove barb wire in pool 2802.

Notes: Black Sage was present onsite during qualitative monitoring. It appears a majority of the edges surrounding the pools had been spot sprayed. Follow-up treatment focusing on hand weeding of vernal pools is recommended. San Diego Button-celery observed.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Proctor Valley (R1)

Visit Date: 6/4/2025 **Start Time:** 8:30 AM

Surveyors: Jacob Dioli

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: ongoing

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Fence repair

Other Management Needs:

Additional Management Actions Recommended: Pools have desiccated erodium and dried grasses. Some uplands have sparse tocalote. No maintenance recommended at this time, unless there is budget to dethatch.

Notes: In one location near north of 2722 the k-rail and fence are cut. NAVFOS observed in pool 2755, numerous pools have ERYARI.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Proctor Valley (R1)

Management Actions Completed

Visit Date: 8/26/2024 **Start Time:** 7:30 AM

Surveyors: Andrew Kort

Action(s) Completed: dethatching, Weed control

Notes: Hand pick weeds, spray herbicide, and line trimmers. Pools in good condition due to management actions coupled with hot and dry conditions.

Visit Date: 9/19/2024 **Start Time:** 10:21 AM

Surveyors: Luis Elias

Action(s) Completed: dethatching, Weed control

Notes: Line-trimmed and spot sprayed non-natives within the vernal pool buffer.

Visit Date: 2/3/2025 **Start Time:** 12:54 PM

Surveyors: Justin Felder, Tom Berg, Emerson Peluso

Action(s) Completed: Weed control, trash pickup

Notes: Button Celery observation post fruiting stage.

Visit Date: 2/25/2025 **Start Time:** 3:05 PM

Surveyors: Emerson Peluso

Action(s) Completed: Fence repair, fence install, trash pickup

Notes:

Visit Date: 2/26/2025 **Start Time:** 1:16 PM

Surveyors: Emerson Peluso

Action(s) Completed: Weed control, trash pickup, reveg restore site maint

Notes: We observed Wild Quails, a Gopher snake, and other bird species. We sprayed weeds, hula hoed a lot of Erodium weeds around the vernal pools. Also lopping a lot of broom bacharis inside the pools.

Visit Date: 2/28/2025 **Start Time:** 2:55 PM

Surveyors: Luis Salas

Action(s) Completed: Weed control, trash pickup

Notes:

Visit Date: 3/19/2025 **Start Time:** 9:08 AM

Surveyors: Emerson Peluso

Action(s) Completed: Weed control, trash pickup

Notes: Removed Broom Bacharis (Baccharis sarothroides) inside and close to the vernal pools.

Visit Date: 3/24/2025 **Start Time:** 8:00 AM

Surveyors: Alonna Medina

Action(s) Completed: Weed control

Notes: Removed invasive plants from within the vernal pools.

Visit Date: 3/27/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: trash pickup, Weed control

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Proctor Valley (R1)

Visit Date: 3/28/2025 **Start Time:** 12:26 PM

Surveyors: Emerson Peluso

Action(s) Completed: trash pickup, Weed control

Notes:

Visit Date: 3/31/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: trash pickup, Weed control, dethatching

Notes:

Visit Date: 4/4/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 4/22/2025 **Start Time:** 2:59 PM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 4/23/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 5/9/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

Visit Date: 5/12/2025 **Start Time:** 8:00 AM

Surveyors: Lucas Corbo

Action(s) Completed: Weed control

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pueblo Lands (North and South) (I12)

Planning Unit: North

City or Other? City

Managing Department: Public Utilities

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 9/4/2024 Start Time: 11:30 AM

Surveyors: Andrew Kort

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching

Other Management Needs:

Additional Management Actions Recommended:

Notes: Recommend spot herbicide, hand pulling, line trim. Encampment observed in SW portion of parcel: approx 32.871484, -117.195101. There is a gap in fence west of encampment: approx 32.871550, -11

Visit Date: 1/23/2025 Start Time: 10:35 AM

Surveyors: Jacob Dioli, Margaret Thompson

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed: Broom baccharis present within pool 2985- removal recommended.

Are other issues new or ongoing? ongoing

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Tocalote present beyond 20-ft and may pose a danger of encroaching.

Notes: Broom baccharis present within pool 2985. Access road contains stinkwort. Erodium seed was present within the pool but no plants are present, weed maintenance will likely be needed following a rain event. Consider seed dispersal to increase cover.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pueblo Lands (North and South) (I12)

Visit Date: 3/24/2025 Start Time: 11:45 AM

Surveyors: Jade Woll

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control

Other Management Needs:

Additional Management Actions Recommended: Hand weed in pools and conduct spot treatment within buffer.

Notes: Native vernal pool species were observed in both pools; however, there's an abundance of bare ground and non-native species within the pools and upland buffer. Non-native species primarily consist of Erodium sp. and non-native grasses.

Visit Date: 5/14/2025 Start Time: 8:40 AM

Surveyors: Jade Woll

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs:

Other Management Needs:

Additional Management Actions Recommended: Conduct non-native control in fall after first rain events. Consider dethatching pools.

Notes: Native species were observed in pools and upland buffer; however, erodium and non-native grasses are present within the buffer and pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Pueblo Lands (North and South) (I12)

Management Actions Completed

Visit Date: 9/17/2024 Start Time: 10:33 AM
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Surveyors: Oscar Elias

Action(s) Completed: Weed control, dethatching

Notes: Line-trimmed and spot sprayed non-natives within the vernal pool buffer.
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Visit Date: 2/21/2025 Start Time: 8:15 AM

Surveyors: Jarett Jones, Nick Diaz

Action(s) Completed: Weed control, dethatching, add replace lock

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 2

Qualitative Monitoring Data

Visit Date: 8/29/2024 Start Time: 10:57 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

Visit Date: 1/17/2025 Start Time: 1:01 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching, Weed control, trash pickup, sign replacement

Other Management Needs:

Additional Management Actions Recommended:

Notes: Graffiti present on sign. Some trash present in preserve. Pools very dry with no new vegetation.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

Visit Date: 2/25/2025 Start Time: 4:53 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Otay mesa mint and SD button celery sprouting.

Visit Date: 4/17/2025 Start Time: 2:02 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 0

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present. Otay mesa mint and SD button celery in most pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

Management Actions Completed

Visit Date: 7/2/2024 **Start Time:** 7:06 AM

Surveyors: Jason Allen

Action(s) Completed: dethatching, Weed control

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 7/30/2024 **Start Time:** 1:38 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 8/1/2024 **Start Time:** 2:03 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performing weed control and dethatching.

Visit Date: 8/2/2024 **Start Time:** 12:22 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performing weed control.

Visit Date: 8/5/2024 **Start Time:** 7:18 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 8/6/2024 **Start Time:** 2:59 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 8/15/2024 **Start Time:** 2:45 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup, reveg restore site maint, Graffiti removal on sign.

Notes: Contracted staff performed habitat restoration site watering. City staff performed trash pickup and graffiti removal.

Visit Date: 8/26/2024 **Start Time:** 7:44 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 8/30/2024 **Start Time:** 8:33 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, reveg restore site maint, trash pickup

Notes: Contracted crew performed weed control, dethatching, trash pickup and restoration site maintenance removing the flags.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

Visit Date: 9/10/2024 **Start Time:** 12:05 PM
Surveyors: Jason Allen
Action(s) Completed: reveg restore site maint
Notes: City staff performed restoration site maintenance and installed plant protectors.

Visit Date: 1/17/2025 **Start Time:** 12:49 PM
Surveyors: Jason Allen
Action(s) Completed: trash pickup
Notes: City staff performed trash pickup.

Visit Date: 2/28/2025 **Start Time:** 8:31 AM
Surveyors: Jason Allen
Action(s) Completed: Weed control, dethatching
Notes: Contracted crew performed weed control and dethatching.

Visit Date: 4/17/2025 **Start Time:** 2:00 PM
Surveyors: Jason Allen
Action(s) Completed: Weed control, dethatching, trash pickup
Notes: City staff performed weed control and trash pickup.

Visit Date: 4/25/2025 **Start Time:** 9:31 AM
Surveyors: Jason Allen
Action(s) Completed: Weed control
Notes: City staff performed weed control.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: SANDER (U15)

Planning Unit: Central

City or Other? City

Managing Department: Public Utilities

VPHCP Required Management and Monitoring Level: Level 2

Qualitative Monitoring Data

Visit Date: 9/23/2024 Start Time: 9:12 AM

Surveyors: Charles Adams

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? wrong_time

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes:

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: SANDER (U15)

Management Actions Completed

Visit Date: 10/1/2024 **Start Time:** 1:30 PM

Surveyors: Jade Woll

Action(s) Completed: Weed control, dethatching, Fence repair, trash pickup

Notes: RECON crew dethatched non-native grasses and spot sprayed non-natives within the vernal pool upland area. Crew repaired two damaged fence locations along Mercury Point. Areas were previously used by unauthorized individuals accessing the site.

Visit Date: 10/25/2024 **Start Time:** 8:00 AM

Surveyors: Megan Hughes

Action(s) Completed: Weed control, Fence repair, trash pickup, dethatching

Notes: RECON crew dethatched non-native species and spot sprayed non-natives along the drainage. Crew repaired four fence locations along Mercury Point. Areas were previously used by unauthorized individuals accessing the site.

Visit Date: 11/21/2024 **Start Time:** 8:49 AM

Surveyors: Jade Woll

Action(s) Completed: Weed control, dethatching, Fence repair, trash pickup

Notes: Maintenance events occurred on 11/18-11/19. During post maintenance site check fence that was repaired appeared to be damaged again.

Visit Date: 12/16/2024 **Start Time:** 8:08 AM

Surveyors: Jade Woll

Action(s) Completed: Weed control, dethatching, Fence repair, trash pickup

Notes: Site continues to be actively used by unauthorized individuals. Fence repairs are on ongoing and continue to be damaged after management actions. Minimal non-natives are present due to limited rain this fall/winter.

Visit Date: 3/7/2025 **Start Time:** 8:20 AM

Surveyors: Jacob Dioli

Action(s) Completed: Weed control, Fence repair, fence install, trash pickup

Notes: 3/5 - 3/7 Herbicide treatment in uplands (Erodium). Vernal pools E2 and H2 were hand weeded. Fencing surrounding the vernal pools was replaced. The chainlink fence surrounding the site was repaired Thursday but cut again by Friday.

Visit Date: 4/11/2025 **Start Time:** 7:56 AM

Surveyors: Jade Woll

Action(s) Completed: Weed control, Fence repair

Notes: Access issues remain the biggest issue onsite with increased encampments and impacts on native habitat. Maintenance Event occurred from March 31-April 4 and April 8-April 11

Visit Date: 5/23/2025 **Start Time:** 8:03 AM

Surveyors: Jade Woll

Action(s) Completed: Weed control, Fence repair, fence install, trash pickup

Notes: Maintenance event occurred from May 5-9, 14-16, and 21-23. Maintenance activities focused on installing additional fencing, repairing damaged fencing along Mercury Pt., hand weeding vernal pools, spot treating uplands, and trash removal.

Visit Date: 6/11/2025 **Start Time:** 8:13 AM

Surveyors: Jade Woll

Action(s) Completed: Weed control, Fence repair

Notes: Maintenance event occurred from June 10-11. Consisted of hand weeding pools and repairing fencing throughout the site.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Seabird Way

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 2/24/2025 Start Time: 12:36 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, sign install, fence install, trash pickup, Regular patrols recommended, accesscontrol

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Illegal brush trimming behind houses on City property. Large cut branches left in preserve. SD Button celery sprouting.

Visit Date: 5/23/2025 Start Time: 2:56 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Seabird Way

Management Actions Completed

Visit Date: 3/17/2025 Start Time: 10:19 AM
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Surveyors: Jason Allen

Action(s) Completed: sign install, dump cleanup, Weed control, dethatching

Notes: Contracted crew performed sign installation, dump cleanup, weed control and dethatching.
--

Visit Date: 5/2/2025 Start Time: 11:54 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 5/23/2025 Start Time: 2:59 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup
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Notes: City staff performed trash pickup.
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VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Serra Mesa Library (N7)

Planning Unit: Central

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 7/26/2024 Start Time: 1:46 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Grading/Recontouring, Regular patrols recommended, reveg restore site maint, Fence repair

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old concrete debris. Some areas along fence need patches.

Visit Date: 11/21/2024 Start Time: 3:48 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs: ongoing

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Fence repair, gaterepair, Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old fence damage. Trash present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Serra Mesa Library (N7)

Visit Date: 12/9/2024 Start Time: 3:44 PM

Surveyors: Adam Skinner

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Wrong_Time

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes:

Visit Date: 3/21/2025 Start Time: 1:18 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash and some old trash present. SD button celery and SD mesa mint sprouting.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Serra Mesa Library (N7)

Visit Date: 5/13/2025 Start Time: 2:58 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD mesa mint and SD button celery present in a few pools.

Management Actions Completed

Visit Date: 11/19/2024 Start Time: 1:22 PM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: Contracted crew performed habitat restoration plant installation.

Visit Date: 11/21/2024 Start Time: 3:47 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup

Notes: City staff performed trash pickup.

Visit Date: 12/13/2024 Start Time: 11:24 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, reveg restore site maint, gaterepair

Notes: City staff performed gate repair and habitat restoration maintenance. Contracted crew performed weed control and dethatching.

Visit Date: 12/24/2024 Start Time: 1:22 PM

Surveyors: Adam Skinner

Action(s) Completed: add replace lock, reveg restore site maint

Notes:

Visit Date: 2/27/2025 Start Time: 9:15 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay 1 Acre (J13N)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 3

Qualitative Monitoring Data

Visit Date: 3/18/2025 Start Time: 11:10 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: yes

Days Since Last Rain: 1-5

Fairy Shrimp Visible: Absent

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds in and around pools. Some pools have water in them. SD button celery observed in pools.

Visit Date: 5/2/2025 Start Time: 11:05 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds in and around pools. Mitigation site is being restored. SD button celery and Otay mesa mint present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay 1 Acre (J13N)

Management Actions Completed

Visit Date: 5/9/2025 Start Time: 3:45 PM
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Surveyors: Jason Allen

Action(s) Completed: reveg restore site maint
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Notes: City staff performed restoration site maintenance.
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Visit Date: 6/5/2025 Start Time: 4:08 PM
--

Surveyors: Jason Allen

Action(s) Completed: reveg restore site maint
--

Notes: City staff performed habitat restoration site maintenance watering and herbivory control.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay J13s (J13)

Planning Unit: South

City or Other?

Managing Department:

VPHCP Required Management and Monitoring Level:

Qualitative Monitoring Data

Visit Date: 11/14/2024 Start Time: 9:15 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Grading/Recontouring, Regular patrols recommended, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash emerging from below thatch. New plants eaten by rabbits.

Visit Date: 2/24/2025 Start Time: 1:41 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. Installed plants looking good.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay J13s (J13)

Visit Date: 3/4/2025 Start Time: 12:01 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, Restoration/Revegetation, trash pickup, dump cleanup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. Habitat restoration needed.

Visit Date: 3/18/2025 Start Time: 11:04 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. SD button celery and Otay mesa mint seedlings present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay J13s (J13)

Visit Date: 4/25/2025 Start Time: 1:01 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, Regular patrols recommended, reveg restore site maint

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. Otay mesa mint and SD button celery present in some pools.

Visit Date: 6/13/2025 Start Time: 2:32 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended, trash pickup

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. Otay mesa mint and SD button celery present in some pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay J13s (J13)

Management Actions Completed

Visit Date: 7/12/2024 **Start Time:** 4:29 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint, regularpatrolsrecommended

Notes:

Visit Date: 7/15/2024 **Start Time:** 12:54 PM

Surveyors: Adam Skinner

Action(s) Completed: trash pickup, regularpatrolsrecommended, reveg restore site maint

Notes:

Visit Date: 7/17/2024 **Start Time:** 1:01 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 8/1/2024 **Start Time:** 12:53 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, reveg restore site maint, trash pickup

Notes: City staff performed habitat restoration watering maintenance, weed control and trash pickup.

Visit Date: 9/10/2024 **Start Time:** 4:17 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 9/23/2024 **Start Time:** 10:30 AM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 10/3/2024 **Start Time:** 1:50 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 11/27/2024 **Start Time:** 1:02 PM

Surveyors: Adam Skinner

Action(s) Completed: restreveg, reveg restore site maint, regularpatrolsrecommended

Notes:

Visit Date: 12/12/2024 **Start Time:** 11:54 AM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: City staff performed habitat restoration seed dispersal.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: South Otay J13s (J13)

Visit Date: 3/4/2025	Start Time: 11:58 AM
Surveyors: Jason Allen	
Action(s) Completed: Weed control	
Notes: City staff performed weed control.	
Visit Date: 3/18/2025	Start Time: 10:50 AM
Surveyors: Jason Allen	
Action(s) Completed: restreveg, reveg restore site maint	
Notes: City staffed performed restoration site maintenance. Placed cages around endangered plant seedlings.	
Visit Date: 4/25/2025	Start Time: 12:59 PM
Surveyors: Jason Allen	
Action(s) Completed: Weed control	
Notes: City staff performed weed control.	
Visit Date: 4/29/2025	Start Time: 2:19 PM
Surveyors: Jason Allen	
Action(s) Completed: reveg restore site maint	
Notes: City staff performed habitat restoration site watering.	
Visit Date: 5/6/2025	Start Time:
Surveyors: Jesus Reyes	
Action(s) Completed: Weed control, dethatching	
Notes: City staff performed weed control and dethatching.	
Visit Date: 6/13/2025	Start Time: 2:30 PM
Surveyors: Jason Allen	
Action(s) Completed: Weed control, restreveg, reveg restore site maint	
Notes: City staff performed weed control, habitat restoration and habitat restoration site watering maintenance.	
Visit Date: 6/23/2025	Start Time:
Surveyors: Jesus Reyes	
Action(s) Completed: reveg restore site maint	
Notes: City staff performed habitat restoration site maintenance watering.	

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Stowe

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/2/2025

Start Time: 3:50 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, fence install, sign install, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present. SD button celery present in two pools. SD mesa mint present in one pool.

Management Actions Completed

Visit Date: 6/2/2025

Start Time: 3:54 PM

Surveyors: Jason Allen

Action(s) Completed: Weed control, trash pickup

Notes: City staff performed weed control and trash pickup.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Tecolote Canyon (QQ)

Planning Unit: Central

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 5/27/2025 Start Time: 1:52 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: new

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Fence repair

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some new trash present. Fence wire needs to be tightened. SD mesa mint present in pool 2476.

Management Actions Completed

Visit Date: 4/21/2025 Start Time:

Surveyors: Jesus Reyes

Action(s) Completed: Weed control

Notes: City staff performed weed control.

Visit Date: 5/27/2025 Start Time:

Surveyors: Jason Allen

Action(s) Completed: trash pickup

Notes: City staff performed trash pickup.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Topsail

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 5/2/2025 Start Time: 12:18 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: dethatching, Weed control, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. SD button celery and Otay mesa mint present in some pools.

Management Actions Completed

Visit Date: 4/21/2025 Start Time:

Surveyors: Jesus Reyes

Action(s) Completed: Weed control

Notes: City staff performed weed control.

Visit Date: 5/8/2025 Start Time:

Surveyors: Jesus Reyes

Action(s) Completed: Weed control, dethatching

Notes: City staff performed weed control and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: West Otay B (J32)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 12/13/2024 Start Time: 2:55 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 1-5

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

Visit Date: 2/24/2025 Start Time: 2:39 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Otay mesa mint sprouting.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: West Otay B (J32)

Management Actions Completed

Visit Date: 9/20/2024 **Start Time:** 8:36 AM

Surveyors: Jason Allen

Action(s) Completed: dethatching, Weed control, reveg restore site maint

Notes: Contracted crew performed weed control, restoration maintenance and dethatching.

Visit Date: 10/25/2024 **Start Time:** 3:38 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 4/9/2025 **Start Time:** 9:19 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 5/2/2025 **Start Time:** 9:30 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: Contracted crew performed weed control and habitat restoration maintenance.

Visit Date: 5/23/2025 **Start Time:** 10:19 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, reveg restore site maint

Notes: Contracted crew performed weed control, habitat restoration maintenance and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: West Otay C (J32)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 2/24/2025

Start Time: 2:56 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Installed plants doing good.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: West Otay C (J32)

Management Actions Completed

Visit Date: 10/25/2024 **Start Time:** 3:40 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 11/26/2024 **Start Time:** 12:42 PM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 12/11/2024 **Start Time:** 10:25 AM

Surveyors: Adam Skinner

Action(s) Completed: reveg restore site maint

Notes:

Visit Date: 12/13/2024 **Start Time:** 2:53 PM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: City staff performed habitat restoration seed dispersal.

Visit Date: 4/10/2025 **Start Time:** 9:23 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 4/11/2025 **Start Time:** 9:56 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching

Notes: Contracted crew performed weed control and dethatching.

Visit Date: 5/2/2025 **Start Time:** 9:27 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control

Notes: Contracted crew performed weed control and habitat restoration maintenance.

Visit Date: 5/23/2025 **Start Time:** 10:21 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, reveg restore site maint

Notes: Contracted crew performed weed control, habitat restoration maintenance and dethatching.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Winterwood (C10-16)

Planning Unit: North

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 4/18/2025

Start Time: 4:14 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use: new

Damage to Fences and/or Signs: new

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Fence repair, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present. Fence was cut.

Management Actions Completed

Visit Date: 4/18/2025

Start Time: 4:21 PM

Surveyors: Jason Allen

Action(s) Completed: trash pickup

Notes: City staff performed trash pickup.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Wruck Canyon (J16-18)

Planning Unit: South

City or Other? City

Managing Department: Parks & Recreation

VPHCP Required Management and Monitoring Level: Level 1

Qualitative Monitoring Data

Visit Date: 8/14/2024 Start Time: 2:15 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, trash pickup, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present.

Visit Date: 4/8/2025 Start Time: 10:33 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: 6-15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, fence install, sign install, dump cleanup, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash from dumps. SD button celery present in two pools. Additional fence needs to be installed around a few pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Wruck Canyon (J16-18)

Visit Date: 6/2/2025 Start Time: 10:30 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Some old trash present. SD button celery barely holding on.

Visit Date: 6/26/2025 Start Time: 12:35 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Present

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, fence install, trash pickup, Regular patrols recommended

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Old trash present. Finish securing fence on Northern boundary. SD button celery present.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Wruck Canyon (J16-18)

Management Actions Completed

Visit Date: 8/20/2024 Start Time: 12:33 PM
--

Surveyors: Jason Allen

Action(s) Completed: reveg restore site maint
--

Notes: City staff performed restoration site watering maintenance.

Visit Date: 10/15/2024 Start Time: 1:31 PM
--

Surveyors: Jason Allen, Adam Skinner

Action(s) Completed: reveg restore site maint, gaterepair, add replace lock, add replace chain, Fence repair

Notes: City staff installed new gate and plant marking flags.
--

Visit Date: 12/12/2024 Start Time: 11:15 AM

Surveyors: Jason Allen

Action(s) Completed: restreveg

Notes: City staff performed habitat restoration seed dispersal.
--

Visit Date: 5/8/2025 Start Time: 10:35 AM

Surveyors: Jason Allen

Action(s) Completed: Weed control, dethatching, fence install
--

Notes: Contracted crew performed weed control, fence installation and dethatching.

Visit Date: 6/5/2025 Start Time: 11:45 AM

Surveyors: Jason Allen

Action(s) Completed: fence install

Notes: City staff performed fence/gate installation.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Arjons

Planning Unit: North

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/30/2025

Start Time: 4:50 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible?

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual and perennial weeds in and around vernal pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: East Ocean Air Drive (H33)

Planning Unit: North

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/30/2025

Start Time: 4:25 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible? Absent

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual and perennial weeds and grasses in and around pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Empire Center (J27)

Planning Unit: South

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/26/2025

Start Time: 2:48 PM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible?

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs:

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trash along street edge.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Facilities Development (Eastgate Miramar Associates) (I6C)

Planning Unit: North

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/30/2025

Start Time: 10:04 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible?

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer:

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, sign install

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Pampas grass near pools. Trash present. Signage needed.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Fieldstone (C17-18)

Planning Unit: North

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/30/2025

Start Time: 10:21 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible?

New and Ongoing Issues Observed During Visit:

Trash:

Tresspass/Unauthorized Use: ongoing

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool:

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools.

VPHCP Qualitative Monitoring and Management Actions

Fiscal Year: 2025

Complex Name: Ford Leasing (Bob Baker) (I6B)

Planning Unit: North

City or Other? Other

Managing Department:

VPHCP Required Management and Monitoring Level: None

Qualitative Monitoring Data

Visit Date: 6/30/2025

Start Time: 9:58 AM

Surveyors: Jason Allen

Site Conditions:

Ponded Water: no

Days Since Last Rain: >15

Fairy Shrimp Visible:

Listed Plants Visible?

New and Ongoing Issues Observed During Visit:

Trash: ongoing

Tresspass/Unauthorized Use:

Damage to Fences and/or Signs:

Fire or Damage from Fire Supression:

Invasive Species in Pool: ongoing

Damage from Edge Effects:

Invasive Species in Buffer: ongoing

Hydrological Impacts:

Other issues observed:

Are other issues new or ongoing?

Management Needs: Weed control, dethatching, Restoration/Revegetation, trash pickup, fence install, sign install

Other Management Needs:

Additional Management Actions Recommended:

Notes: Annual weeds and grasses in and around pools. Trash present. Fence and signage needed.

Appendix C-2

2025 Vernal Pool Quantitative Monitoring Datasheets

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 42

2003 Baseline Survey Data

Baseline Cover of ERAR: 63.0

Baseline Cover of NAFO: 3.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 38.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 02:53 PM

Survey End Time: 03:21 PM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 42

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis pilularis</i> - coyote brush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Navarretia hamata</i> - hooked skunkweed
<i>Plagiobothrys</i> sp.
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 51

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 1.0

Baseline Cover of ORCA: 1.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 38.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 01:44 PM

Survey End Time: 02:46 PM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: PONU, ERAR, NAFO

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin: <1%

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 1-5%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 14

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Erigeron canadensis</i> - horseweed	<1%
<i>Lysimachia minima</i> - chaffweed	<1%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Erodium moschatum</i> - greenstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Melilotus indicus</i> - annual yellow sweetclover	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	10-25%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 13

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 51

Additional Information:

Bare Ground Cover in Basin: 25-50% **Cover of Rocks/Cobble in Basin:** 5-10% **Cover of Litter in Basin:** 1-5%
Days Since Last Rain: 1-5 **Ponded Water Present:** no
Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 51

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon micranthus</i> - Grab Lotus
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus madritensis</i> - foxtail chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Epilobium campestre</i> - smooth boisduvalia
<i>Erigeron canadensis</i> - horseweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Glebionis coronaria</i> - crown daisy
<i>Lamarckia aurea</i> - golden-top
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Peritoma arborea</i> - bladderpod
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 67

2003 Baseline Survey Data

Baseline Cover of ERAR: 3.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 63.0

2025 Quantitative Monitoring Data

Survey Date: 5/27/2025

Survey Start Time: 08:30 AM

Survey End Time: 09:24 AM

Surveyors: Sara Allen, Ella Horvath, Danielle Parsons, Maya Holdren

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Ferocactus viridescens</i> - San Diego barrel cactus	<1%
<i>Muhlenbergia rigens</i> - deer grass	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys collinus</i> - Cooper's popcornflower	<1%
<i>Simmondsia chinensis</i> - jojoba	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Brassica nigra</i> - black mustard	<1%
<i>Bromus hordeaceus</i> - soft chess	5-10%
<i>Bromus rubens</i> - red brome	5-10%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	5-10%
<i>Medicago polymorpha</i> - California burclover	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 13

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 67

Additional Information:

Bare Ground Cover in Basin: 1-5%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 67

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Amaranthus albus</i> - tumbleweed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia intermedia</i> - common fiddleneck
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Hainardia cylindrica</i> - barb grass
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Lactuca serriola</i> - prickly lettuce
<i>Laennecia coulteri</i> - Coulter's horseweed
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Muhlenbergia rigens</i> - deer grass
<i>Navarretia hamata</i> - hooked skunkweed
<i>Phacelia minor</i> - wild canterbury bells
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Salsola tragus</i> - Russian thistle
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stephanomeria diegensis</i> - San Diego wreath-plant
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 78

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 1.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/27/2025

Survey Start Time: 09:37 PM

Survey End Time: 10:45 PM

Surveyors: Ella Horvath, Danielle Parsons

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 5-10%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 14

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Eriogonum fasciculatum</i> - California buckwheat	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys collinus</i> - Cooper's popcornflower	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%
<i>Solanum americanum</i> - white nightshade	<1%
<i>Stipa lepida</i> - foothill needle grass	<1%
<i>Stipa pulchra</i> - purple needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	10-25%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	1-5%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 11

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 78

Additional Information:

Bare Ground Cover in Basin: 5-10% **Cover of Rocks/Cobble in Basin:** 10-25% **Cover of Litter in Basin:** 10-25%
Days Since Last Rain: 6-15 **Ponded Water Present:** no
Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 78

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia intermedia</i> - common fiddleneck
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Distichlis spicata</i> - salt grass
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Lactuca serriola</i> - prickly lettuce
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malosma laurina</i> - laurel sumac
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Navarretia hamata</i> - hooked skunkweed
<i>Phalaris minor</i> - little-seeded canary grass
<i>Plagiobothrys collinus</i> - Cooper's popcornflower
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Spergularia bocconi</i> - Boccone's sand-spurrey
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 89

2003 Baseline Survey Data

Baseline Cover of ERAR: 16.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 63.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 02:01 PM

Survey End Time: 02:25 PM

Surveyors: Ryan Meszaros, Melissa Tamarkin

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 5-10%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eriogonum fasciculatum</i> - California buckwheat	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	10-25%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	10-25%
<i>Festuca perennis</i> - rye grass	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 89

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex pacifica</i> - south coast saltscale
<i>Avena fatua</i> - wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Brachypodium distachyon</i> - purple false brome
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Lactuca serriola</i> - prickly lettuce
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Navarretia hamata</i> - hooked skunkweed
<i>Plagiobothrys</i> sp.
<i>Rosa minutifolia</i> - small-leaved rose
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 96

2003 Baseline Survey Data

Baseline Cover of ERAR: 63.0

Baseline Cover of NAFO: 1.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 3.0

2025 Quantitative Monitoring Data

Survey Date: 5/27/2025

Survey Start Time: 09:49 AM

Survey End Time: 10:46 AM

Surveyors: Sara Allen, Maya Holdren

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Distichlis spicata</i> - salt grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Laennecia coulteri</i> - Coulter's horseweed	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%
<i>Stipa pulchra</i> - purple needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	1-5%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium</i> sp.	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	1-5%
<i>Lactuca serriola</i> - prickly lettuce	1-5%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 96

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Distichlis spicata</i> - salt grass
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant
<i>Muhlenbergia rigens</i> - deer grass
<i>Plagiobothrys collinus</i> - Cooper's popcornflower
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Silene gallica</i> - windmill pink
<i>Simmondsia chinensis</i> - jojoba
<i>Spergularia</i> sp.
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 100

2003 Baseline Survey Data

Baseline Cover of ERAR: 80.0

Baseline Cover of NAFO: 3.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 02:41 PM

Survey End Time: 03:12 PM

Surveyors: Ryan Meszaros, Melissa Tamarkin

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	1-5%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 100

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis salicifolia</i> - mule fat
<i>Centaurea melitensis</i> - tocalote
<i>Cryptantha</i> sp.
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Distichlis spicata</i> - salt grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Heteromeles arbutifolia</i> - toyon
<i>Laennecia coulteri</i> - Coulter's horseweed
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Marsilea vestita</i> - hairy waterclover
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Navarretia hamata</i> - hooked skunkweed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Plagiobothrys</i> sp.
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Rhus integrifolia</i> - lemonade berry
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Spergularia</i> sp.
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 100

<i>Yucca schidigera</i> - Mojave yucca
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Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 295

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 12:30 PM

Survey End Time: 01:45 PM

Surveyors: Ryan Meszaros, Melissa Tamarkin

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 9

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon micranthus</i> - Grab Lotus	<1%
<i>Baccharis pilularis</i> - coyote brush	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Laennecia coulteri</i> - Coulter's horseweed	<1%
<i>Muhlenbergia rigens</i> - deer grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Brachypodium distachyon</i> - purple false brome	<1%
<i>Bromus rubens</i> - red brome	5-10%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Helminthotheca echioides</i> - bristly ox-tongue	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant	<1%
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 15

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 295

Additional Information:

Bare Ground Cover in Basin: 10-25% **Cover of Rocks/Cobble in Basin:** 25-50% **Cover of Litter in Basin:** 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 295

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex pacifica</i> - south coast saltscale
<i>Baccharis pilularis</i> - coyote brush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus madritensis</i> - foxtail chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Chenopodium murale</i> - nettle-leaf goosefoot
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Distichlis spicata</i> - salt grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Euphorbia</i> sp.
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Gamochaeta stagnalis</i> - desert cudweed
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Lactuca serriola</i> - prickly lettuce
<i>Laennecia coulteri</i> - Coulter's horseweed
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malosma laurina</i> - laurel sumac
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Myoporum parvifolium</i> - slender myoporum
<i>Phalaris</i> sp.
<i>Plagiobothrys</i> sp.

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 295

<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Rhus integrifolia</i> - lemonade berry
<i>Salsola tragus</i> - Russian thistle
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Simmondsia chinensis</i> - jojoba
<i>Solanum</i> sp.
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 301

2003 Baseline Survey Data

Baseline Cover of ERAR: 63.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 37.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 11:00 AM

Survey End Time: 11:36 AM

Surveyors: Ryan Meszaros, Melissa Tamarkin

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 25-50%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%
<i>Stipa lepida</i> - foothill needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Brachypodium distachyon</i> - purple false brome	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	5-10%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	5-10%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hainardia cylindrica</i> - barb grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 13

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 301

2025 Quantitative Monitoring Data continued
--

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex canescens</i> - four-wing saltbush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Lactuca serriola</i> - prickly lettuce
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Peritoma arborea</i> - bladderpod
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Rhus integrifolia</i> - lemonade berry
<i>Salsola tragus</i> - Russian thistle
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 445

2003 Baseline Survey Data

Baseline Cover of ERAR: 63.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 38.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 08:30 PM

Survey End Time: 10:02 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 25-50%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	1-5%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 445

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Lamarckia aurea</i> - golden-top
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Salsola tragus</i> - Russian thistle
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 447

2003 Baseline Survey Data

Baseline Cover of ERAR: 63.0

Baseline Cover of NAFO: 1.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 10:29 PM

Survey End Time: 10:58 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Salsola tragus</i> - Russian thistle	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 447

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Distichlis spicata</i> - salt grass
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Rhus integrifolia</i> - lemonade berry
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass
<i>Verbena menthifolia</i> - mint-leaf vervain
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 449

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 38.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 09:00 AM

Survey End Time: 09:52 AM

Surveyors: Ryan Meszaros, Melissa Tamarkin

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 10-25%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	10-25%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	5-10%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Melilotus indicus</i> - annual yellow sweetclover	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 13

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 449

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Grindelia camporum</i> - gumplant
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lomatium dasycarpum</i> - lace parsnip
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Navarretia hamata</i> - hooked skunkweed
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 450

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 38.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 10:00 AM

Survey End Time: 10:46 AM

Surveyors: Ryan Meszaros, Melissa Tamarkin

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Brassica nigra</i> - black mustard	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	5-10%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	10-25%
<i>Lamarckia aurea</i> - golden-top	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	1-5%
<i>Polycarpon tetraphyllum</i> var. <i>tetraphyllum</i> - four-leaved allseed	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 12

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 450

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis salicifolia</i> - mule fat
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Brachypodium distachyon</i> - purple false brome
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> - Italian thistle
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Lactuca serriola</i> - prickly lettuce
<i>Lycium californicum</i> - California box-thorn
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant
<i>Peritoma arborea</i> - bladderpod
<i>Phacelia cicutaria</i> - caterpillar phacelia
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 451

2003 Baseline Survey Data

Baseline Cover of ERAR: 16.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 3.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 11:14 PM

Survey End Time: 11:43 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: <1%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra conjugens</i> - Otay tarplant	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Encelia californica</i> - California encelia	<1%
<i>Grindelia camporum</i> - gumplant	<1%
<i>Rhus integrifolia</i> - lemonade berry	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Brassica nigra</i> - black mustard	<1%
<i>Bromus diandrus</i> - ripgut grass	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	1-5%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 10

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 451

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Brassica nigra</i> - black mustard
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Grindelia camporum</i> - gumplant
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 452

2003 Baseline Survey Data

Baseline Cover of ERAR: 80.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 12:45 PM

Survey End Time: 01:27 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 1-5%

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra conjugens</i> - Otay tarplant	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Eriogonum fasciculatum</i> - California buckwheat	<1%
<i>Hordeum intercedens</i> - bobtail barley	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 452

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Gastridium phleoides</i> - nit grass
<i>Glebionis coronaria</i> - crown daisy
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Logfia arizonica</i> - Arizona cottonrose
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 459

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 3.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 01:30 PM

Survey End Time: 02:11 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra conjugens</i> - Otay tarplant	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Senecio vulgaris</i> - common groundsel	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 12

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 459

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium californicum</i> - California box-thorn
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Senecio vulgaris</i> - common groundsel
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 464

2003 Baseline Survey Data

Baseline Cover of ERAR: 16.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 02:15 PM

Survey End Time: 02:56 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 1-5%

Cover of Native Species in Basin: <1%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Convolvulus simulans</i> - small-flowered morning-glory	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Brachypodium distachyon</i> - purple false brome	<1%
<i>Brassica nigra</i> - black mustard	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	10-25%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Medicago polymorpha</i> - California burclover	<1%
<i>Senecio vulgaris</i> - common groundsel	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 14

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 464

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Avena fatua</i> - wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Brachypodium distachyon</i> - purple false brome
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Grindelia camporum</i> - gumplant
<i>Lactuca serriola</i> - prickly lettuce
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malosma laurina</i> - laurel sumac
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Rhus integrifolia</i> - lemonade berry
<i>Senecio vulgaris</i> - common groundsel
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 471

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 3.0

Baseline Cover of ORCA: 3.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 38.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 03:56 PM

Survey End Time: 04:51 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 5-10%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 11

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra conjugens</i> - Otay tarplant	1-5%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Encelia californica</i> - California encelia	<1%
<i>Simmondsia chinensis</i> - jojoba	<1%
<i>Stipa</i> sp.	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	1-5%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Medicago polymorpha</i> - California burclover	<1%
<i>Melilotus indicus</i> - annual yellow sweetclover	<1%
<i>Senecio vulgaris</i> - common groundsel	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 12

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 471

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Lactuca serriola</i> - prickly lettuce
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Malosma laurina</i> - laurel sumac
<i>Rhus integrifolia</i> - lemonade berry
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 473

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 16.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 03:12 PM

Survey End Time: 03:51 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 10-25%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	10-25%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Erigeron canadensis</i> - horseweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Stipa</i> sp.	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Senecio vulgaris</i> - common groundsel	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 10-25% Cover of Rocks/Cobble in Basin: 25-50% Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 473

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 483

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 3.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 01:55 PM

Survey End Time: 01:55 PM

Surveyors: Jason Allen, Ella Horvath, Danielle Parsons

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 9 9

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Encelia californica</i> - California encelia	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Simmondsia chinensis</i> - jojoba	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 483

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Grindelia camporum</i> - gumplant
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Navarretia hamata</i> - hooked skunkweed
<i>Peritoma arborea</i> - bladderpod
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 484

2003 Baseline Survey Data

Baseline Cover of ERAR: 16.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 3.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 01:50 PM

Survey End Time: 02:35 PM

Surveyors: Jason Allen, Ella Horvath, Danielle Parsons

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 1-5%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Erigeron canadensis</i> - horseweed	<1%
<i>Eriogonum fasciculatum</i> - California buckwheat	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Rhus integrifolia</i> - lemonade berry	5-10%
<i>Simmondsia chinensis</i> - jojoba	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Brachypodium distachyon</i> - purple false brome	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lamarckia aurea</i> - golden-top	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 12

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 484

Additional Information:

Bare Ground Cover in Basin: 25-50% **Cover of Rocks/Cobble in Basin:** 25-50% **Cover of Litter in Basin:** 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 484

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus hordeaceus</i> - soft chess
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lepidium nitidum</i> - shining peppergrass
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Rhus integrifolia</i> - lemonade berry
<i>Salsola tragus</i> - Russian thistle
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Silene gallica</i> - windmill pink
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 490

2003 Baseline Survey Data

Baseline Cover of ERAR: 16.0

Baseline Cover of NAFO: 1.0

Baseline Cover of ORCA: 16.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 11:13 AM

Survey End Time: 11:56 AM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon micranthus</i> - Grab Lotus	<1%
<i>Deinandra conjugens</i> - Otay tarplant	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lamarckia aurea</i> - golden-top	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 490

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Avena</i> sp.
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Chenopodium murale</i> - nettle-leaf goosefoot
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Glebionis coronaria</i> - crown daisy
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 502

2003 Baseline Survey Data

Baseline Cover of ERAR: 16.0

Baseline Cover of NAFO: 1.0

Baseline Cover of ORCA: 3.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 03:39 PM

Survey End Time: 04:12 PM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: ERAR, POAB

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 1-5

Ponded Water Present: yes

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 502

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus madritensis</i> - foxtail chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Grindelia camporum</i> - gumplant
<i>Lamarckia aurea</i> - golden-top
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rosa minutifolia</i> - small-leaved rose
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 509

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 3.0

Baseline Cover of ORCA: 3.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 16.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 10:03 AM

Survey End Time: 11:02 AM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: ERAR, PONU

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 8 7

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 509

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex pacifica</i> - south coast saltscale
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Lamarckia aurea</i> - golden-top
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Mesembryanthemum crystallinum</i> - crystalline iceplant
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 509

<i>Yucca schidigera</i> - Mojave yucca
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Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 591

2003 Baseline Survey Data

Baseline Cover of ERAR: 38.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 38.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 3.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 03:15 PM

Survey End Time: 03:59 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: ERAR, PONU

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 9 9

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis pilularis</i> - coyote brush	<1%
<i>Deinandra conjugens</i> - Otay tarplant	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%
<i>Stipa lepida</i> - foothill needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erigeron sumatrensis</i> - tropical horseweed	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Salsola tragus</i> - Russian thistle	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 14

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 591

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Ambrosia pumila</i> - San Diego ambrosia
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Grindelia camporum</i> - gumplant
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malosma laurina</i> - laurel sumac
<i>Navarretia hamata</i> - hooked skunkweed
<i>Phalaris minor</i> - little-seeded canary grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rosa minutifolia</i> - small-leaved rose
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 591

<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1310

2003 Baseline Survey Data

Baseline Cover of ERAR: 20.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 1.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 15.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 09:53 AM

Survey End Time: 11:12 AM

Surveyors: Jason Allen, Ella Horvath, Danielle Parsons

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 5-10%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra conjugens</i> - Otay tarplant	1-5%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	5-10%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca perennis</i> - rye grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 12

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1310

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Acmispon micranthus</i> - Grab Lotus
<i>Adenostoma fasciculatum</i> - chamise
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia intermedia</i> - common fiddleneck
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Hirschfeldia incana</i> - short-pod mustard
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Osmadenia tenella</i> - osmadenia
<i>Phalaris minor</i> - little-seeded canary grass
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Ricinus communis</i> - castor bean
<i>Salvia mellifera</i> - black sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1310

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1321

2003 Baseline Survey Data

Baseline Cover of ERAR: 2.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 5.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 12:56 PM

Survey End Time: 01:37 PM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: ERAR, POAB

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Deinandra conjugens</i> - Otay tarplant	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1321

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus madritensis</i> - foxtail chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Chenopodium murale</i> - nettle-leaf goosefoot
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra conjugens</i> - Otay tarplant
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Glebionis coronaria</i> - crown daisy
<i>Heliotropium curassavicum</i> var. <i>oculatum</i> - seaside heliotrope
<i>Hirschfeldia incana</i> - short-pod mustard
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Phalaris minor</i> - little-seeded canary grass
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1713

2003 Baseline Survey Data

Baseline Cover of ERAR: 2.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.5

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 11:20 AM

Survey End Time: 12:13 PM

Surveyors: Jason Allen, Ella Horvath, Danielle Parsons

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	10-25%
<i>Deschampsia danthonioides</i> - annual hair grass	5-10%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Brachypodium distachyon</i> - purple false brome	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Glebionis coronaria</i> - crown daisy	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 15

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1713

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Camissoniopsis</i> sp.
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Eschscholzia californica</i> - California poppy
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Glebionis coronaria</i> - crown daisy
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Navarretia hamata</i> - hooked skunkweed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Phalaris minor</i> - little-seeded canary grass
<i>Plantago erecta</i> - dot-seed plantain
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1724

2003 Baseline Survey Data

Baseline Cover of ERAR: 40.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 1.0

2025 Quantitative Monitoring Data

Survey Date: 5/22/2025

Survey Start Time: 08:44 AM

Survey End Time: 09:42 AM

Surveyors: Ryan Meszaros, Kelsey Woldt

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Marsilea vestita</i> - hairy waterclover	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca perennis</i> - rye grass	1-5%
<i>Lamarckia aurea</i> - golden-top	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1724

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Amaranthus albus</i> - tumbleweed
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis pilularis</i> - coyote brush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Datura wrightii</i> - sacred datura
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Epilobium campestre</i> - smooth boisduvalia
<i>Erigeron canadensis</i> - horseweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> - long-stem golden-yarrow
<i>Erodium cicutarium</i> - redstem filaree
<i>Erodium moschatum</i> - greenstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia maculata</i> - spotted spurge
<i>Euphorbia</i> sp.
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Glebionis coronaria</i> - crown daisy
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Heteromeles arbutifolia</i> - toyon
<i>Laennecia coulteri</i> - Coulter's horseweed
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malva parviflora</i> - cheeseweed
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Polycarpon tetraphyllum</i> var. <i>tetraphyllum</i> - four-leaved allseed
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (North), Otay Mesa Road Parcels (J2)

VP ID: 1724

Salvia mellifera - black sage
Schismus barbatus - Mediterranean schismus
Solanum sp.
Sonchus asper ssp. asper - prickly sow thistle
Sonchus oleraceus - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2022

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 1.0

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 01:00 PM

Survey End Time: 01:26 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 50-75%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	25-50%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Juncus bufonius</i> - toad rush	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Zeltnera venusta</i> - California centaury	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Helminthotheca echiodides</i> - bristly ox-tongue	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	5-10%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2022

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Amsinckia</i> sp.
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula aquatica</i> - water pygmyweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Heliotropium curassavicum</i> var. <i>oculatum</i> - seaside heliotrope
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Hirschfeldia incana</i> - short-pod mustard
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Lysimachia minima</i> - chaffweed
<i>Malosma laurina</i> - laurel sumac
<i>Matricaria discoidea</i> - pineapple weed
<i>Navarretia hamata</i> - hooked skunkweed
<i>Phacelia cicutaria</i> - caterpillar phacelia
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Rhus integrifolia</i> - lemonade berry
<i>Rosa minutifolia</i> - small-leaved rose
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2022

<i>Zeltnera venusta</i> - California centaury

Notes: Photo on Ryan Meszaros Phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2025

2003 Baseline Survey Data

Baseline Cover of ERAR: 3.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 5.0

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 10:15 AM

Survey End Time: 10:58 AM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 15

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Encelia californica</i> - California encelia	<1%
<i>Frankenia salina</i> - alkali heath	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Simmondsia chinensis</i> - jojoba	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Brassica nigra</i> - black mustard	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Helminthotheca echinoides</i> - bristly ox-tongue	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Oncosiphon pilulifer</i> - stinknet	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	5-10%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	5-10%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 12

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2025

Additional Information:

Bare Ground Cover in Basin: 10-25% **Cover of Rocks/Cobble in Basin:** 5-10% **Cover of Litter in Basin:** 25-50%

Days Since Last Rain: 6-15 **Ponded Water Present:** no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2025

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Amblyopappus pusillus</i> - pineapple-weed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Artemisia californica</i> - California sagebrush
<i>Astragalus trichopodus</i> - Santa Barbara milk vetch
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula aquatica</i> - water pygmyweed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Dudleya edulis</i> - ladies' fingers
<i>Dudleya pulverulenta</i> - chalk dudleya
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Frankenia salina</i> - alkali heath
<i>Logfia arizonica</i> - Arizona cottonrose
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malosma laurina</i> - laurel sumac
<i>Peritoma arborea</i> - bladderpod
<i>Phalaris minor</i> - little-seeded canary grass
<i>Plantago elongata</i> - prairie plantain
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2025

<i>Rhus integrifolia</i> - lemonade berry
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stephanomeria</i> sp.
<i>Stipa</i> sp.

Notes: Photo on Ryan Meszaros phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2039

2003 Baseline Survey Data

Baseline Cover of ERAR: 15.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 1.0

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 01:35 PM

Survey End Time: 02:11 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 25-50%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	10-25%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: <1%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2039

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dudleya pulverulenta</i> - chalk dudleya
<i>Encelia californica</i> - California encelia
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Hedypnois rhagadioloides</i> - crete weed
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Navarretia hamata</i> - hooked skunkweed
<i>Peritoma arborea</i> - bladderpod
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes: Photo on Ryan Meszaros phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2043

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.5

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 11:20 AM

Survey End Time: 12:15 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 19

Other Native Species in Pool:

Species Name	Cover
<i>Amblyopappus pusillus</i> - pineapple-weed	<1%
<i>Callitriche marginata</i> - winged water-starwort	<1%
<i>Crassula aquatica</i> - water pygmyweed	1-5%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Elatine brachysperma</i> - short-seed waterwort	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Heliotropium curassavicum</i> var. <i>oculatum</i> - seaside heliotrope	<1%
<i>Juncus bufonius</i> - toad rush	1-5%
<i>Marsilea vestita</i> - hairy waterclover	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Triglochin scilloides</i> - flowering-quillwort	1-5%
<i>Zeltnera venusta</i> - California centaury	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Amaranthus albus</i> - tumbleweed	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 7

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2043

Additional Information:

Bare Ground Cover in Basin: 50-75% **Cover of Rocks/Cobble in Basin:** 10-25% **Cover of Litter in Basin:** <1%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2043

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Amblyopappus pusillus</i> - pineapple-weed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Astragalus trichopodus</i> - Santa Barbara milk vetch
<i>Avena fatua</i> - wild oat
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bergerocactus emoryi</i> - golden-spined cereus
<i>Bromus rubens</i> - red brome
<i>Crassula aquatica</i> - water pygmyweed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Dudleya edulis</i> - ladies' fingers
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Heliotropium curassavicum</i> var. <i>oculatum</i> - seaside heliotrope
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Juncus bufonius</i> - toad rush
<i>Lamarckia aurea</i> - golden-top
<i>Logfia arizonica</i> - Arizona cottonrose
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Malosma laurina</i> - laurel sumac
<i>Navarretia hamata</i> - hooked skunkweed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Plantago elongata</i> - prairie plantain
<i>Plantago erecta</i> - dot-seed plantain
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Unknown mustard</i>

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2043

<i>Yucca schidigera</i> - Mojave yucca
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Notes: Photo on Ryan Meszaros phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2044

2003 Baseline Survey Data

Baseline Cover of ERAR: 20.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 5.0

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 02:15 PM

Survey End Time: 02:57 PM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2044

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia californica</i> var. <i>californica</i> - snake cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lycium andersonii</i> - Anderson's desert thorn
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Navarretia hamata</i> - hooked skunkweed
<i>Peritoma arborea</i> - bladderpod
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca

Notes: Photo on Ryan Meszaros phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2185

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 60.0

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 08:20 AM

Survey End Time: 09:04 AM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 25-50%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Simmondsia chinensis</i> - jojoba	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Unknown mustard</i>	5-10%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: <1%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2185

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia</i> sp.
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Artemisia californica</i> - California sagebrush
<i>Astragalus trichopodus</i> - Santa Barbara milk vetch
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus rubens</i> - red brome
<i>Camissoniopsis</i> sp.
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Encelia californica</i> - California encelia
<i>Epilobium campestre</i> - smooth boisduvalia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Frankenia salina</i> - alkali heath
<i>Iva hayesiana</i> - San Diego marsh-elder
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Navarretia hamata</i> - hooked skunkweed
<i>Osmadenia tenella</i> - osmadenia
<i>Plantago elongata</i> - prairie plantain
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Salvia apiana</i> - white sage
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Unknown mustard</i>

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2185

<i>Yucca schidigera</i> - Mojave yucca
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Notes: Photo on Ryan Meszaros phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2189

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 5.0

2025 Quantitative Monitoring Data

Survey Date: 5/29/2025

Survey Start Time: 09:15 AM

Survey End Time: 10:02 AM

Surveyors: Ryan Meszaros, Imran Badar

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 10-25%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Epilobium campestre</i> - smooth boisduvalia	<1%
<i>Eriogonum fasciculatum</i> - California buckwheat	<1%
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Spergularia</i> sp.	<1%
Unknown mustard	25-50%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: <1%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Cal Terraces (South) (J14)

VP ID: 2189

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Amblyopappus pusillus</i> - pineapple-weed
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula aquatica</i> - water pygmyweed
<i>Crassula connata</i> - pygmy-weed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Frankenia salina</i> - alkali heath
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Iva hayesiana</i> - San Diego marsh-elder
<i>Logfia arizonica</i> - Arizona cottonrose
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Navarretia fossalis</i> - spreading navarretia
<i>Navarretia hamata</i> - hooked skunkweed
<i>Plantago elongata</i> - prairie plantain
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Polycarpon tetraphyllum</i> var. <i>tetraphyllum</i> - four-leaved allseed
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Schismus barbatus</i> - Mediterranean schismus
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Unknown mustard</i>
<i>Yucca schidigera</i> - Mojave yucca

Notes: Photo on Ryan Meszaros phone

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1077

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 09:46 AM

Survey End Time: 11:56 AM

Surveyors: Sara Allen

VPHCP Covered Species Present: POAB, ERAR, NAFO

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin: <1%

Cover of ORCA in Basin:

Cover of POAB in Basin: 10-25%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 18

Other Native Species in Pool:

Species Name	Cover
<i>Adenostoma fasciculatum</i> - chamise	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Cuscuta californica</i> - chaparral dodder	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Erigeron canadensis</i> - horseweed	<1%
<i>Festuca octoflora</i> - sixweeks grass	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	<1%
<i>Juncus bufonius</i> - toad rush	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1077

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus rubens</i> - red brome
<i>Crassula aquatica</i> - water pygmyweed
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Erigeron canadensis</i> - horseweed
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> - long-stem golden-yarrow
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca octoflora</i> - sixweeks grass
<i>Galium angustifolium</i> ssp. <i>angustifolium</i> - narrow leaved bedstraw
<i>Gastridium phleoides</i> - nit grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Juncus dubius</i> - mariposa rush
<i>Lasthenia gracilis</i> - common goldfields
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris
<i>Navarretia hamata</i> - hooked skunkweed
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stylocline gnaphaloides</i> - everlasting neststraw
<i>Zeltnera venusta</i> - California centaury

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1092

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 3.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/16/2025

Survey Start Time: 08:09 AM

Survey End Time: 10:19 AM

Surveyors: Ryan Meszaros

VPHCP Covered Species Present: POAB, NAFO, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin: <1%

Cover of ORCA in Basin:

Cover of POAB in Basin: 10-25%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 25

Other Native Species in Pool:

Species Name	Cover
<i>Agrostis microphylla</i> - small-leaf bent grass	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> - long-spined spineflower	<1%
<i>Crassula aquatica</i> - water pygmyweed	1-5%
<i>Cuscuta californica</i> - chaparral dodder	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Downingia cuspidata</i> - toothed downingia	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Erigeron canadensis</i> - horseweed	<1%
<i>Festuca octoflora</i> - sixweeks grass	<1%
<i>Gnaphalium palustre</i> - lowland cudweed	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	1-5%
<i>Lysimachia minima</i> - chaffweed	<1%
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1092

<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%
<i>Spergularia</i> sp.	<1%

Cover of Nonnative Species in Basin: <1% **Nonnative Species Richness in Basin:** 8

Additional Information:

Bare Ground Cover in Basin: 25-50% **Cover of Rocks/Cobble in Basin:** 10-25% **Cover of Litter in Basin:** 5-10%
Days Since Last Rain: 6-15 **Ponded Water Present:** no
Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1092

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Agrostis microphylla</i> - small-leaf bent grass
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Baccharis pilularis</i> - coyote brush
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus rubens</i> - red brome
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> - long-spined spineflower
<i>Crassula aquatica</i> - water pygmyweed
<i>Cuscuta californica</i> - chaparral dodder
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Erigeron canadensis</i> - horseweed
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> - long-stem golden-yarrow
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca octoflora</i> - sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Lasthenia gracilis</i> - common goldfields
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pentagramma triangularis</i> - goldback fern
<i>Plagiobothrys</i> sp.
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Salvia mellifera</i> - black sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Stylocline gnaphaloides</i> - everlasting neststraw

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1096

2003 Baseline Survey Data

Baseline Cover of ERAR: 10.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/16/2025

Survey Start Time: 10:30 AM

Survey End Time: 11:26 AM

Surveyors: Ryan Meszaros, Oliver Putnam

VPHCP Covered Species Present: ERAR, POAB

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 5-10%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 20

Other Native Species in Pool:

Species Name	Cover
<i>Agrostis microphylla</i> - small-leaf bent grass	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Cuscuta californica</i> - chaparral dodder	<1%
<i>Daucus pusillus</i> - rattlesnake weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Downingia cuspidata</i> - toothed downingia	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Erigeron canadensis</i> - horseweed	<1%
<i>Festuca octoflora</i> - sixweeks grass	<1%
<i>Juncus dubius</i> - mariposa rush	<1%
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Psilocarphus tenellus</i> - slender woolly-marbles	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Pseudognaphalium luteoalbum</i> - fragrant everlasting cudweed	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1096

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 25-50% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Agrostis microphylla</i> - small-leaf bent grass
<i>Baccharis pilularis</i> - coyote brush
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus rubens</i> - red brome
<i>Crassula aquatica</i> - water pygmyweed
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Erigeron canadensis</i> - horseweed
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> - long-stem golden-yarrow
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Juncus dubius</i> - mariposa rush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stylocline gnaphaloides</i> - everlasting neststraw

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1109

2003 Baseline Survey Data

Baseline Cover of ERAR: 20.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 3.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 03:25 PM

Survey End Time: 03:48 PM

Surveyors: Ryan Meszaros, Jim Rocks, Alec Goodman

VPHCP Covered Species Present: POAB, ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 5-10%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	1-5%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Festuca octoflora</i> - sixweeks grass	<1%
<i>Juncus dubius</i> - mariposa rush	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 3

Additional Information:

Bare Ground Cover in Basin: 25-50% Cover of Rocks/Cobble in Basin: 25-50% Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1109

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Antirrhinum nuttallianum</i> - Nuttall's Snapdragon
<i>Baccharis pilularis</i> - coyote brush
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus rubens</i> - red brome
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Juncus dubius</i> - mariposa rush
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1740

2003 Baseline Survey Data

Baseline Cover of ERAR: 30.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 5.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 02:33 PM

Survey End Time: 03:02 PM

Surveyors: Ryan Meszaros, Jim Rocks, Alec Goodman

VPHCP Covered Species Present: POAB, ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 50-75%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Juncus dubius</i> - mariposa rush	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 1-5%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1740

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Baccharis pilularis</i> - coyote brush
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca octoflora</i> - sixweeks grass
<i>Hordeum murinum</i> - wall barley
<i>Juncus dubius</i> - mariposa rush
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1743

2003 Baseline Survey Data

Baseline Cover of ERAR: 20.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 01:06 PM

Survey End Time: 02:17 PM

Surveyors: Ryan Meszaros, Jim Rocks, Alec Goodman

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Festuca octoflora</i> - sixweeks grass	<1%
<i>Juncus dubius</i> - mariposa rush	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	10-25%
<i>Hypochaeris glabra</i> - smooth cat's-ear	1-5%
<i>Medicago polymorpha</i> - California burclover	<1%
<i>Melilotus indicus</i> - annual yellow sweetclover	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 12

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1743

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Amsinckia</i> sp.
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Cuscuta californica</i> - chaparral dodder
<i>Cynodon dactylon</i> - Bermuda grass
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia maculata</i> - spotted spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca octoflora</i> - sixweeks grass
<i>Gamochaeta stagnalis</i> - desert cudweed
<i>Hirschfeldia incana</i> - short-pod mustard
<i>Hordeum murinum</i> - wall barley
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Juncus dubius</i> - mariposa rush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lythrum hyssopifolia</i> - grass poly
<i>Marah macrocarpa</i> - chilicothe
<i>Medicago polymorpha</i> - California burclover
<i>Microseris douglasii</i> ssp. <i>platycarpa</i> - small-flowered microseris
<i>Navarretia hamata</i> - hooked skunkweed
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1743

<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle
<i>Spergularia</i> sp.
<i>Stipa pulchra</i> - purple needle grass
<i>Stylocline gnaphaloides</i> - everlasting neststraw

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1746

2003 Baseline Survey Data

Baseline Cover of ERAR: 10.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 04:11 PM

Survey End Time: 04:45 PM

Surveyors: Ryan Meszaros, Jim Rocks, Alec Goodman

VPHCP Covered Species Present: ERAR, POAB

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 16

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Daucus pusillus</i> - rattlesnake weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Festuca octoflora</i> - sixweeks grass	<1%
<i>Juncus dubius</i> - mariposa rush	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Zeltnera venusta</i> - California centaury	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Carroll Canyon (D5-8)

VP ID: 1746

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Baccharis pilularis</i> - coyote brush
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Juncus dubius</i> - mariposa rush
<i>Lactuca serriola</i> - prickly lettuce
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Clayton Parcel (J2)

VP ID: 876

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 03:11 PM

Survey End Time: 03:48 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 10-25%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Grindelia camporum</i> - gumplant	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	25-50%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	1-5%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca perennis</i> - rye grass	<1%
<i>Melilotus indicus</i> - annual yellow sweetclover	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 10-25% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Clayton Parcel (J2)

VP ID: 876

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis salicifolia</i> - mule fat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Euphorbia serpens</i> - matted sandmat
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Grindelia camporum</i> - gumplant
<i>Heterotheca grandiflora</i> - telegraph weed
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Rhus integrifolia</i> - lemonade berry
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1255

2003 Baseline Survey Data

Baseline Cover of ERAR: 25.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 12:59 PM

Survey End Time: 01:25 PM

Surveyors: Jason Allen, Del Brooks

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Adenostoma fasciculatum</i> - chamise	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Quercus dumosa</i> - Nuttall's scrub oak	<1%
<i>Rhus integrifolia</i> - lemonade berry	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%
<i>Stipa lepida</i> - foothill needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 2

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1255

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Baccharis pilularis</i> - coyote brush
<i>Calochortus splendens</i> - splendid mariposa lily
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Galium aparine</i> - goose grass
<i>Navarretia hamata</i> - hooked skunkweed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Quercus dumosa</i> - Nuttall's scrub oak
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1260

2003 Baseline Survey Data

Baseline Cover of ERAR: 30.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 11:53 AM

Survey End Time: 12:48 PM

Surveyors: Jason Allen, Del Brooks

VPHCP Covered Species Present: POAB, ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 5-10%

Cover of PONU in Basin:

Cover of Native Species in Basin: 50-75%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	5-10%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Rhus integrifolia</i> - lemonade berry	<1%
<i>Stipa pulchra</i> - purple needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1260

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Calochortus splendens</i> - splendid mariposa lily
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> - long-stem golden-yarrow
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Galium aparine</i> - goose grass
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Quercus dumosa</i> - Nuttall's scrub oak
<i>Rhus integrifolia</i> - lemonade berry
<i>Salvia mellifera</i> - black sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Zeltnera venusta</i> - California centaury

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1264

2003 Baseline Survey Data

Baseline Cover of ERAR: 15.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 08:58 PM

Survey End Time: 09:59 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Psilocarphus tenellus</i> - slender woolly-marbles	<1%
<i>Quercus dumosa</i> - Nuttall's scrub oak	1-5%
<i>Rhus integrifolia</i> - lemonade berry	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 4

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1264

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Baccharis pilularis</i> - coyote brush
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Galium aparine</i> - goose grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Psilocarphus tenellus</i> - slender woolly-marbles
<i>Quercus dumosa</i> - Nuttall's scrub oak
<i>Rafinesquia californica</i> - California chicory
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1272

2003 Baseline Survey Data

Baseline Cover of ERAR: 10.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 10:00 AM

Survey End Time: 11:27 AM

Surveyors: Jason Allen, Del Brooks

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Adenostoma fasciculatum</i> - chamise	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Juncus dubius</i> - mariposa rush	10-25%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Quercus dumosa</i> - Nuttall's scrub oak	1-5%
<i>Rhus integrifolia</i> - lemonade berry	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	1-5%
<i>Zeltnera venusta</i> - California centaury	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	1-5%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 1272

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Baccharis pilularis</i> - coyote brush
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Calochortus splendens</i> - splendid mariposa lily
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Galium angustifolium</i> ssp. <i>angustifolium</i> - narrow leaved bedstraw
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Juncus dubius</i> - mariposa rush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Navarretia hamata</i> - hooked skunkweed
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Quercus dumosa</i> - Nuttall's scrub oak
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Yucca schidigera</i> - Mojave yucca
<i>Zeltnera venusta</i> - California centaury

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 2468

2004 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 08:09 AM

Survey End Time: 08:45 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 11

Other Native Species in Pool:

Species Name	Cover
<i>Adenostoma fasciculatum</i> - chamise	1-5%
<i>Baccharis pilularis</i> - coyote brush	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Elatine brachysperma</i> - short-seed waterwort	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Psilocarphus tenellus</i> - slender woolly-marbles	<1%
<i>Quercus dumosa</i> - Nuttall's scrub oak	1-5%
<i>Selaginella cinerascens</i> - ashy spike-moss	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 2

Additional Information:

Bare Ground Cover in Basin: 25-50% Cover of Rocks/Cobble in Basin: 50-75% Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool: *Adenostoma fasciculatum*

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Del Mar Mesa (H 1-10, 13-15, 18-23, 24-26)

VP ID: 2468

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Baccharis pilularis</i> - coyote brush
<i>Cneoridium dumosum</i> - bushrue
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Navarretia hamata</i> - hooked skunkweed
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Quercus dumosa</i> - Nuttall's scrub oak
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Goat Mesa (J16-18)

VP ID: 2642

2005 Baseline Survey Data

Baseline Cover of ERAR: 5.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 12:56 PM

Survey End Time: 01:31 PM

Surveyors: Jade Woll

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Elatine brachysperma</i> - short-seed waterwort	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Myosurus minimus</i> ssp. <i>apus</i> - little mouse tail	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium</i> sp.	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 4

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 25-50%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Goat Mesa (J16-18)

VP ID: 2642

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Bromus rubens</i> - red brome
<i>Cerastium glomeratum</i> - sticky mouse-ear chickweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Erodium</i> sp.
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Simmondsia chinensis</i> - jojoba

Notes: The majority of plant material was dessicated.

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1177

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 3.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 01:30 PM

Survey End Time: 02:50 PM

Surveyors: Jason Allen, Justin Felder

VPHCP Covered Species Present: POAB, ERAR

Cover of ERAR in Basin: 10-25%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 10-25%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon micranthus</i> - Grab Lotus	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Opuntia littoralis</i> - coast prickly-pear	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Helminthotheca echioides</i> - bristly ox-tongue	<1%
<i>Lythrum hyssopifolia</i> - grass poly	1-5%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	10-25%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1177

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Acmispon micranthus</i> - Grab Lotus
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis pilularis</i> - coyote brush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus rubens</i> - red brome
<i>Crassula connata</i> - pygmy-weed
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Erigeron canadensis</i> - horseweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Geranium carolinianum</i> - Carolina geranium
<i>Heteromeles arbutifolia</i> - toyon
<i>Juncus dubius</i> - mariposa rush
<i>Lactuca serriola</i> - prickly lettuce
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Lythrum hyssopifolia</i> - grass poly
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Solanum americanum</i> - white nightshade

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1180

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 3.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 02:55 PM

Survey End Time: 03:50 PM

Surveyors: Jason Allen, Justin Felder

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 10-25%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 21

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed	<1%
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Bahiopsis laciniata</i> - San Diego viguiera	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Elatine brachysperma</i> - short-seed waterwort	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%
<i>Logfia filaginoides</i> - California cottonrose	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Opuntia littoralis</i> - coast prickly-pear	1-5%
<i>Plantago elongata</i> - prairie plantain	1-5%
<i>Pseudognaphalium californicum</i> - California everlasting	<1%
<i>Pseudognaphalium stramineum</i> - cotton-batting plant	<1%
<i>Rhus integrifolia</i> - lemonade berry	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1180

Additional Information:

Bare Ground Cover in Basin: 25-50% **Cover of Rocks/Cobble in Basin:** 25-50% **Cover of Litter in Basin:** 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1180

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Acmispon micranthus</i> - Grab Lotus
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis pilularis</i> - coyote brush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lythrum hyssopifolia</i> - grass poly
<i>Navarretia hamata</i> - hooked skunkweed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Plantago elongata</i> - prairie plantain
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Salvia munzii</i> - Munz's sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1188

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/14/2025

Survey Start Time: 03:55 PM

Survey End Time: 04:55 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: ERAR, POAB

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 25-50%

Cover of PONU in Basin:

Cover of Native Species in Basin: 50-75%

Native Species Richness in Basin: 15

Other Native Species in Pool:

Species Name	Cover
<i>Callitriche marginata</i> - winged water-starwort	<1%
<i>Crassula connata</i> - pygmy-weed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Elatine brachysperma</i> - short-seed waterwort	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	25-50%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	1-5%
<i>Lysimachia minima</i> - chaffweed	<1%
<i>Opuntia littoralis</i> - coast prickly-pear	1-5%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Amaranthus albus</i> - tumbleweed	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erigeron sumatrensis</i> - tropical horseweed	<1%
<i>Euphorbia maculata</i> - spotted spurge	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 9

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1188

Additional Information:

Bare Ground Cover in Basin: 10-25% **Cover of Rocks/Cobble in Basin:** 1-5% **Cover of Litter in Basin:** 1-5%

Days Since Last Rain: 6-15 **Ponded Water Present:** no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1188

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Acmispon micranthus</i> - Grab Lotus
<i>Artemisia californica</i> - California sagebrush
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus rubens</i> - red brome
<i>Crassula connata</i> - pygmy-weed
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Elatine brachysperma</i> - short-seed waterwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Erigeron sumatrensis</i> - tropical horseweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia maculata</i> - spotted spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Isoetes orcuttii</i> - Orcutt's quillwort
<i>Juncus dubius</i> - mariposa rush
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Lythrum hyssopifolia</i> - grass poly
<i>Malosma laurina</i> - laurel sumac
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Plantago elongata</i> - prairie plantain
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium luteoalbum</i> - fragrant everlasting cudweed
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Salvia mellifera</i> - black sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Yucca schidigera</i> - Mojave yucca

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Greystone Torrey Highlands (H39)

VP ID: 1188

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

VP ID: 771

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/27/2025

Survey Start Time: 09:48 AM

Survey End Time: 10:43 AM

Surveyors: Jason Allen, Jesus Reyes

VPHCP Covered Species Present: POAB, ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 5-10%

Cover of PONU in Basin:

Cover of Native Species in Basin: 50-75%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Adenostoma fasciculatum</i> - chamise	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	50-75%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	1-5%
<i>Gastridium phleoides</i> - nit grass	1-5%
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley	1-5%
<i>Lythrum hyssopifolia</i> - grass poly	1-5%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

VP ID: 771

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena barbata</i> - slender wild oat
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus rubens</i> - red brome
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Gastridium phleoides</i> - nit grass
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley
<i>Lythrum hyssopifolia</i> - grass poly
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Solanum</i> sp.
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

VP ID: 778

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/27/2025

Survey Start Time: 10:50 AM

Survey End Time: 11:39 AM

Surveyors: Jason Allen, Ivy Neff, Jesus Reyes

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 9 9

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Croton setiger</i> - doveweed	1-5%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	25-50%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%
<i>Stipa pulchra</i> - purple needle grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	10-25%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

VP ID: 778

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus rubens</i> - red brome
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Euphorbia serpens</i> - matted sandmat
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Rumex crispus</i> - curly dock
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

VP ID: 790

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/27/2025

Survey Start Time: 08:15 AM

Survey End Time: 09:46 AM

Surveyors: Jason Allen, Ivy Neff, Jesus Reyes

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 10

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus	<1%
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed	<1%
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena fatua</i> - wild oat	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	25-50%
<i>Festuca perennis</i> - rye grass	10-25%
<i>Pennisetum setaceum</i> - crimson fountain grass	<1%

Cover of Nonnative Species in Basin: 50-75%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Kearny Mesa Logistics (U19)

VP ID: 790

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Avena fatua</i> - wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus rubens</i> - red brome
<i>Crocanthemum scoparium</i> - peak rush-rose
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Euphorbia serpens</i> - matted sandmat
<i>Festuca perennis</i> - rye grass
<i>Heterotheca grandiflora</i> - telegraph weed
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Lythrum hyssopifolia</i> - grass poly
<i>Medicago polymorpha</i> - California burclover
<i>Pennisetum setaceum</i> - crimson fountain grass
<i>Pseudognaphalium beneolens</i> - fragrant everlasting
<i>Pseudognaphalium luteoalbum</i> - fragrant everlasting cudweed
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

VP ID: 706

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 2.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 12:06 PM

Survey End Time: 12:23 PM

Surveyors: Sara Allen

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 10-25%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 17

Other Native Species in Pool:

Species Name	Cover
<i>Adenostoma fasciculatum</i> - chamise	<1%
<i>Allium haematochiton</i> - red-skin onion	<1%
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	1-5%
<i>Crassula aquatica</i> - water pygmyweed	1-5%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	5-10%
<i>Hordeum intercedens</i> - bobtail barley	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Opuntia littoralis</i> - coast prickly-pear	<1%
<i>Phalaris lemmonii</i> - Lemmon's canary grass	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%
<i>Zeltnera venusta</i> - California centaury	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

VP ID: 706

Additional Information:

Bare Ground Cover in Basin: 10-25% **Cover of Rocks/Cobble in Basin:** 25-50% **Cover of Litter in Basin:** 1-5%
Days Since Last Rain: 1-5 **Ponded Water Present:** no
Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

VP ID: 706

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Allium haematochiton</i> - red-skin onion
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Avena barbata</i> - slender wild oat
<i>Bloomeria clevelandii</i> - San Diego goldenstar
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Calochortus splendens</i> - splendid mariposa lily
<i>Castilleja densiflora</i> ssp. <i>gracilis</i> - graceful owl's clover
<i>Crassula aquatica</i> - water pygmyweed
<i>Crassula connata</i> - pygmy-weed
<i>Crocanthemum scoparium</i> - peak rush-rose
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Gastridium phleoides</i> - nit grass
<i>Hordeum intercedens</i> - bobtail barley
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isoetes orcuttii</i> - Orcutt's quillwort
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lupinus bicolor</i> - miniature lupine
<i>Malosma laurina</i> - laurel sumac
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris
<i>Navarretia hamata</i> - hooked skunkweed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Osmadenia tenella</i> - osmadenia
<i>Pentachaeta aurea</i> ssp. <i>aurea</i> - golden-rayed pentachaeta
<i>Phalaris lemmonii</i> - Lemmon's canary grass
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Stipa pulchra</i> - purple needle grass

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

VP ID: 706

<i>Zeltnera venusta</i> - California centaury

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

VP ID: 712

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 01:49 PM

Survey End Time: 02:18 PM

Surveyors: Sara Allen, Maya Holdren, Sarah McCutcheon

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 5-10%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 11

Other Native Species in Pool:

Species Name	Cover
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i> - four-spot	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	1-5%
<i>Osmadenia tenella</i> - osmadenia	<1%
<i>Pentachaeta aurea</i> ssp. <i>aurea</i> - golden-rayed pentachaeta	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Zeltnera venusta</i> - California centaury	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Logfia gallica</i> - daggerleaf cottonrose	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: <1%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Lopez Ridge (B7-8)

VP ID: 712

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Amsinckia intermedia</i> - common fiddleneck
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Avena barbata</i> - slender wild oat
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Castilleja densiflora</i> ssp. <i>gracilis</i> - graceful owl's clover
<i>Ceanothus tomentosus</i> - Ramona-lilac
<i>Centaurea melitensis</i> - tocalote
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i> - four-spot
<i>Crocanthemum scoparium</i> - peak rush-rose
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> - long-stem golden-yarrow
<i>Erodium cicutarium</i> - redstem filaree
<i>Festuca perennis</i> - rye grass
<i>Hedypnois rhagadioloides</i> - crete weed
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Lupinus bicolor</i> - miniature lupine
<i>Malosma laurina</i> - laurel sumac
<i>Navarretia hamata</i> - hooked skunkweed
<i>Osmadenia tenella</i> - osmadenia
<i>Pentachaeta aurea</i> ssp. <i>aurea</i> - golden-rayed pentachaeta
<i>Pentagramma glanduloviscida</i> - San Diego silverback fern
<i>Plantago erecta</i> - dot-seed plantain
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus oleraceus</i> - common sow thistle
<i>Stipa pulchra</i> - purple needle grass
<i>Stylocline gnaphaloides</i> - everlasting neststraw
<i>Uropappus lindleyi</i> - silver puffs
<i>Xylococcus bicolor</i> - mission manzanita
<i>Zeltnera venusta</i> - California centaury

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 4256

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 12:11 PM

Survey End Time: 01:07 PM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 5-10%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Downingia cuspidata</i> - toothed downingia	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Plagiobothrys</i> sp.	1-5%
<i>Pogogyne abramsii</i> - San Diego mesa mint	5-10%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Trichostema lanceolatum</i> - vinegar weed	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: <1%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 4256

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Artemisia californica</i> - California sagebrush
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i> - four-spot
<i>Croton setiger</i> - doveweed
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Euphorbia maculata</i> - spotted spurge
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Lythrum hyssopifolia</i> - grass poly
<i>Malosma laurina</i> - laurel sumac
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Trichostema lanceolatum</i> - vinegar weed

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 4596

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.5

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 10:55 AM

Survey End Time: 11:29 AM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 1-5%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Downingia cuspidata</i> - toothed downingia	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Pilularia americana</i> - American pillwort	1-5%
<i>Pogogyne abramsii</i> - San Diego mesa mint	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Trichostema lanceolatum</i> - vinegar weed	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 25-50% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 10-25%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 4596

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Gastridium phleoides</i> - nit grass
<i>Pilularia americana</i> - American pillwort
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5352

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.5

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 01:15 PM

Survey End Time: 01:35 PM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 11

Other Native Species in Pool:

Species Name	Cover
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	<1%
<i>Plagiobothrys</i> sp.	1-5%
<i>Pogogyne abramsii</i> - San Diego mesa mint	5-10%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Trichostema lanceolatum</i> - vinegar weed	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5352

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5355

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 01:41 PM

Survey End Time: 01:53 PM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Croton setiger</i> - doveweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Plagiobothrys</i> sp.	1-5%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 2

Additional Information:

Bare Ground Cover in Basin: >75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5356

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 1.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/5/2025

Survey Start Time: 08:59 AM

Survey End Time: 09:33 AM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 1-5%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	<1%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%
<i>Veronica peregrina</i> ssp. <i>xalapensis</i> - purslane speedwell	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Euphorbia serpens</i> - matted sandmat	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5356

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Hirschfeldia incana</i> - short-pod mustard
<i>Isoetes orcuttii</i> - Orcutt's quillwort
<i>Lythrum hyssopifolia</i> - grass poly
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rumex crispus</i> - curly dock

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5358

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 30.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/5/2025

Survey Start Time: 09:38 AM

Survey End Time: 10:07 AM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 1-5%

Cover of PONU in Basin:

Cover of Native Species in Basin:

Native Species Richness in Basin: 11

Other Native Species in Pool:

Species Name	Cover
<i>Croton setiger</i> - doveweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	1-5%
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> - small-flowered microseris	<1%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Pogogyne abramsii</i> - San Diego mesa mint	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Dittrichia graveolens</i> - stinkwort	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin:

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin:

Cover of Rocks/Cobble in Basin:

Cover of Litter in Basin:

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5358

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cyperus eragrostis</i> - tall flatsedge
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Isoetes orcuttii</i> - Orcutt's quillwort
<i>Juncus bufonius</i> - toad rush
<i>Lythrum hyssopifolia</i> - grass poly
<i>Malosma laurina</i> - laurel sumac
<i>Marah macrocarpa</i> - chilicothe
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Phalaris lemmonii</i> - Lemmon's canary grass
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5363

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 30.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/5/2025

Survey Start Time: 10:45 AM

Survey End Time:

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 1-5%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Callitriche marginata</i> - winged water-starwort	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	1-5%
<i>Phalaris lemmonii</i> - Lemmon's canary grass	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Pogogyne abramsii</i> - San Diego mesa mint	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%
<i>Trichostema lanceolatum</i> - vinegar weed	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 4

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5363

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5369

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 30.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/5/2025

Survey Start Time: 11:56 AM

Survey End Time: 12:29 PM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 13

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	1-5%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Hordeum depressum</i> - low barley	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	<1%
<i>Phalaris lemmonii</i> - Lemmon's canary grass	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%
<i>Rumex</i> sp. (native)	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gazania linearis</i> - treasure flower	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polygonum aviculare</i> ssp. <i>depressum</i> - prostrate knotweed	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5369

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus madritensis</i> - foxtail chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cyperus eragrostis</i> - tall flatsedge
<i>Deinandra</i> sp.
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Gazania linearis</i> - treasure flower
<i>Hedypnois rhagadioloides</i> - crete weed
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Pseudognaphalium biolettii</i> - bicolor cudweed
<i>Rumex crispus</i> - curly dock
<i>Silene gallica</i> - windmill pink
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5371

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 15.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/5/2025

Survey Start Time: 12:37 PM

Survey End Time: 01:01 PM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 14

Other Native Species in Pool:

Species Name	Cover
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Hordeum depressum</i> - low barley	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	<1%
<i>Juncus bufonius</i> - toad rush	<1%
<i>Phalaris lemmonii</i> - Lemmon's canary grass	<1%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Plantago elongata</i> - prairie plantain	1-5%
<i>Pogogyne abramsii</i> - San Diego mesa mint	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Veronica peregrina</i> ssp. <i>xalapensis</i> - purslane speedwell	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Cotula coronopifolia</i> - brass-buttons	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Plantago coronopus</i> - cut-leaf plantain	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: <1%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5371

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Galium angustifolium</i> ssp. <i>angustifolium</i> - narrow leaved bedstraw
<i>Gazania linearis</i> - treasure flower
<i>Geranium carolinianum</i> - Carolina geranium
<i>Hordeum depressum</i> - low barley
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Malosma laurina</i> - laurel sumac
<i>Marah macrocarpa</i> - chilicothe
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Pennisetum setaceum</i> - crimson fountain grass
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Silene gallica</i> - windmill pink

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5388

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 5.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 09:43 AM

Survey End Time: 10:17 AM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 14

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea terrestris</i> ssp. <i>kernensis</i> - Kern dwarf brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Pogogyne abramsii</i> - San Diego mesa mint	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Selaginella cinerascens</i> - ashy spike-moss	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena barbata</i> - slender wild oat	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Festuca perennis</i> - rye grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5388

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus rubens</i> - red brome
<i>Croton setiger</i> - doveweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Gastridium phleoides</i> - nit grass
<i>Malosma laurina</i> - laurel sumac
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Plantago elongata</i> - prairie plantain
<i>Plantago erecta</i> - dot-seed plantain
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5423

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.5

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 10:19 AM

Survey End Time: 10:17 AM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 12

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Navarretia hamata</i> - hooked skunkweed	<1%
<i>Pilularia americana</i> - American pillwort	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Pogogyne abramsii</i> - San Diego mesa mint	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: >75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 5423

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Artemisia californica</i> - California sagebrush
<i>Avena barbata</i> - slender wild oat
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus rubens</i> - red brome
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Gastridium phleoides</i> - nit grass
<i>Osmadenia tenella</i> - osmadenia
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 6351

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.5

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/4/2025

Survey Start Time: 02:13 PM

Survey End Time: 02:24 PM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Elatine brachysperma</i> - short-seed waterwort	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	5-10%
<i>Pogogyne abramsii</i> - San Diego mesa mint	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Euphorbia maculata</i> - spotted spurge	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	1-5%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 6351

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brachypodium distachyon</i> - purple false brome
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Galium angustifolium</i> ssp. <i>angustifolium</i> - narrow leaved bedstraw
<i>Gastridium phleoides</i> - nit grass
<i>Malosma laurina</i> - laurel sumac
<i>Pennisetum setaceum</i> - crimson fountain grass
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Quercus berberidifolia</i> - scrub oak
<i>Stipa</i> sp.

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 6384

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 20.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 6/5/2025

Survey Start Time: 10:13 AM

Survey End Time: 10:30 AM

Surveyors: Frank Santana and JR Sundberg

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: 10-25%

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 11

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Downingia cuspidata</i> - toothed downingia	<1%
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant	<1%
<i>Isoetes orcuttii</i> - Orcutt's quillwort	5-10%
<i>Phalaris lemmonii</i> - Lemmon's canary grass	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Pogogyne abramsii</i> - San Diego mesa mint	10-25%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lythrum hyssopifolia</i> - grass poly	<1%

Cover of Nonnative Species in Basin: <1%

Nonnative Species Richness in Basin: 4

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Montgomery Field (N5-6)

VP ID: 6384

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon americanus</i> var. <i>americanus</i> - Spanish lotus
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Hirschfeldia incana</i> - short-pod mustard
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Isoetes orcuttii</i> - Orcutt's quillwort
<i>Lythrum hyssopifolia</i> - grass poly
<i>Phalaris lemmonii</i> - Lemmon's canary grass
<i>Pogogyne abramsii</i> - San Diego mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Nobel Drive (X5)

VP ID: 666

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 02:15 PM

Survey End Time: 03:29 PM

Surveyors: Sara Allen, Maya Holdren, Sarah McCutcheon

VPHCP Covered Species Present: POAB

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin: <1%

Cover of PONU in Basin:

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 9 9

Other Native Species in Pool:

Species Name	Cover
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	5-10%
<i>Eleocharis macrostachya</i> - pale spike-rush	5-10%
<i>Phalaris lemmonii</i> - Lemmon's canary grass	<1%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Cotula coronopifolia</i> - brass-buttons	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Lythrum hyssopifolia</i> - grass poly	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Nobel Drive (X5)

VP ID: 666

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis pilularis</i> - coyote brush
<i>Brodiaea Orcuttii</i> - Orcutt's brodiaea
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Cotula coronopifolia</i> - brass-buttons
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Gastridium phleoides</i> - nit grass
<i>Holocarpha virgata</i> ssp. <i>elongata</i> - graceful tarplant
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lythrum hyssopifolia</i> - grass poly
<i>Malosma laurina</i> - laurel sumac
<i>Phalaris lemmonii</i> - Lemmon's canary grass
<i>Polypogon monspeliensis</i> - rabbitfoot grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 207

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 09:41 AM

Survey End Time: 10:11 AM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 4 4

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	1-5%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 10-25% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 207

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Cuscuta californica</i> - chaparral dodder
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 208

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 09:53 AM

Survey End Time: 10:37 AM

Surveyors: Katie Raffaini, Margaret Thompson

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Cressa truxillensis</i> - alkali weed	<1%
<i>Cuscuta californica</i> - chaparral dodder	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Ferocactus viridescens</i> - San Diego barrel cactus	<1%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%
<i>Lepidium nitidum</i> - shining peppergrass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	10-25%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	25-50%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 50-75%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 25-50% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 208

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lepidium nitidum</i> - shining peppergrass
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Plantago rhodosperma</i> - red-seed plantain
<i>Salvia munzii</i> - Munz's sage

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 656

2003 Baseline Survey Data

Baseline Cover of ERAR: 5.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 10:38 AM

Survey End Time: 11:11 AM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 9 9

Other Native Species in Pool:

Species Name	Cover
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed	<1%
<i>Cressa truxillensis</i> - alkali weed	1-5%
<i>Cuscuta californica</i> - chaparral dodder	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eriogonum fasciculatum</i> - California buckwheat	<1%
<i>Isocoma menziesii</i> - coastal goldenbush	1-5%
<i>Lepidium nitidum</i> - shining peppergrass	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Brachypodium distachyon</i> - purple false brome	<1%
<i>Bromus hordeaceus</i> - soft chess	25-50%
<i>Bromus rubens</i> - red brome	1-5%
<i>Erodium botrys</i> - long-beak filaree/storksbill	25-50%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 656

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Avena</i> sp.
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca perennis</i> - rye grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lepidium nitidum</i> - shining peppergrass
<i>Sisyrinchium bellum</i> - western blue-eyed-grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 891

2003 Baseline Survey Data

Baseline Cover of ERAR: 20.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 10:53 AM

Survey End Time: 11:11 AM

Surveyors: Jade Woll

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 4

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 891

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Rhus integrifolia</i> - lemonade berry
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 892

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 1.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/28/2025

Survey Start Time: 09:49 AM

Survey End Time: 10:49 AM

Surveyors: Jade Woll

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 7 6

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Plagiobothrys</i> sp.	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	5-10%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	5-10%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 10-25% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 10-25%

Days Since Last Rain: >16

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 892

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Avena</i> sp.
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Juncus</i> sp.
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 898

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 10:34 AM

Survey End Time: 11:01 AM

Surveyors: Jade Woll, Alex Fromer

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Crassula aquatica</i> - water pygmyweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Logfia filaginoides</i> - California cottonrose	<1%
<i>Plantago erecta</i> - dot-seed plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 1-5%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: >75%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 898

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Crassula</i> sp.
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Logfia filaginoides</i> - California cottonrose
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 907

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 01:49 PM

Survey End Time:

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 4 4

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%
<i>Lepidium nitidum</i> - shining peppergrass	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 50-75% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: <1%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 907

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena</i> sp.
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Stipa</i> sp.

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 908

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 02:14 PM

Survey End Time: 02:36 PM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%
<i>Lepidium nitidum</i> - shining peppergrass	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%
<i>Stipa</i> sp.	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	5-10%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 25-50% Cover of Rocks/Cobble in Basin: 50-75% Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 908

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena</i> sp.
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 909

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 11:18 AM

Survey End Time: 11:43 AM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Muhlenbergia rigens</i> - deer grass	1-5%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	10-25%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 909

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Avena</i> sp.
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lepidium nitidum</i> - shining peppergrass
<i>Muhlenbergia rigens</i> - deer grass
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 911

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 12:22 PM

Survey End Time: 01:03 PM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 2 2

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus diandrus</i> - ripgut grass	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	25-50%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	5-10%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 25-50%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: <1%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 911

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Avena</i> sp.
<i>Baccharis pilularis</i> - coyote brush
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Calystegia macrostegia</i> - island morning glory
<i>Centaurea melitensis</i> - tocalote
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Malosma laurina</i> - laurel sumac
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Silene gallica</i> - windmill pink
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Stipa</i> sp.

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 912

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 12:21 PM

Survey End Time: 12:48 PM

Surveyors: Jade Woll, Alex Fromer

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 4 4

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%
<i>Plagiobothrys</i> sp.	<1%
<i>Stipa</i> sp.	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus diandrus</i> - ripgut grass	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Silene gallica</i> - windmill pink	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: <1%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 912

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Avena</i> sp.
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Malosma laurina</i> - laurel sumac
<i>Silene gallica</i> - windmill pink
<i>Solanum</i> sp.

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1792

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 11:11 AM

Survey End Time: 11:50 AM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 2 2

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	1-5%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: <1%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1792

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1793

2003 Baseline Survey Data

Baseline Cover of ERAR: 1.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 10:30 AM

Survey End Time: 11:11 AM

Surveyors: Alex Fromer, Jade Woll

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Plagiobothrys</i> sp.	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Festuca perennis</i> - rye grass	<1%
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 50-75%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1793

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Avena</i> sp.
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Malacothamnus densiflorus</i> - many-flower bushmallow
<i>Malosma laurina</i> - laurel sumac
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1795

2003 Baseline Survey Data

Baseline Cover of ERAR: 5.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 10:28 AM

Survey End Time: 11:10 AM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 4 4

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1795

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Malacothamnus densiflorus</i> - many-flower bushmallow
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1797

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 10:30 AM

Survey End Time: 10:57 AM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 3 3

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Selaginella cinerascens</i> - ashy spike-moss	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 4

Additional Information:

Bare Ground Cover in Basin: 50-75% Cover of Rocks/Cobble in Basin: 25-50% Cover of Litter in Basin: <1%

Days Since Last Rain: 0

Ponded Water Present: no

Dead Species Present in Pool:

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Bromus rubens</i> - red brome
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Logfia</i> sp.
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1801

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 01:07 PM

Survey End Time: 01:32 PM

Surveyors: Jade Woll, Alex Fromer

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 8

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1801

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena</i> sp.
<i>Bromus hordeaceus</i> - soft chess
<i>Centaurea melitensis</i> - tocalote
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Sisyrinchium bellum</i> - western blue-eyed-grass

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1802

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 12:39 PM

Survey End Time: 01:04 PM

Surveyors: Margaret Thompson, Katie Raffaini

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 2 2

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 10-25% Cover of Rocks/Cobble in Basin: 10-25% Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1802

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena</i> sp.
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Malacothamnus densiflorus</i> - many-flower bushmallow
<i>Sisyrinchium bellum</i> - western blue-eyed-grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1803

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 12:40 PM

Survey End Time: 01:04 PM

Surveyors: Jade Woll, Alex Fromer

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	10-25%
<i>Plagiobothrys</i> sp.	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 9

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1803

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena</i> sp.
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Croton californicus</i> - California croton
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1804

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 09:10 AM

Survey End Time: 10:27 AM

Surveyors: Margaret Thompson, Jade Woll, Alex From, Katie Raffaini

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 4 4

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1804

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Avena</i> sp.
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Croton setiger</i> - doveweed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Malacothamnus densiflorus</i> - many-flower bushmallow
<i>Selaginella cinerascens</i> - ashy spike-moss

Notes: Burned pool. There is barbed wire, trash, and debris in the upland buffer.

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1805

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/20/2025

Survey Start Time: 01:48 PM

Survey End Time: 02:31 PM

Surveyors: Jade Woll, Alex Fromer

VPHCP Covered Species Present:

Cover of ERAR in Basin:

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	1-5%
<i>Brodiaea terrestris</i> ssp. <i>kernensis</i> - Kern dwarf brodiaea	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Deschampsia danthonioides</i> - annual hair grass	1-5%
<i>Isocoma menziesii</i> - coastal goldenbush	<1%
<i>Lepidium nitidum</i> - shining peppergrass	<1%
<i>Logfia filaginoides</i> - California cottonrose	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Avena</i> sp.	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 7

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 50-75%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 1805

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Avena</i> sp.
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Lepidium nitidum</i> - shining peppergrass
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Stipa</i> sp.

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 2318

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/21/2025

Survey Start Time: 09:47 AM

Survey End Time: 10:14 AM

Surveyors: Jade Woll, Alex Fromer

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Crassula</i> sp.	<1%
<i>Croton setiger</i> - doveweed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	1-5%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	1-5%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Gastridium phleoides</i> - nit grass	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 5

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 5-10%

Cover of Litter in Basin: 50-75%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Otay Lakes (K5)

VP ID: 2318

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Adenostoma fasciculatum</i> - chamise
<i>Avena</i> sp.
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Malacothamnus densiflorus</i> - many-flower bushmallow
<i>Malosma laurina</i> - laurel sumac
<i>Pseudognaphalium californicum</i> - California everlasting
<i>Salvia mellifera</i> - black sage
<i>Solanum</i> sp.

Notes: Burned pool

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1580

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/7/2025

Survey Start Time: 04:03 PM

Survey End Time: 04:40 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 1-5%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 1-5%

Native Species Richness in Basin: 5 5

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Simmondsia chinensis</i> - jojoba	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Brassica nigra</i> - black mustard	<1%
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	1-5%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Glebionis coronaria</i> - crown daisy	1-5%
<i>Helminthotheca echinoides</i> - bristly ox-tongue	5-10%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 11

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 1-5%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool: *Epilobium campestre*

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1580

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex pacifica</i> - south coast saltscale
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Brassica nigra</i> - black mustard
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia misera</i> - cliff spurge
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Glebionis coronaria</i> - crown daisy
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Hypochaeris glabra</i> - smooth cat's-ear
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Matricaria discoidea</i> - pineapple weed
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Rhus integrifolia</i> - lemonade berry
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1598

2003 Baseline Survey Data

Baseline Cover of ERAR: 40.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/7/2025

Survey Start Time: 02:35 PM

Survey End Time: 03:24 PM

Surveyors: Jason Allen, Sara Allen, Justin Felder

VPHCP Covered Species Present: ERAR, PONU

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Amsinckia intermedia</i> - common fiddleneck	<1%
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Sisyrinchium bellum</i> - western blue-eyed-grass	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	1-5%
<i>Helminthotheca echioides</i> - bristly ox-tongue	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%

Cover of Nonnative Species in Basin: 1-5%

Nonnative Species Richness in Basin: 10

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1598

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex pacifica</i> - south coast saltscale
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Centaurea melitensis</i> - tocalote
<i>Crassula connata</i> - pygmy-weed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Helminthotheca echioides</i> - bristly ox-tongue
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Phalaris minor</i> - little-seeded canary grass
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Rhus integrifolia</i> - lemonade berry
<i>Salvia mellifera</i> - black sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Stipa lepida</i> - foothill needle grass
<i>Stipa pulchra</i> - purple needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1668

2003 Baseline Survey Data

Baseline Cover of ERAR: 75.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 5.0

2025 Quantitative Monitoring Data

Survey Date: 5/7/2025

Survey Start Time: 09:56 AM

Survey End Time: 12:02 PM

Surveyors: Sara Allen

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 7 7

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%
<i>Rhus integrifolia</i> - lemonade berry	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	1-5%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Euphorbia serpens</i> - matted sandmat	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	5-10%
<i>Festuca perennis</i> - rye grass	<1%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	1-5%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Salsola tragus</i> - Russian thistle	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 14

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 10-25%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1668

2025 Quantitative Monitoring Data continued
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Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Apiastrum angustifolium</i> - mock-parsley
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus madritensis</i> - foxtail chess
<i>Bromus rubens</i> - red brome
<i>Calochortus splendens</i> - splendid mariposa lily
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Dittrichia graveolens</i> - stinkwort
<i>Encelia californica</i> - California encelia
<i>Erigeron canadensis</i> - horseweed
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia serpens</i> - matted sandmat
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Festuca perennis</i> - rye grass
<i>Laennecia coulteri</i> - Coulter's horseweed
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Peritoma arborea</i> - bladderpod
<i>Phacelia minor</i> - wild canterbury bells
<i>Plagiobothrys collinus</i> - Cooper's popcornflower
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Pseudognaphalium stramineum</i> - cotton-batting plant
<i>Salsola tragus</i> - Russian thistle
<i>Salvia mellifera</i> - black sage
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1668

<i>Stipa lepida</i> - foothill needle grass

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1684

2003 Baseline Survey Data

Baseline Cover of ERAR: 50.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.5

2025 Quantitative Monitoring Data

Survey Date: 5/7/2025

Survey Start Time: 01:48 PM

Survey End Time: 02:30 PM

Surveyors: Jason Allen, Sara Allen, Justin Felder

VPHCP Covered Species Present: ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin:

Cover of Native Species in Basin: 5-10%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Baccharis sarothroides</i> - broom baccharis	<1%
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	1-5%
<i>Ferocactus viridescens</i> - San Diego barrel cactus	<1%
<i>Rhus integrifolia</i> - lemonade berry	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	1-5%
<i>Erodium cicutarium</i> - redstem filaree	1-5%
<i>Lactuca serriola</i> - prickly lettuce	<1%
<i>Lamarckia aurea</i> - golden-top	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Phalaris minor</i> - little-seeded canary grass	1-5%
<i>Polypogon monspeliensis</i> - rabbitfoot grass	1-5%
<i>Senecio vulgaris</i> - common groundsel	5-10%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 10-25%

Nonnative Species Richness in Basin: 12

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1684

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Acmispon glaber</i> var. <i>glaber</i> - deerweed
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Carrichtera annua</i> - Ward's weed
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Daucus pusillus</i> - rattlesnake weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Dittrichia graveolens</i> - stinkwort
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Matricaria discoidea</i> - pineapple weed
<i>Mirabilis laevis</i> var. <i>crassifolia</i> - wishbone bush
<i>Opuntia littoralis</i> - coast prickly-pear
<i>Phacelia minor</i> - wild canterbury bells
<i>Polypogon monspeliensis</i> - rabbitfoot grass
<i>Rhus integrifolia</i> - lemonade berry
<i>Salsola tragus</i> - Russian thistle
<i>Senecio vulgaris</i> - common groundsel
<i>Simmondsia chinensis</i> - jojoba
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Sonchus oleraceus</i> - common sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1710

2003 Baseline Survey Data

Baseline Cover of ERAR: 90.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 10.0

2025 Quantitative Monitoring Data

Survey Date: 5/7/2025

Survey Start Time: 01:39 PM

Survey End Time: 01:52 PM

Surveyors: Sara Allen, Jason Allen, Justin Felder

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 25-50%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 5-10%

Cover of Native Species in Basin: 25-50%

Native Species Richness in Basin: 6 6

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Cylindropuntia prolifera</i> - coast cholla	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Rhus integrifolia</i> - lemonade berry	1-5%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Centaurea melitensis</i> - tocalote	1-5%
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill	<1%
<i>Erodium cicutarium</i> - redstem filaree	<1%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	5-10%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	1-5%
<i>Sonchus oleraceus</i> - common sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 10

Additional Information:

Bare Ground Cover in Basin: 10-25%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 5-10%

Days Since Last Rain: 1-5

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: Robinhood Ridge (J4-5)

VP ID: 1710

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Atriplex pacifica</i> - south coast saltscale
<i>Avena barbata</i> - slender wild oat
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet
<i>Bromus diandrus</i> - ripgut grass
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Carrichtera annua</i> - Ward's weed
<i>Centaurea melitensis</i> - tocalote
<i>Cylindropuntia prolifera</i> - coast cholla
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium brachycarpum</i> - short-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Euphorbia serpens</i> - matted sandmat
<i>Ferocactus viridescens</i> - San Diego barrel cactus
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Glebionis coronaria</i> - crown daisy
<i>Isocoma menziesii</i> - coastal goldenbush
<i>Lysimachia arvensis</i> - scarlet pimpernel
<i>Medicago polymorpha</i> - California burclover
<i>Melilotus indicus</i> - annual yellow sweetclover
<i>Peritoma arborea</i> - bladderpod
<i>Phalaris minor</i> - little-seeded canary grass
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Rhus integrifolia</i> - lemonade berry
<i>Salvia mellifera</i> - black sage
<i>Simmondsia chinensis</i> - jojoba
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: South Otay 1 acre (J13N)

VP ID: 1235

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.0

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 10.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 12:33 PM

Survey End Time: 01:18 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 1-5%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Deinandra fasciculata</i> - fascicled tarweed	10-25%
<i>Deschampsia danthonioides</i> - annual hair grass	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	<1%
<i>Malvella leprosa</i> - alkali-mallow	5-10%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	5-10%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus diandrus</i> - ripgut grass	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca perennis</i> - rye grass	<1%
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley	<1%
<i>Hypochaeris glabra</i> - smooth cat's-ear	<1%
<i>Lysimachia arvensis</i> - scarlet pimpernel	<1%
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Salsola tragus</i> - Russian thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 10

Additional Information:

Bare Ground Cover in Basin: 25-50%

Cover of Rocks/Cobble in Basin: <1%

Cover of Litter in Basin: 25-50%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: South Otay 1 acre (J13N)

VP ID: 1235

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Artemisia californica</i> - California sagebrush
<i>Bromus rubens</i> - red brome
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Deschampsia danthonioides</i> - annual hair grass
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Encelia californica</i> - California encelia
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca perennis</i> - rye grass
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley
<i>Malvella leprosa</i> - alkali-mallow
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower
<i>Plantago erecta</i> - dot-seed plantain
<i>Pogogyne nudiuscula</i> - Otay mesa mint
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Salsola tragus</i> - Russian thistle
<i>Sisyrinchium bellum</i> - western blue-eyed-grass
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle
<i>Spergularia bocconi</i> - Boccone's sand-spurrey

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: South Otay 1 acre (J13N)

VP ID: 2339

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 11:45 AM

Survey End Time: 12:31 PM

Surveyors: Jason Allen

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: <1%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: <1%

Cover of Native Species in Basin: 50-75%

Native Species Richness in Basin: 9 9

Other Native Species in Pool:

Species Name	Cover
<i>Artemisia californica</i> - California sagebrush	<1%
<i>Brodiaea terrestris</i> ssp. <i>kernensis</i> - Kern dwarf brodiaea	<1%
<i>Cressa truxillensis</i> - alkali weed	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	<1%
<i>Eleocharis macrostachya</i> - pale spike-rush	50-75%
<i>Malvella leprosa</i> - alkali-mallow	5-10%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Beta vulgaris</i> ssp. <i>maritima</i> - sea beet	<1%
<i>Bromus diandrus</i> - ripgut grass	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium cicutarium</i> - redstem filaree	5-10%
<i>Festuca perennis</i> - rye grass	<1%
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley	<1%
<i>Mesembryanthemum nodiflorum</i> - slender-leaved iceplant	<1%
<i>Phalaris minor</i> - little-seeded canary grass	<1%
<i>Salsola tragus</i> - Russian thistle	<1%
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 10

Additional Information:

Bare Ground Cover in Basin: 5-10%

Cover of Rocks/Cobble in Basin: <1%

Cover of Litter in Basin: 50-75%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: South Otay 1 acre (J13N)

VP ID: 2339

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Bromus rubens</i> - red brome
<i>Cressa truxillensis</i> - alkali weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Eleocharis macrostachya</i> - pale spike-rush
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca perennis</i> - rye grass
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> - Mediterranean barley
<i>Malvella leprosa</i> - alkali-mallow
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Salsola tragus</i> - Russian thistle
<i>Sonchus asper</i> ssp. <i>asper</i> - prickly sow thistle

Notes:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: West Otay C (J32)

VP ID: 1545

2003 Baseline Survey Data

Baseline Cover of ERAR: 0.5

Baseline Cover of NAFO: 0.0

Baseline Cover of ORCA: 0.0

Baseline Cover of POAB: 0.0

Baseline Cover of PONU: 0.0

2025 Quantitative Monitoring Data

Survey Date: 5/23/2025

Survey Start Time: 08:56 AM

Survey End Time: 09:50 AM

Surveyors: Jason Allen

VPHCP Covered Species Present: PONU, ERAR

Cover of ERAR in Basin: 5-10%

Cover of NAFO in Basin:

Cover of ORCA in Basin:

Cover of POAB in Basin:

Cover of PONU in Basin: 1-5%

Cover of Native Species in Basin: 10-25%

Native Species Richness in Basin: 8 8

Other Native Species in Pool:

Species Name	Cover
<i>Bahiopsis laciniata</i> - San Diego viguiera	<1%
<i>Deinandra fasciculata</i> - fascicled tarweed	5-10%
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower	1-5%
<i>Plantago elongata</i> - prairie plantain	<1%
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads	1-5%
<i>Stipa</i> sp.	<1%

Nonnative Species in Pool:

Species Name	Cover
<i>Bromus hordeaceus</i> - soft chess	<1%
<i>Bromus rubens</i> - red brome	<1%
<i>Erodium botrys</i> - long-beak filaree/storksbill	5-10%
<i>Festuca myuros</i> - rattail sixweeks grass	<1%
<i>Melilotus indicus</i> - annual yellow sweetclover	<1%
<i>Spergularia bocconi</i> - Boccone's sand-spurrey	<1%

Cover of Nonnative Species in Basin: 5-10%

Nonnative Species Richness in Basin: 6

Additional Information:

Bare Ground Cover in Basin: 50-75%

Cover of Rocks/Cobble in Basin: 10-25%

Cover of Litter in Basin: 1-5%

Days Since Last Rain: 6-15

Ponded Water Present: no

Dead Species Present in Pool:

Annual VPHCP Covered Plant Monitoring

Fiscal Year: 2025

Complex Name: West Otoy C (J32)

VP ID: 1545

2025 Quantitative Monitoring Data continued

Associated Species in Buffer: (Buffer = 20 foot or 6 meter radius around basin perimeter)

Species Name
<i>Ambrosia chenopodiifolia</i> - San Diego bur-sage
<i>Amsinckia intermedia</i> - common fiddleneck
<i>Artemisia californica</i> - California sagebrush
<i>Baccharis sarothroides</i> - broom baccharis
<i>Bahiopsis laciniata</i> - San Diego viguiera
<i>Bromus hordeaceus</i> - soft chess
<i>Bromus rubens</i> - red brome
<i>Crassula connata</i> - pygmy-weed
<i>Deinandra fasciculata</i> - fascicled tarweed
<i>Encelia californica</i> - California encelia
<i>Eriogonum fasciculatum</i> - California buckwheat
<i>Erodium botrys</i> - long-beak filaree/storksbill
<i>Erodium cicutarium</i> - redstem filaree
<i>Eryngium aristulatum</i> var. <i>parishii</i> - San Diego button-celery
<i>Festuca myuros</i> - rattail sixweeks grass
<i>Lamarckia aurea</i> - golden-top
<i>Logfia gallica</i> - daggerleaf cottonrose
<i>Peritoma arborea</i> - bladderpod
<i>Plagiobothrys acanthocarpus</i> - adobe popcornflower
<i>Plantago elongata</i> - prairie plantain
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i> - dwarf woollyheads
<i>Selaginella cinerascens</i> - ashy spike-moss
<i>Simmondsia chinensis</i> - jojoba
<i>Spergularia bocconi</i> - Boccone's sand-spurrey
<i>Yucca schidigera</i> - Mojave yucca

Notes:

Appendix D-1

2025 Vernal Pool Management Photolog



Photo 1. Dry vernal pool.



Photo 2. Dry vernal pool.

Appendix D-1 - 2025 Vernal Pool Management Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 3. Contracted crew performing weed control.



Photo 4. Vernal pool with focal species.

Photographic Documentation
Photos 3 & 4



Photo 5. Vernal pool with focal species.



Photo 6. Vernal pool filled with water.



Photo 7. Vernal pool with vegetation.



Photo 8. Vernal pool filled with water.



Photo 9. Dry vernal pool.



Photo 10. Vernal pool with focal species.

Appendix D-1 - 2025 Vernal Pool Management Photolog Carroll Canyon (Parkdale Carroll Canyon)



Photo 11. Dry vernal pool.



Photo 12. Contracted crew performing weed control.



Photo 13. Educational tour of vernal pools.



Photo 14. Vernal pool filled with water.



Photo 15. Vernal pool filled with water.



Photo 16. Vernal pool filled with water.



Photo 17. Vernal pool with focal species.



Photo 18. City staff performing gate installation.



Photo 19. Dry vernal pool.



Photo 20. City staff performing habitat restoration maintenance.



Photo 21. Vernal pool with focal species.



Photo 22. Contracted crew performing fence installation.



Photo 23. Fenced vernal pool.



Photo 24. Contracted crew performing weed control.



Photo 25. Dry vernal pool.



Photo 26. Dry vernal pool.



Photo 27. Dry vernal pool.



Photo 28. Contracted crew performing weed control.

Appendix D-1 - 2025 Vernal Pool Management Photolog Greystone Torrey Highlands



Photo 29. Vernal pool filled with water.



Photo 30. Vernal pool with focal species.

Photographic Documentation
Photos 29 & 30



Photo 31. Contracted crew performing weed control.



Photo 32. Vernal pool with focal species.



Photo 33. Contracted crew performing habitat restoration plant installation.



Photo 34. Dry vernal pool.



Photo 35. Vernal pool with focal species.



Photo 36. Vernal pool filled with water.



Photo 37. Contracted crew performing weed control.



Photo 38. City staff performing habitat restoration plant installation.



Photo 39. *Pogogyne abramsii* in vernal pool.



Photo 40. Vernal pool with vegetation.



Photo 41. Dry vernal pool.



Photo 42. Contracted crew performing weed control.

Appendix D-1 - 2025 Vernal Pool Management Photolog Mission Trails Regional Park



Photo 43. Vernal pool filled with water.



Photo 44. Dry vernal pool.

Photographic Documentation
Photos 43 & 44



Photo 45. Volunteers performing habitat restoration plant installation.



Photo 46. Contracted crew performing weed control.



Photo 47. Contracted crew performing weed control.



Photo 48. *Navarretia fossalis* in vernal pool.



Photo 49. Contracted crew performing weed control.



Photo 50. Contracted crew performing weed control.



Photo 51. Dry vernal pool.



Photo 52. Contracted crew performing weed control.



Photo 53. Contracted crew performing weed control.



Photo 54. Vernal pool filled with focal species.



Photo 55. Contracted crew performing habitat restoration plant installation.



Photo 56. Dry vernal pool.



Photo 57. Contracted crew performing weed control.



Photo 58. Vernal pool filled with water.



Photo 59. Contracted crew performing weed control.



Photo 60. Contracted crew performing fence installation.



Photo 61. Contracted crew performing weed control.



Photo 62. Dry vernal pool.



Photo 63. Vernal pool with focal species.



Photo 64. Vernal pool with focal species.



Photo 65. Contracted crew performing weed control.



Photo 66. Contracted crew performing weed control.



Photo 67. Contracted crew performing weed control.



Photo 68. Contracted crew performing weed control.



Photo 69. Contracted crew performing dethatching.



Photo 70. Dry vernal pool.



Photo 71. Habitat restoration around vernal pools.



Photo 72. City staff performing habitat restoration maintenance.



Photo 73. Habitat restoration around vernal pools.



Photo 74. Dry vernal pool.



Photo 75. Vernal pool behind fence.



Photo 76. Vernal pool with focal species.



Photo 77. *Pogogyne nudiuscula* in vernal pool.



Photo 78. Vernal pool with focal species.



Photo 79. Contracted crew performing habitat restoration plant installation.



Photo 80. Contracted crew performing habitat restoration plant installation.



Photo 81. Vernal pool behind fence.

Appendix D-1 - 2025 Vernal Pool Management Photolog Wruck Canyon



Photo 82. Contracted crew performing fence installation.



Photo 83. City staff performed gate installation.

Appendix D-2

2025 Vernal Pool Monitoring Photolog

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 1. Pool 42



Photo 2. Pool 51

Photographic Documentation
Photos 1 & 2

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 3. Pool 67



Photo 4. Pool 78

Photographic Documentation
Photos 3 & 4



Photo 5. Pool 89



Photo 6. Pool 96

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 7. Pool 100



Photo 8. Pool 295

Photographic Documentation
Photos 7 & 8

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 9. Pool 301



Photo 10. Pool 445

Photographic Documentation
Photos 9 & 10

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 11. Pool 447



Photo 12. Pool 449

Photographic Documentation
Photos 11 & 12

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 13. Pool 450



Photo 14. Pool 451

Photographic Documentation
Photos 13 & 14

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 15. Pool 452



Photo 16. Pool 459

Photographic Documentation
Photos 15 & 16

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 17. Pool 464



Photo 18. Pool 471

Photographic Documentation
Photos 17 & 18

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 19. Pool 473



Photo 20. Pool 483

Photographic Documentation
Photos 19 & 20

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 21. Pool 484



Photo 22. Pool 490

Photographic Documentation
Photos 21 & 22

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 23. Pool 502



Photo 24. Pool 509

Photographic Documentation
Photos 23 & 24

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 25. Pool 591



Photo 26. Pool 1310

Photographic Documentation
Photos 25 & 26

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Cal Terraces (North), Otay Mesa Road Parcels



Photo 27. Pool 1321



Photo 28. Pool 1713

Photographic Documentation
Photos 27 & 28



Photo 29. Pool 1724



Photo 30. Pool 2022



Photo 31. Pool 2025



Photo 32. Pool 2039



Photo 33. Pool 2043



Photo 34. Pool 2044



Photo 35. Pool 2185



Photo 36. Pool 2189

**Appendix D-2 - 2025 Vernal Pool Monitoring Photolog
Carroll Canyon (Parkdale Carroll Canyon)**



Photo 37. Pool 1077



Photo 38. Pool 1092

Photographic Documentation
Photos 37 & 38

Appendix D-2 - 2025 Vernal Pool Monitoring Photolog Carroll Canyon (Parkdale Carroll Canyon)



Photo 39. Pool 1096



Photo 40. Pool 1109

Photographic Documentation
Photos 39 & 40

**Appendix D-2 - 2025 Vernal Pool Monitoring Photolog
Carroll Canyon (Parkdale Carroll Canyon)**



Photo 41. Pool 1740



Photo 42. Pool 1743

Photographic Documentation
Photos 41 & 42



Photo 43. Pool 1746



Photo 44. Pool 876



Photo 45. Pool 1255



Photo 46. Pool 1260



Photo 47. Pool 1264



Photo 48. Pool 1272



Photo 49. Pool 2441



Photo 50. Pool 2468



Photo 51. Pool 2642



Photo 52. Pool 1177



Photo 53. Pool 1180



Photo 54. Pool 1188



Photo 55. Pool 771



Photo 56. Pool 778



Photo 57. Pool 790

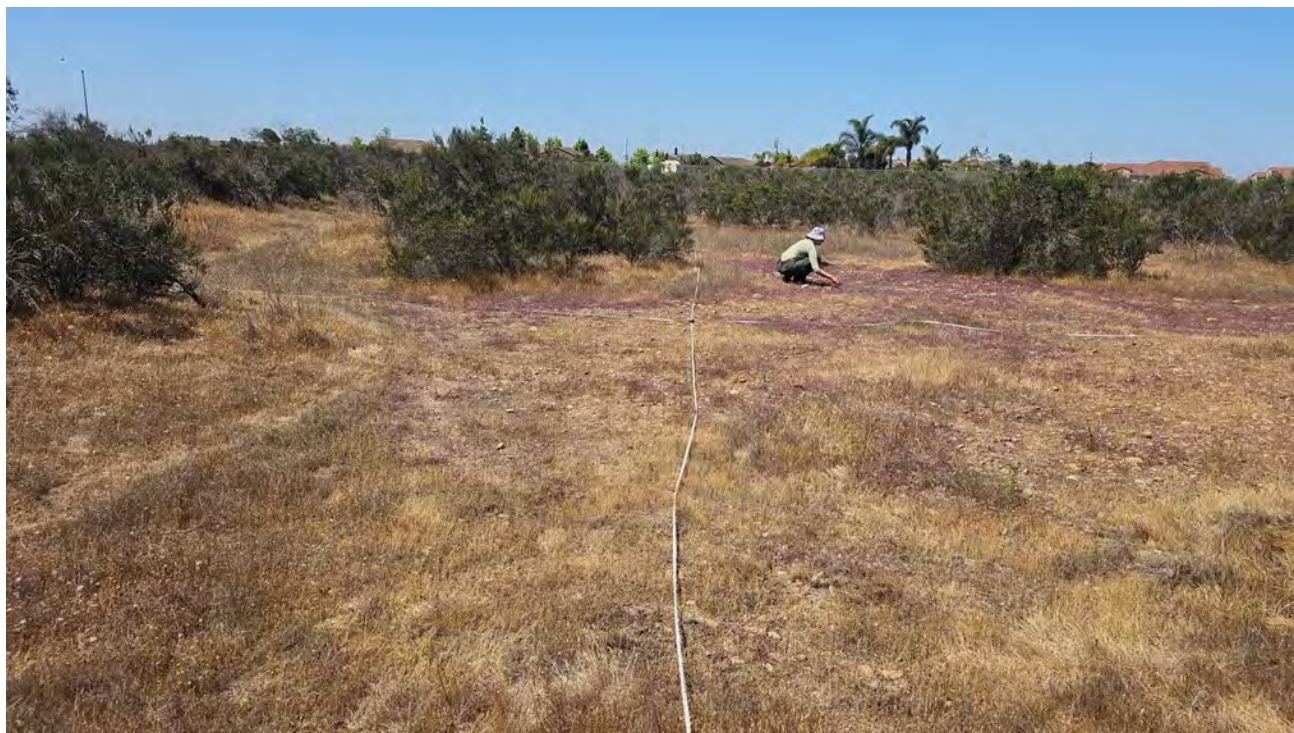


Photo 58. Pool 706



Photo 59. Pool 712



Photo 60. Pool 4256



Photo 61. Pool 4596



Photo 62. Pool 5352



Photo 63. Pool 5355



Photo 64. Pool 5356



Photo 65. Pool 5358



Photo 66. Pool 5363



Photo 67. Pool 5369



Photo 68. Pool 5371



Photo 69. Pool 5388



Photo 70. Pool 5423



Photo 71. Pool 6351



Photo 72. Pool 6384



Photo 73. Pool 666



Photo 74. Pool 208



Photo 75. Pool 656



Photo 76. Pool 891



Photo 77. Pool 892



Photo 78. Pool 1801



Photo 79. Pool 1580



Photo 80. Pool 1598



Photo 81. Pool 1668



Photo 82. Pool 1684



Photo 83. Pool 1710



Photo 84. Pool 1235



Photo 85. Pool 2339



Photo 86. Pool 1545

Appendix E-1

Private Property Compliance Tracking

Appendix E-1. Private Property Compliance Tracking

Project	Associated Plan	Maintenance Requirements	Monitoring Requirements	Success Criteria	Reporting Requirements ¹	2025 Status
Handler	Mitigated Negative Declaration (Section V.9 Vernal Pool Management Plan)	• Weed control (see success standards • Fence and sign repair • Trash and debris removal • Remedial measures (invasive plant control, erosion control, additional fencing and vehicle barriers, seeding) • 2 general maintenance visits per year • Monthly weed control visits from January through May each year	• Monitoring visits 4 times per year (fall, January, March, May) • Photographs at established photo points taken at each visit • Species cover and richness taken in pool and upland areas • Detailed status notes on maintenance needs	• Bent grass (<i>Agrostis</i> sp.) and Italian ryegrass (<i>Lolium multiflorum</i>) ≤1% cover • Total nonnative weed cover within pools ≤5% • Total nonnative weed cover in upland area ≤5% • Total nonnative grass cover in upland area ≤25%	• Following the final monitoring visit each year, the VP monitor shall prepare a letter evaluating the state of the preserved vernal pool habitat to date, along with any recommended remedial measures. • Copies of the letter will be submitted to the MSCP, EAS, MMC, and other City staff, as appropriate. <i>MMRP</i>	Grading permits were issued during 2019–2020. The San Diego Urban Corps Habitat Services performed the annual maintenance activities in the Open Space in 2025 based upon the Long-Term Vernal Pool Management Plan prepared by Helix Environmental dated 14 January 2003. The majority of the visits consisted of habitat maintenance to remove non-native thatch from previous years and to remove new, non-native plants before they set seed. No fence or sign repair/replacement was necessary.
Mesa Norte	Mesa Norte Vernal Pool Mitigation Plan (1998)	• Fence and sign repair will be conducted in perpetuity • Trash and debris removal • Remedial measures (invasive eradication, erosion control, additional fencing and vehicle barriers, fire suppression/damage repair, trampling repair) • 2 weed control visits during spring (general and vernal pool basin)	• No monitoring requirements outlined in the VPHCP for this complex.	• Maintain existing habitat conditions consistent with the Mesa Norte Vernal Pool Mitigation Plan	• City to work with property owner to assess implementation of the Mesa Norte Vernal Pool Mitigation Plan and provide annual reporting. <i>MP</i>	Closed out; No further action; No VPHCP monitoring obligations remain. City staff conducted a site visit on April 28, 2023, to follow up on management activities. The City’s Development Services Department (DSD) Mitigation Monitoring and Coordination (MMC) team addressed management enforcement during 2022–2023.
Rhodes Crossing	Rhodes Crossing Habitat Management Plan (2010)	• 2 weed control visits during (once in January/February and again in April/May) • Fence and sign repair, as-needed and informed by general quarterly surveys	• Created and preserved vernal pools within the preserve areas will be visited twice during the rainy season (Feb-April) each year for 10 years to assess their condition. After 10 years they will be visited once per year. • Each pool will be monitored and a species list will be created, including presence of exotics and cover estimates for each species • Quarterly general surveys to document condition and extent of VPs • The baseline vegetation/sensitive resources map will be updated every 5 years and submitted to the agencies	• 'Zero Tolerance Species' to be removed within 2 weeks of discovery • 'Moderate Tolerance Species' to be removed when cover increases 15% over baseline	• A report summarizing the status of the preserve, the results of the surveys, and all major actions taken since the last assessment will be provided to the USFWS, CDFG, and City each year by January 15. • Report will include information on extent and overall health of habitats present within, changes to health or distribution of sensitive plant and animal species observed (provided on digital map), observed changes resulting from natural or man-made causes, management issues/tasks addressed during the last year, and tasks identified for the next year. • Report will also compare most recent data with previous years, and identify appropriate remedial measures as needed. If any vegetation community or sensitive species is declining, the report will outline a plan for its recovery. • Report will also include updated digital-format maps of vegetation and sensitive species. The City's HMP Admin will be responsible for distributing. <i>HMP</i>	Alden submitted the year 7 vernal pool restoration/mitigation report received in January 2024. No additional measures beyond regular maintenance and weed control were taken during year 7. On August 20, 2025, the U.S. Army Corps of Engineers confirmed that the compensatory mitigation performance standards associated with Department of the Army Permit No. SPL-2009-00733-MBS had been satisfied, and that no further compensatory mitigation monitoring is required. Following completion of the monitoring program, the site transitioned to an interim maintenance phase pending transfer to the long-term habitat manager, with current activities limited to routine maintenance intended to preserve habitat function and prevent degradation of the established vernal pool and upland restoration areas.

Project	Associated Plan	Maintenance Requirements	Monitoring Requirements	Success Criteria	Reporting Requirements ¹	2025 Status
Salk Institute	Habitat Management Plan (2008)	• 2 weed control visits annually in the spring • Trash removal visits every other month • Ongoing maintenance of barrier along Torrey Pines Scenic Drive	• Baseline inventory of quality and quantity of vernal pools (2008) • 2 monitoring visits per year during the rainy season (Feb-April); create species list with cover estimates	• Maintain existing habitat conditions consistent with the Salk Institute Master Plan Habitat Management Plan • 'Zero Tolerance Species' to be removed within 2 weeks of discovery • 'Moderate Tolerance Species' to be removed when cover increases 15% over baseline	• Reports due every other year by the 15th of January following the end of the preceding calendar year • Copies provided to Salk Institute, USFWS, CDFW, and the City. • The report will document: existing conditions in the preserve, wildlife use of the preserve, significant changes within the preserve, and recommended remedial measures. • Report will include: summary of management actions; summary of results of annual surveys; locations of sensitive species detected within the preserve; description of exotic species removal measures (with before and after photos); description of proposed exotic species removal tasks for the following year; site maps showing areas of concern; photo documentation of any significant management issues or biological observations. <i>HMP</i>	Grading, vernal pool mitigation, and protection measures have been completed. The project has been closed out. The City has not received any reports regarding long-term management activities. Ongoing (in perpetuity) reporting was not included as part of the project entitlements.
Shaw Lorenz	Vernal Pool Management Plan Shaw-Lorenz Project (2007)	• All weeding within and adjacent to pools will be performed by hand; no herbicide use • Weeding to occur twice per year, generally in Spring • Removal of trash, regularly or at intervals • Installation and repair of protective fencing, signage, direct-light shields, drainage ditches and swales • No brush management will be conducted within Mitigation Site and Conserved areas containing depressional features (except Lot; however no brush management within the basin)	• Annual quantitative monitoring (species richness and vegetative cover) for CSS restoration; stratified random sampling with maps provided	• 5 years of success criteria for upland restoration/enhancement areas will include: the appropriate species richness and cover criteria for all five years of monitoring; 0% weed cover for Cal-IPC High or Moderate and <5% relative cover of all other exotic weed species. • Container plant survival >80% of the initial plantings for the first five years. At the end of Years 1 and 2, all dead plants will be replaced unless their function has been replaced by natural recruitment	• Annual reports will be submitted to the Service by Sept. 1 of each year of the 5-year monitoring program. • Reports will assess both the attainment of yearly success criteria and progress toward the final success criteria. • The reports will summarize the project's compliance with all Service biological opinion conservation measures and terms and conditions. <i>BO</i>	Grading complete: project closed out. RECON is working with USFWS regarding fairy shrimp presence.

Project	Associated Plan	Maintenance Requirements	Monitoring Requirements	Success Criteria	Reporting Requirements ¹	2025 Status
Merge 56	Merge 56 Development Project Vernal Pool Mitigation Plan (2016)	• 5 year maintenance program; monthly site visits • Trash Removal during maintenance events • Weed control within and adjacent to the vernal pools will be performed with hands; no herbicide use within 5 feet of vernal pools • Weeding in uplands of vernal pools will be removed by hand or with small machinery, focused herbicide application may be used • Container stock, native grass plugs, and transplanted sensitive plants will be hand watered at least twice a month, as needed, during the first 2 years of maintenance and monitoring	• Vernal pools - monthly inspections during Year 1, every other month during Year 2, and every 3 months during the remainder of the monitoring period • Fairy Shrimp - Wet season monitoring conducted every other week during the rainy season; Dry Season sampling of Fairy Shrimp egg presence and density will be measured • Annual Monitoring visits of vernal pools will be conducted near the end of the rainy season; including photo documentation; identification of all plant species, and estimation of species richness and relative vegetative cover of native/non-native plants	• 5 year success criteria for upland and vernal pool restoration areas will include the appropriate species richness and cover criteria of all five years of monitoring (Table 14); for re-established vernal pool <1% for Cal-IPC High or Moderate and <5% relative cover of all other exotic weed species; for enhanced Vernal pool/Upland 0% weed cover for Cal-IPC High or Moderate, and <5% relative cover of all other weed species • Hatched Fairy Shrimp and gravid density of restored pools must not differ significantly from the control pools for 3 wet seasons	• Annual reports will be submitted by August 31 of each year • These will include data collected throughout the year, data from the annual monitoring visit, comparisons of the monitoring data for the years that data are collected, and any recommendations for future work	The 2024/2025 rainy season had below average rainfall (measured at MCAS Miramar). •All of the pools except for P7 met the hydrology criterion •The invasive species criterion was met in all the established pools •The species cover criterion was met in 15 of the pools •The species richness criterion was met in all but two pools (M10 and N2) •A total of 15 vernal pool plant indicator species occurs within the established pools, with richness values ranging from 2 to 14 species per pool •San Diego fairy shrimp continue to be present in 27 established pools, in addition to the previously existing enhanced pool •No additional remedial measures are warranted currently beyond continued monitoring and routine stewardship maintenance for Year 6
Nobel Drive	Nobel Research Park - Vernal Pool Maintenance Program (2002)	In general passive maintenance will be used onsite to help preserve the natural pools. • trash removal • fence installation • signage mounted to the fence stating the area is a vernal pool preserve • Weeding and removal of non-native species, especially landscape plants found on adjacent slopes or developed areas				Recon provided a Maintenance and Monitoring Report for the 2023/2024 year summarizing the following: - as-needed weed control performed - fairy shrimp observed in six of the vernal pool basins (not required by maintenance program)

¹Reporting requirements are derived from associated plans; plan type acronyms listed for each set of requirements are defined as follows: *BO* = Biological Opinion; *HMP* = Habitat Management Plan; *MP* = Mitigation Plan; *MMRP* = Mitigation Monitoring reporting Program

Appendix E-2

Private Property Compliance Reports



BOARD OF DIRECTORS

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First Future Credit Union

Rhody Soria
Chief Executive Officer

MEMORANDUM

TO: Michael Shoemaker

FROM: Gretchen Cummings

DATE: 19 December 2025

SUBJ: 2025 Annual Maintenance Report for the Handler Vernal Pool Open Space

Summary:

This memo represents the annual maintenance report for the Handler Vernal Pool Open Space ("Open Space") on APN 645-080-28-00 for 2025. The 7.41-acre Open Space is located south of California State Route 905 and east of the Caliente Avenue in the Otay Mesa Community of the City of San Diego (see attached Figures 1 and 2). The San Diego Urban Corps Habitat Services ("SDUCHS") performed the annual maintenance activities in the Open Space in 2025 based upon the Long-Term Vernal Pool Management Plan prepared by Helix Environmental dated 14 January 2003. Please see Table 1 below for a breakdown of the long-term management tasks that were performed in 2025.

Field Visits:

In order to accomplish the tasks outlined in Table 1 below, the Open Space was visited by biologist, Gretchen Cummings, and SDUCHS staff. Below is Table 2 showing the field visits that occurred in 2025. A total of fifteen field visits took place in the Open Space in 2025. The majority of the visits consisted of habitat maintenance to remove non-native thatch from previous years and to remove new, non-native plants before they set seed. Biological site visits occurred on 31 January, 3 March, 20 June, and 6 October. Although trash removal, and sign and fence repair/replacement were listed as long-term management tasks, no trash was observed within the Open Space and no fence or sign repair/replacement was necessary.

Results:

The Open Space is comprised of Vernal Pools and Non-Native Grassland with scattered native plants. The Vernal Pools are disturbed and contain 100% cover of non-native grasses and forbs. The Non-Native Grassland contained the same non-native grasses and forbs as the Vernal Pools but also contained approximately 2-3% cover of native shrubs, such as Broom Baccharis (*Baccharis sarothroides*), Deerweed (*Acmispon glaber*), and California Sagebrush (*Artemisia californica*). Several annual native plants were also noted in the Non-Native Grassland, such as Clustered Tarweed (*Deinandra fasciculata*), Common Goldfields (*Lasthenia californica*), and Red Maids (*Calandrinia menziesii*). The thick thatch of non-native plant biomass in the Non-Native Grassland was cut with mowers and weed whackers, while the thick thatch within the Vernal Pools were hand cut with small sickles (see Figures 3 and 4). The Vernal Pools did not fill this year. Photo points were established

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at 5 locations around the perimeter of the Open Space (please see the attached Figures 2, 5, 6, 7, 8, and 9). Two sensitive plant species and one vernal pool indicator plant species were mapped in the Open Space (see Figure 2 for locations). The two sensitive plant species were the San Diego County Viguiera (*Bahiopsis laciniata*) and Coast Barrel Cactus (*Ferocactus viridescens*). The vernal pool indicator species observed was Woolly Marbles (*Psilocarphus brevissimus*). The Woolly Marbles were not found within any of the mapped vernal pools on-site but rather along the northwest perimeter of the Open Space adjacent to restored vernal pools to the north and west of the Open Space (again see Figure 2). Ten species of birds were observed within or near the Open Space. Three of the ten bird species are considered sensitive. The three sensitive bird species were Northern Harrier, California Horned Lark, and California Gnatcatcher. All three of these sensitive bird species were detected off-site. The remaining seven birds were Red-tailed Hawk, Western Meadowlark, Say's Phoebe, Common Raven, Bushtit, Lesser Goldfinch, and White-crowned Sparrow. Other wildlife observations included pellets assignable to *Sylvilagus* sp. and the San Diego Black-tailed Jackrabbit (*Lepus californicus* ssp. *bennettii*). The San Diego Black-tailed Jackrabbit is considered a sensitive wildlife species with a State Rank of S3S4.

Table 1. Long-term Management Tasks Performed at the Handler Vernal Pool Open Space in 2025

Category	Task	Description	Frequency
Monitoring and Surveying	Biological Site Visits	a. Visually assess the species cover and richness within the vernal pools and in the upland habitat b. Take photos at photo points c. Document incidental observations of noteworthy species	4x/year (Jan, Mar, June, Oct)
	Habitat Maintenance Supervision	Supervise non-native plant removal in and around vernal pools	As needed in Jan, Feb, Mar, Apr, May
Long-term Management	Habitat Maintenance	Mowing, dethatching, and removal of non-native plants	10 days initial mowing and dethatching, and monthly visits in Jan, Feb, Mar, Apr, May
	Trash Removal	Removal of accumulated trash and debris	As needed
	Fence and Sign Repair and/or Replacement	Repair and/or replace fencing and signs	As needed
Reporting	Annual Report	Short memo summary of annual maintenance activities	Annually (Dec)

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Table 2 – Summary of Field Visits by SDUCHS in 2025

2025 Handler Vernal Pool Open Space Field Visits in 2025										
Type of Site Visit	Observers	Date	Beginning of Observation Period				End of Observation Period			
			Time	Cloud Cover	Wind	Air Temp	Time	Cloud Cover	Wind	Air Temp
Biological Site Visit, Habitat Maintenance Supervision, and Habitat Maintenance	G. Cummings C. Casey	31 Jan 2025	0800	20%	2.8 – 5.3 mph	57.1°F	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	10 Feb 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	11 Feb 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey D. Whittaker	12 Feb 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	18 Feb 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey D. Whittaker	19 Feb 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	21 Feb 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Biological Site Visit, Habitat Maintenance Supervision, and Habitat Maintenance	G. Cummings C. Casey	3 Mar 2025	0845	80%	6.4 – 14.0 mph	55.0°F	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	4 Mar 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	10 Mar 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance	C. Casey	11 Mar 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Habitat Maintenance Supervision and Habitat Maintenance	G. Cummings C. Casey	25 Apr 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A

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Table 2 – Summary of Field Visits by Urban Corps in 2025 (continued)

2025 Handler Vernal Pool Open Space Field Visits in 2025										
Type of Site Visit	Observers	Date	Beginning of Observation Period				End of Observation Period			
			Time	Cloud Cover	Wind	Air Temp	Time	Cloud Cover	Wind	Air Temp
Habitat Maintenance	C. Casey	7 May 2025	0800	N/A	N/A	N/A	1430	N/A	N/A	N/A
Biological Site Visit	G. Cummings	20 June 2025	0930	Clear	1.0 – 2.0 mph	69.0°F	1030	Clear	1.0 – 2.0 mph	72.4°F
Biological Site Visit	G. Cummings	6 Oct 2025	0800	100%	< 2.1 mph	64.8°F	0945	100%	< 1.6 mph	72.5°F

Recommendations for 2026:

The Vernal Pools and surrounding Non-Native Grassland at the Handler Vernal Pool Open Space are currently inundated with non-native plants. Habitat maintenance and biological monitoring is required again for 2026. Habitat maintenance should take the form of monthly non-native plant removal from January to May to encourage native plant growth in the Non-Native Grassland and to encourage the vernal pools to fill with water. Biological site visits should occur in January, March, May, and October with photos taken at the established photo points, a visual assessment of the species cover and richness, and documentation of incidental noteworthy species observations. Habitat maintenance supervision should occur as needed during habitat maintenance visits from January to May.

If you have any questions, please feel free to contact me at (619)729-6188.

[:/1972/HANDLER VERNAL POOL OPEN SPACE 2025 Report 12-19-25.docx]

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Project Vicinity

HANDLER PRESERVE

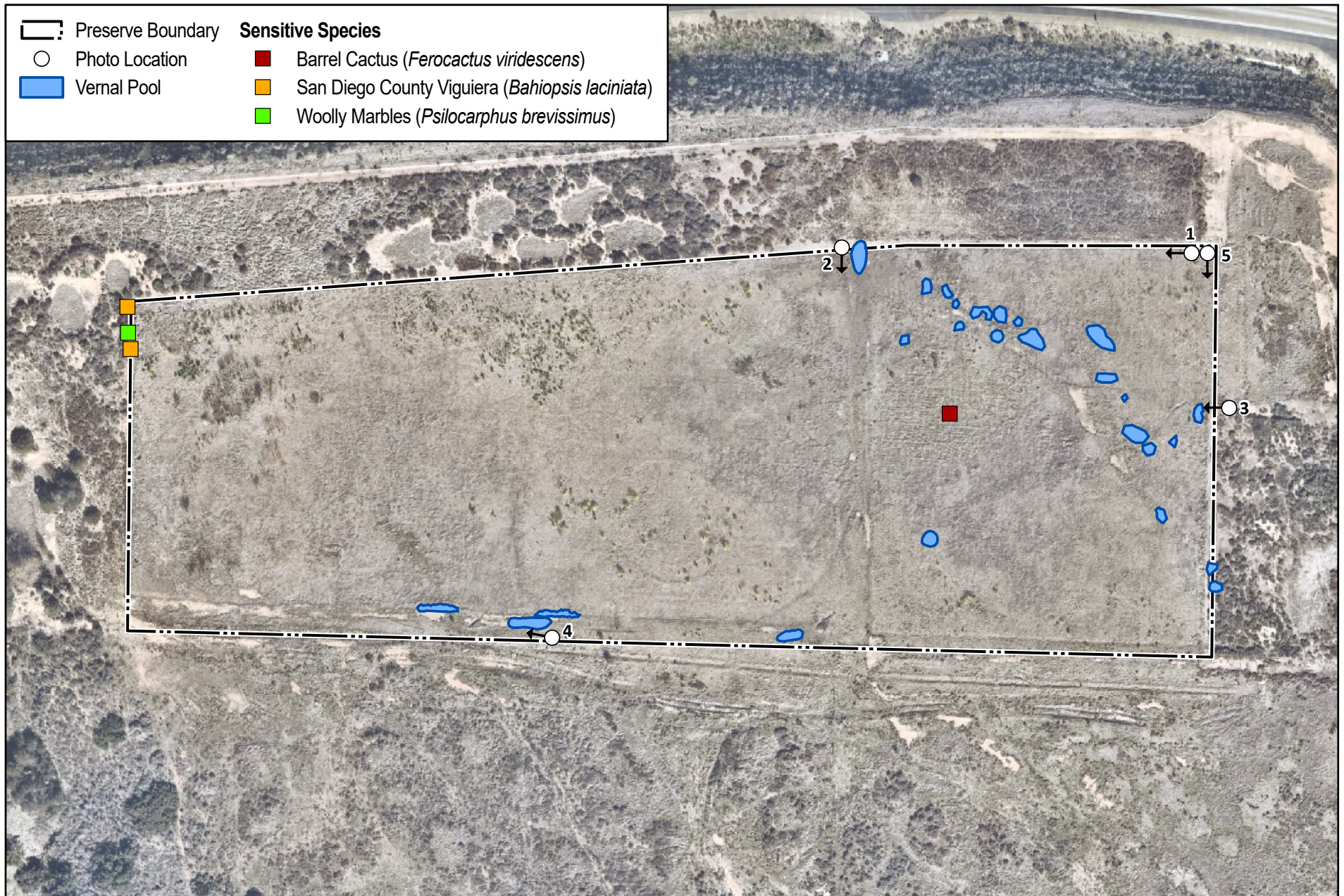
0 1,000 2,000 Feet



FIGURE 1

Source: USGS National Map (Imperial Beach, Otay Mesa)

Jan 2026



Vernal Pool, Sensitive Species, and Photo Point Locations Shown on an Aerial Photo

HANDLER PRESERVE

0 60 120 Feet



Aerial Photo: Nearmap 2024

FIGURE 2

Oct 2025

Figure 3 – Top Photo: Mowing of Thick Thatch of Non-Native Plant Material Taken 31 January 2025;
Bottom Photo: Removal of Non-Native Grasses with Weed Whackers Taken 10 February 2025



Figure 4 – Top Photo: Raking and Bagging of Cut Non-Native Material Taken 12 February 2025;
Bottom Photo: Hand Removal of Non-Native Plants in a Flagged Vernal Pool Taken 19 February 2025



Figure 5 – Top Photo: Photo Point 1 Taken 31 January 2025;
Bottom Photo: Photo Point 1 Taken 6 October 2025



Figure 6 – Top Photo: Photo Point 2 Taken 3 March 2025;
Bottom Photo: Photo Point 2 Taken 6 October 2025



Figure 7 – Top Photo: Photo Point 3 Taken 25 April 2025;
Bottom Photo: Photo Point 3 Taken 6 October 2025



Figure 8 – Top Photo: Photo Point 4 Taken 25 April 2025;
Bottom Photo: Photo Point 4 Taken 6 October 2025



Figure 9 – Top Photo: Photo Point 5 Taken 25 April 2025;
Bottom Photo: Photo Point 5 Taken 6 October 2025



Appendix F

Take Summary Reports



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



In Reply Refer to:
2024-0046501-S7-F-SD

December 19, 2024
Sent Electronically

Mason Gamble
Project Manager, Transportation and Special Projects Branch
U.S. Army Corps of Engineers - Los Angeles District
Regulatory Division
915 Wilshire Blvd., Suite 1109
Los Angeles, California 90017

Subject: Section 7 Consultation and Conference for the Candlelight Project (SPL-2015-00294),
San Diego County, California

Dear Mason Gamble:

This document transmits the U.S. Fish and Wildlife Service's (Service) streamlined consultation, based on our review of Cornerstone Communities Corporation's (applicant) Candlelight Project (project) in San Diego County, California (Figure 1 and 2) and its effects on the federally endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Riverside fairy shrimp (*Streptocephalus woottoni*), collectively fairy shrimp, and the federally threatened coastal California gnatcatcher (*Poliophtila californica californica*; gnatcatcher), in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). Additionally, this document transmits the Service's informal consultation on the federally endangered Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) and conference opinion on the western spadefoot [Southern distinct population segment (*Spea hammondi*); spadefoot] which is proposed for listing as threatened. We initiated consultation on December 21, 2023, the date we received the U.S. Army Corps of Engineer's (Corps) request for consultation of the same date.

The Western Preserve on the Candlelight property is adjacent to Subunit 5a of designated critical habitat for the Riverside fairy shrimp. Subunit 5a contains vernal pools occupied by Riverside and San Diego fairy shrimp that were restored and preserved by the Sweetwater Union High School District (subsequently named San Ysidro High School) pursuant to Service biological opinion 1-6-99-F-77. The Western Preserve currently supports six pools known or potentially occupied by San Diego fairy shrimp, which will be enhanced and preserved. The Western Preserve will also be restored with additional vernal pools that will be inoculated with Riverside and San Diego fairy shrimp and will benefit Subunit 5a.

A 1.5-acre portion of the Eastern Preserve on the Candlelight property falls within Subunit 5f of designated critical habitat for the San Diego fairy and Subunit 5g of designated critical habitat for the Riverside fairy shrimp. The Eastern Preserve currently supports vernal pool 1 (occupied by San Diego fairy shrimp) and part of its watershed, which will be enhanced and preserved. In

addition, the Eastern Preserve will be restored with additional vernal pools that will be inoculated with fairy shrimp and will benefit San Diego fairy shrimp Subunit 5f and Riverside fairy shrimp Subunit 5g.

In addition to the above, the proposed conservation measures (CMs) for fairy shrimp and spadefoot will benefit Riverside fairy shrimp Subunits 5a and 5g, as well as San Diego fairy shrimp Subunit 5f. Therefore, the Service has determined that the proposed project is not likely to adversely affect designated critical habitat for the fairy shrimp, and critical habitat for these species is not addressed further in this consultation.

The gnatcatcher is also known to occur in maritime succulent scrub in and/or adjacent to the Western and Eastern Preserves. The proposed restoration in these areas will not directly impact maritime succulent scrub and will include restoration of this vegetation community in upland areas surrounding restored vernal pools, which is expected to benefit the gnatcatcher. The MSCP was established to minimize and mitigate habitat loss and impacts to covered species in association with specific activities covered by the program.

The Multiple Species Conservation Program (MSCP) establishes a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species in association with specific activities covered by the program. The MSCP encompasses a 900-square mile area in southwestern San Diego County and includes the City, 10 additional city jurisdictions, and unincorporated portions of the County of San Diego. On July 18, 1997, the Service issued an incidental take permit under section 10(a)(1)(B) of the Act to the City for its Subarea Plan (SAP) under the broader MSCP. The project is in the City's SAP boundary and is consistent with the SAP.

The gnatcatcher is a covered species under the City's SAP. The status of the gnatcatcher and the effects of implementing the City's SAP were previously addressed in our 1997 biological opinion for issuance of an incidental take permit to the City. In the 1997 biological opinion, we concluded that the effects of the City's SAP and level of incidental take were not likely to jeopardize the continued existence of the gnatcatcher. The project will implement all applicable avoidance, minimization, and mitigation measures in their SAP for gnatcatcher. Given that the proposed project is consistent with the City's SAP, we do not anticipate any adverse effects to gnatcatcher that were not previously evaluated in our 1997 biological opinion, and no further consultation on gnatcatcher for this project is necessary pursuant to the Act.

The Quino is known from the project vicinity on Otay Mesa. Service protocol Quino surveys on the project site were conducted in 2004 (Helix 2004), 2005 (Helix 2005), and 2012 (Alden 2013). The entire area was found to be suitable habitat at that time, and no areas were excluded from the surveys. No Quino were found on the project site during the previous surveys. The project impact footprint is dominated by dense non-native grassland, lacks host [e.g. dot seed plantain (*Plantago erecta*)] and nectar [e.g., owl's clover (*Castilleja exserta*) and Chinese houses (*Collinsia heterophylla*)] plants, and is not expected to support Quino breeding. However, the primary Quino host plant dot-seed plantain was observed within the Western Preserve and near the Eastern Preserve, where vernal pool restoration is proposed (Alden 2013). Therefore, these areas may support Quino breeding.



Figure 1. Regional Location.

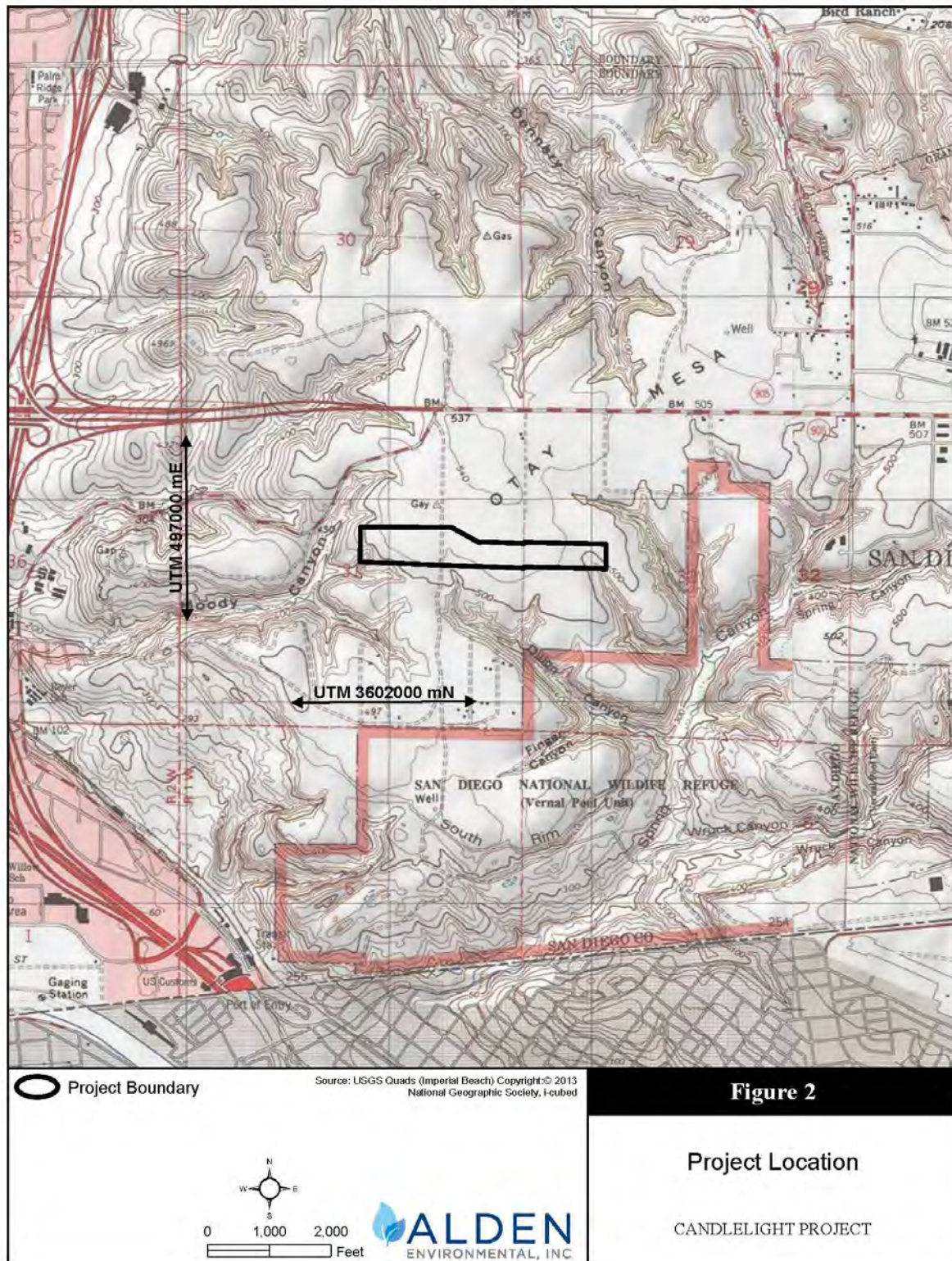


Figure 2. Project Location.

To help ensure that vernal pool restoration does not adversely affect Quino, a pre-construction survey for Quino host and nectar plants will be conducted prior to vernal pool restoration. If Quino host and nectar plants are found, the applicant will work with the Service to develop CMs to avoid and minimize potential impacts to Quino host and nectar plants. In addition, Quino host and nectar plants will be included in the vernal pool restoration plan approved by the Service.

Although the Candlelight TM/PDP/SDP Final Environmental Impact Report (FEIR; City 2018) shows a trail through the Eastern Preserve that could impact Quino and its habitat, this trail will not be built as part of the project and is not addressed in this consultation. Any potential impacts to Quino and its habitat from the trail will need to be addressed through section 7 or 10 of the Act.

Based on the site and species information and the applicant's commitment to implement the CMs above, we concur that all project potential impacts to Quino will be avoided or reduced to a level of insignificance supporting the Corps determination that the proposed project is not likely to adversely affect this species. Therefore, the interagency consultation requirements of section 7 of the Act have been satisfied, and Quino is not addressed in this biological opinion. Should project plans change or if additional information on the distribution of Quino becomes available, this determination may be reconsidered and further section 7 consultation may be required.

This streamlined consultation and conference is based on information provided in: (1) the Corps December 21, 2023, request for consultation; (2) Alden Environmental Inc's (Alden) March 20, 2024, letter to the Corps; (3) Alden's February 12, 2024, letter to the Corps; (4) the 2023 Dry Season Fairy Shrimp Sampling Results Report for the Candlelight Project (2023 dry season report; Alden 2023); (5) the Vernal Pool Establishment and Watershed Restoration Mitigation Plan for the Candlelight Project (RMP; Recon 2022); (6) the Vernal Pool Habitat Management Plan for the Candlelight Project (HMP; Recon 2023); (7) the City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP); (8) Intra-Service Biological Opinion (10B0010-18F1285) for Issuance of an Endangered Species Act Section 10(a)(1)(B) Permit (TE-97791C) for the City of San Diego Vernal Pool Habitat Conservation Plan, City of San Diego, California (2018 biological opinion); (9) City of San Diego Multiple Species Conservation Plan Subarea Plan; (10) Intra-Service Biological and Conference Opinions on the Issuance of an Incidental Take Permit to the City of San Diego pursuant to the Multiple Species Conservation Program (I-6-97-FW-47) (1997 biological opinion); (11) Alden's October 8, 2024, email on the Candlelight Consultation; (12) the Service's June 21, 2010, biological opinion for Formal Section 7 Consultation for the Candlelight Villas Project (Corps 404 File No.200501638-LAM), San Diego County, California (08B0715-08F0817; 2010 biological opinion); (13) Recon's April 4, 2019, letter to Clinton Abrams on the Candlelight 404 Permit Application (SPL-2015-00294-RAG) Fairy Shrimp and Compliance with City of San Diego Vernal Pool Habitat Conservation Plan (RECON Number 8407); (14) the Candlelight FEIR (City 2018); and (15) other sources of information including survey reports, technical reviews, and email correspondence. A complete project file addressing this consultation is maintained at the Carlsbad Fish and Wildlife Office (CFWO).

CONSULTATION/CONFERENCE HISTORY

On June 21, 2010, the Service issued the 2010 biological opinion for construction of the Candlelight Villas Project by a previous applicant (Candlelight Partners, LLC), which includes the prior consultation history. Terms and Conditions 1.1 and 2.1 of the 2010 biological opinion state that if construction of the Candlelight Villas East or West phase of the project is not initiated within 2 years of issuance of the 2010 biological opinion, the Corps and/or applicant will submit documentation to the Service prior to the initiation of project construction demonstrating that the number and distribution of fairy shrimp has not changed.

On July 25, 2016, the Service sent a comment letter on the Draft Environmental Impact Report for the Candlelight Villas Project (Project No. 403329, SCH No. 2013101036) (FWS-SDG-08B0715-16TA0779), which stated that updated fairy shrimp surveys would be needed per Terms and Conditions 1.1 and 2.1 of the 2010 biological opinion. If the number and distribution of pools occupied by San Diego fairy shrimp and Riverside fairy shrimp changes, reinitiation of formal consultation would be required as provided in 50 CFR §402.16.

In May 2017, the Service met on site with the Candlelight Partners, LLC and its consultant to inspect several relatively shallow and small basins found on the property since completion of the 2010 biological opinion that may support San Diego fairy shrimp. At the meeting, the Service recommended either performing updated protocol fairy shrimp surveys or treating the additional basins as occupied by San Diego fairy shrimp¹ to fulfill Terms and Conditions 1.1 and 2.1 of the 2010 biological opinion.

On October 11, 2017, the Service and Candlelight Partners, LLC met and agreed to treat all of the newly found basins as occupied by San Diego fairy shrimp and agreed that no additional protocol fairy shrimp surveys were needed.

On August 3, 2018, the Service issued an incidental take permit under section 10(a)(1)(B) of the Act to the City for their VPHCP.

On April 7, 2020, the Service received an email from the Corps with a letter dated April 6, 2020, requesting streamlined consultation pursuant to the City's VPHCP and on the Candlelight Partners, LLC's re-submitted application to construct the Candlelight Villas project. The Corps' letter confirmed that Candlelight Partners, LLC proposed treating all of the basins as occupied by San Diego fairy shrimp per the previous agreement.

On April 7, 2020, the Service sent an email to the City and Corps requesting documentation/confirmation that the Candlelight Villas project was consistent with and could be covered by the VPHCP.

¹ It was the Service's assessment that these additional basins are likely to support San Diego fairy shrimp since they contain suitable breeding habitat and are in close proximity to similar habitat where San Diego fairy shrimp have been documented.

On April 14, 2020, the Service received an email from the City stating “The applicant has not been in contact with MSCP or resubmitted the project to address comments made in 2019 requesting evidence of compliance with measures outlined in the Biological Opinion (FWS-SDG-08B0715-08F0817) and VPHCP.”

On May 26, 2020, the Service received an email from the Corps stating the applicant and consultant “are working on resubmitting their project to the city to ensure consistency. They will need to show conformity to receive their grading plans and be able to move forward with the project.”

Between June 1 and June 11, 2020, the Service exchanged emails with the Corps (copied to the City) reiterating the need for a consistency determination for the project to complete the streamlined consultation under the VPHCP and again provided the City’s contact information for this.

On December 21, 2023, the Service received an email from the Corps requesting streamlined consultation pursuant to the City’s VPHCP on the Cornerstone Communities Corporation’s (Cornerstone’s) re-submitted application to construct the Candlelight project. The Corps’ letter confirmed that Cornerstone proposed treating all basins as occupied by San Diego fairy shrimp, per the previous agreement.

On January 21, 2024, the Service received an email from the Corps with the 2023 dry season report which confirmed presence of San Diego fairy shrimp cysts in seven of the basins that were previously assumed to support San Diego fairy shrimp.

On January 30, 2024, the Service and Cornerstone representatives met on site and observed spadefoot in pool 16 within the impact footprint and in several basins in the Western Preserve outside the impact footprint. In addition, the Service confirmed that site conditions appeared the same as the last site visit in May 2017, in regards to the number and distribution of basins likely occupied by fairy shrimp.

On February 12, 2024, the Service emailed the Corps a letter requesting additional information to initiate consultation including clarification on: the total acreage and boundaries of the project site and preserves; which RMP should be used; and project impacts and mitigation including those associated with proposed trails. The letter also recommended updated Quino and spadefoot surveys be done and that the Corps consult and conference on these species, respectively.

On February 12, 2024, the Service received an email from Alden, with an attached letter of the same date that included updated biological information for the project.

On April 26, 2024, the Service received an email from the Corps with an attached letter from Alden dated March 20, 2024, with responses to the Service’s February 12, 2024, letter.

Between May and October of 2024, the Service, Cornerstone representatives, and the Corps exchanged emails and met to clarify whether consultation and conference would be conducted

for Quino and spadefoot, whether the suitable basins on the property would be treated as occupied by San Diego fairy shrimp, and to clarify other project details.

On October 8, 2024, the Service received an email from Alden with updated information for the project and agreeing to: treat all basins as occupied by San Diego fairy shrimp per the previous agreement; include pools shown in the Southwest Village BTR; and include consultation and conference on Quino and spadefoot, respectively. The email also provided information on the pools known or assumed to be occupied by spadefoot based on depth and ponding.

On October 15, 2024, the Service received an email from the Corps requesting consultation and conference on Quino and spadefoot, respectively.

On November 25, 2024, the Service sent an email with the draft project description and consultation history to the Corps, applicant, and City, including several changes since the 2010 biological opinion include exclusion an irrevocable offer to dedicate (IOD) area and most of the Southwind project from the project and other changes since the 2010 biological opinion.

On December 10, 2024, the Service sent an email with the draft streamlined consultation/conference to the Corps, applicant, and City.

On December 12, 2024, the Service received an email from Alden with suggested edits which were incorporated into draft streamlined consultation/conference.

CONSULTATION/CONFERENCE OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed action is the issuance of a permit by the Corps to the applicant under section 404 of the Clean Water Act for the project to impact 0.12 acre of palustrine emergent wetland and 0.486 acre of vernal/road pools (pools). The 46.42-acre project site is located south of Airway Road and State Route 905 in the Otay Mesa community of the City (Figures 1 and 2, Table 1). San Ysidro High School is located along the northwestern boundary of the project site, a multi-family residential project abuts the northeastern boundary, and the eastern, southern, and western boundaries abut undeveloped land (Figure 3).

The project consists of residential development, two biological open space preserves (Western Preserve and Eastern Preserve) and public road improvements (Figure 3). The project will impact 25.93 acres on site and 2.52 acres [including 0.82 acre of brush management zone (BMZ) 2] off site (Table 2). The project will provide an access trail, trailhead, and trail improvements outside of the Eastern Preserve, within the development footprint. The Western Preserve will be 15.87 acres, and the Eastern Preserve will be 2.1 acres.

Table 1. Existing Vegetation Communities/Resources.

Community Type	Vegetation Community/Resource	Onsite Impacts	Offsite Impacts	Offsite BMZ 2 ¹	Western Preserve ²	Eastern Preserve ²	Total
Upland	Maritime Succulent Scrub	0.29	-	-	4.73	0.69	5.71
Upland	Non-native Grassland	22.92	0.09	-	10.70	1.26	34.97
Upland	Eucalyptus Woodland	0.70	0.03	-	-	-	0.73
Upland	Disturbed Land	1.40	1.18	0.79	0.43	0.07	3.87
Upland	Developed Land	-	0.33	-	-	-	0.33
Total Upland		25.31	1.63	0.79	15.86	2.02	45.61
Wetland/Jurisdictional Resources	Vernal Pool	0.039	-	-	0.013	0.055	0.107
Wetland/Jurisdictional Resources	Road Pool	0.413	0.034	0.027	-	-	0.474
Wetland/Jurisdictional Resources	Willow-Mulefat	0.08	0.04	-	-	-	0.12
Wetland/Jurisdictional Resources	Freshwater Marsh	0.06	-	-	-	-	0.06
Wetland/Jurisdictional Resources	Ephemeral Drainage	0.03	-	-	-	0.02	0.05
Total Wetland		0.622	0.074	0.027	0.013	0.075	0.811
Total		25.93	1.70	0.82	15.87	2.10	46.42

¹ Brush Management Zone 2 – Impact Neutral.

² On site habitat preserve/mitigation areas.

Project infrastructure improvements include the extension of Caliente Avenue through the Candlelight project site, ending at a new Public Street (Abrams Avenue), running east and west at the southern edge of the site. Within Caliente Avenue, public sewer, storm drain, and water facilities are proposed, along with private sewer facilities. Abrams Avenue will be constructed at the southern end of Caliente Avenue as a two-lane local collector. The project will construct half-width plus 10 feet of roadway, totaling 28 feet of roadway. This will have a full parkway on the north side within the existing right-of-way. Abrams Avenue will provide direct access to the project site. The new intersection of Caliente Avenue and Abrams Avenue will be configured as an all-way stop controlled intersection (prior to the future extension of Caliente Avenue to the south). The project also includes offsite drainage improvements to the south of the western cul-de-sac of Abrams Avenue on Parcel C (now referred to as the Southwind property).

Changes from the 2010 biological opinion for the Candlelight Villas Project include:

Exclusion of an IOD area (Figure 3) and most of the Southwind property, except the western cul-de-sac for Abrams Avenue, and offsite drainage improvements south of the cul-de-sac. The offsite drainage improvements will avoid vernal pool/watershed impacts. Impacts

associated with future development of the IOD area and the rest of the Southwind property will not be mitigated within the Candlelight preserve and will be subject to separate permitting under the City's VPHCP.

Vernal pool 1 was assessed as directly impacted through loss of a major portion of its watershed in the 2010 biological opinion (Figure 3). The watershed for vernal pool 1 was previously mapped as terminating along the existing berm that forms the northern pool boundary. This berm serves as a barrier to what would be a much larger watershed area to the north. At the time of the 2010 biological opinion, the berm was in good condition and provided an effective barrier. In addition, it was anticipated that the entire area north of the pool would be developed. Instead, with the subsequent development of the Southview East project to the north, this potential larger watershed area north of vernal pool 1 has been preserved and placed within a covenant of easement.

Currently, the berm is degraded, and it is evident that water that ponds on the north side is seeping through to vernal pool 1 on the south side. In addition, pool SV-F occurs on the Southview East project site directly to the north of vernal pool 1 and the berm (Figure 2). The current mitigation plan for the Candlelight project involves enhancing vernal pool 1 and removing the berm on its north side. With this action, vernal pool 1 and SV-F will be joined and share a much larger and more functional watershed. Therefore, impacts are no longer being assessed to vernal pool 1.

The 2010 biological opinion also assessed BMZ 2 fuel modification impacts to offsite pools SV36 to 48 and 4 to 6 and direct impacts to offsite pools 7 to 11 from an offsite access road. Offsite pools SV36 to 48 were subsequently impacted by the Southview project and are therefore not included in this consultation (Figure 3). The project has also been redesigned to avoid direct impacts to offsite pools 7 to 11 from the offsite access road. Pools 4 to 11 will be within BMZ 2; however, fuel modification will be conditioned to not occur within the pools consistent with the VPHCP. The fuel modification adjacent to these pools is expected to benefit these pools by removing non-native vegetation within their watersheds. In addition, these pools are expected to be impacted by future development on the adjacent property. Therefore, impacts are not assessed to these pools by the Candlelight project.

In addition, all basins/pools found on the project site since the 2010 biological opinion discussed above are included in the analysis for this biological opinion and treated as occupied by San Diego fairy shrimp.

As discussed in the 2010 biological opinion, based on aerial photographs dating back to 1928, the flat portions of the entire project site, like most of Otay Mesa, appear to have historically supported vernal pool habitat. Also, pools along the project site perimeter appear to have been created during the construction of a berm around the site. All pools remaining on site have been disturbed by past agricultural activities, ongoing off-road vehicle use, and border patrol activities. As a result of these activities, the pools have little to no vernal pool indicator plant species and/or are predominated by nonnative grasses and forbs. The Candlelight project area (including offsite) currently supports 87 pools (0.581 acre), including 82 pools

(0.575 acre) known or treated as occupied by San Diego fairy shrimp, 1 pool (0.171 acre) known to be occupied Riverside fairy shrimp, and 7 pools (i.e., pools 1, 2, 13, 14, 16, 88, and 100; 0.165 acre) known or treated as occupied by spadefoot (Table 2). In addition, four pools in the IOD area (i.e., pools 28, 30, 32 and 34) to be avoided and pools in the San Ysidro High School vernal pool restoration site may also support spadefoot, and it is likely that the upland aestivation habitat for these pools extends onto the project site (Figure 3).

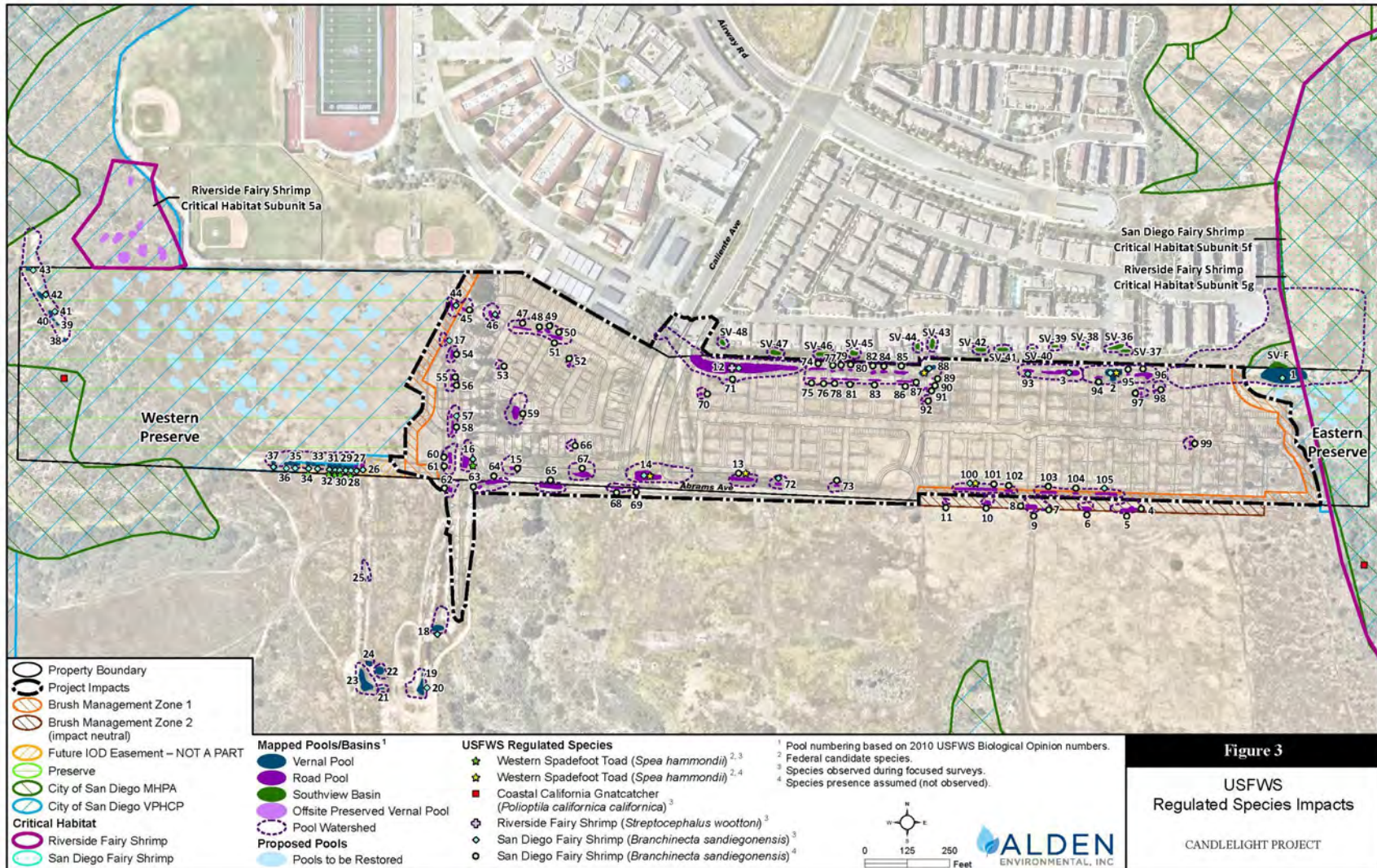


Figure 3. USFWS Regulated Species.

Table 2. Summary of Impacts to Pools.

Basin No.	Type	Impacted	Fairy Shrimp Observed	Fairy Shrimp Assumed	Spadefoot Toad Observed	Spadefoot Toad Assumed	Location	Sq. Ft	Acre
1	VP	No	SD	--	--	Yes	Eastern Preserve	2,415	0.055
2	VP	Yes	SD	--	--	Yes	Impact Footprint	1,010	0.023
3	RP	Yes	SD	--	--	--	Impact Footprint	1,001	0.023
4	RP	No	--	SD	--	--	Offsite BMZ 2	23	0.001
5	RP	No	--	SD	--	--	Offsite BMZ 2	374	0.009
6	RP	No	--	SD	--	--	Offsite BMZ 2	196	0.004
7	RP	No	--	SD	--	--	Offsite BMZ 2	14	0.000
8	RP	No	SD	--	--	--	Offsite BMZ 2	327	0.008
9	RP	No	--	SD	--	--	Offsite BMZ 2	24	0.001
10	RP	No	--	SD	--	--	Offsite BMZ 2	128	0.003
11	RP	No	--	--	--	--	Offsite BMZ 2	26	0.001
12	RP	Yes	SD, RS	--	--	--	Onsite Impact	7,442	0.171
13	RP	Yes	--	SD	--	Yes	Onsite Impact	524	0.012
14	RP	Yes	SD	--	--	Yes	Onsite Impact	1,533	0.035
15	RP	Yes	--	SD	--	--	Onsite Impact	10	0.000
16	RP	Yes	SD	--	Yes	--	Onsite Impact	488	0.011
17	RP	Yes	SD	--	--	--	Onsite Impact	33	0.001
36	VP	No	SD	--	--	--	Western Preserve	87	0.002
37	VP	No	SD	--	--	--	Western Preserve	62	0.001

Basin No.	Type	Impacted	Fairy Shrimp Observed	Fairy Shrimp Assumed	Spadefoot Toad Observed	Spadefoot Toad Assumed	Location	Sq. Ft	Acre
38	VP	No	--	--	--	--	Western Preserve	58	0.001
39	VP	No	--	--	--	--	Western Preserve	30	0.001
40	VP	No	--	--	--	--	Western Preserve	27	0.001
41	VP	No	--	--	--	--	Western Preserve	62	0.001
42	VP	No	SD	--	--	--	Western Preserve	157	0.004
43	VP	No	--	--	--	--	Western Preserve	93	0.002
44	RP	Yes	SD	--	--	--	Onsite Impact	123	0.003
45	RP	Yes	--	SD	--	--	Onsite Impact	71	0.002
46	RP	Yes	SD	--	--	--	Onsite Impact	125	0.003
47	RP	Yes	--	SD	--	--	Onsite Impact	163	0.004
48	RP	Yes	--	SD	--	--	Onsite Impact	51	0.001
49	RP	Yes	--	SD	--	--	Onsite Impact	109	0.003
50	RP	Yes	--	SD	--	--	Onsite Impact	101	0.002
51	RP	Yes	--	SD	--	--	Onsite Impact	84	0.002
52	RP	Yes	--	SD	--	--	Onsite Impact	36	0.001
53	RP	Yes	--	SD	--	--	Onsite Impact	13	0.000
54	RP	Yes	--	SD	--	--	Onsite Impact	140	0.003
55	RP	Yes	--	SD	--	--	Onsite Impact	70	0.002
56	RP	Yes	--	SD	--	--	Onsite Impact	41	0.001

Basin No.	Type	Impacted	Fairy Shrimp Observed	Fairy Shrimp Assumed	Spadefoot Toad Observed	Spadefoot Toad Assumed	Location	Sq. Ft	Acre
57	RP	Yes	SD	--	--	--	Onsite Impact	51	0.001
58	RP	Yes	--	SD	--	--	Onsite Impact	133	0.003
59	RP	Yes	--	SD	--	--	Onsite Impact	575	0.013
60	RP	Yes	--	SD	--	--	Onsite Impact	255	0.006
61	RP	Yes	--	SD	--	--	Onsite Impact	40	0.001
62	RP	Yes	--	SD	--	--	Offsite Impact	117	0.003
63	RP	Yes	--	SD	--	--	Offsite Impact	72	0.002
64	RP	Yes	--	SD	--	--	Offsite Impact	456	0.010
65	RP	Yes	--	SD	--	--	Offsite Impact	635	0.015
66	RP	Yes	--	SD	--	--	Onsite Impact	17	0.000
67	RP	Yes	--	SD	--	--	Onsite Impact	511	0.012
68	RP	Yes	--	SD	--	--	Offsite Impact	131	0.003
69	RP	Yes	--	SD	--	--	Offsite Impact	23	0.001
70	RP	Yes	--	SD	--	--	Onsite Impact	61	0.001
71	RP	Yes	--	SD	--	--	Onsite Impact	32	0.001
72	RP	Yes	SD	--	--	--	Onsite Impact	109	0.003
73	RP	Yes	--	SD	--	--	Onsite Impact	79	0.002
74	RP	Yes	--	SD	--	--	Onsite Impact	198	0.005
75	RP	Yes	--	SD	--	--	Onsite Impact	66	0.002

Basin No.	Type	Impacted	Fairy Shrimp Observed	Fairy Shrimp Assumed	Spadefoot Toad Observed	Spadefoot Toad Assumed	Location	Sq. Ft	Acre
76	RP	Yes	--	SD	--	--	Onsite Impact	57	0.001
77	RP	Yes	--	SD	--	--	Onsite Impact	42	0.001
78	RP	Yes	--	SD	--	--	Onsite Impact	84	0.002
79	RP	Yes	--	SD	--	--	Onsite Impact	47	0.001
80	RP	Yes	--	SD	--	--	Onsite Impact	51	0.001
81	RP	Yes	--	SD	--	--	Onsite Impact	157	0.004
82	RP	Yes	--	SD	--	--	Onsite Impact	111	0.003
83	RP	Yes	--	SD	--	--	Onsite Impact	114	0.003
84	RP	Yes	--	SD	--	--	Onsite Impact	101	0.002
85	RP	Yes	--	SD	--	--	Onsite Impact	271	0.006
86	RP	Yes	--	SD	--	--	Onsite Impact	148	0.003
87	RP	Yes	--	SD	--	--	Onsite Impact	13	0.000
88	VP	Yes	SD	--	--	Yes	Onsite Impact	699	0.016
89	RP	Yes	--	SD	--	--	Onsite Impact	12	0.000
90	RP	Yes	--	SD	--	--	Onsite Impact	18	0.000
91	RP	Yes	--	SD	--	--	Onsite Impact	42	0.001
92	RP	Yes	--	SD	--	--	Onsite Impact	18	0.000
93	RP	Yes	SD	--	--	--	Onsite Impact	163	0.004
94	RP	Yes	--	SD	--	--	Onsite Impact	81	0.002

Basin No.	Type	Impacted	Fairy Shrimp Observed	Fairy Shrimp Assumed	Spadefoot Toad Observed	Spadefoot Toad Assumed	Location	Sq. Ft	Acre
95	RP	Yes	--	SD	--	--	Onsite Impact	34	0.001
96	RP	Yes	--	SD	--	--	Onsite Impact	496	0.011
97	RP	Yes	--	SD	--	--	Onsite Impact	49	0.001
98	RP	Yes	--	SD	--	--	Onsite Impact	25	0.001
99	RP	Yes	--	SD	--	--	Onsite Impact	46	0.001
100	RP	Yes	SD	--	Yes	--	Onsite Impact	583	0.013
101	RP	Yes	--	SD	--	--	Onsite Impact	109	0.002
102	RP	Yes	--	SD	--	--	Onsite Impact	121	0.003
103	RP	Yes	--	SD	--	--	Onsite Impact	257	0.006
104	RP	Yes	--	SD	--	--	Onsite Impact	68	0.002
105	RP	Yes	SD	--	--	--	Onsite Impact	346	0.008
Total Pool Area	--	--	--	--	--	--		25,194	0.581
Total Pool/SD Fairy Shrimp Impacts	--	--	--	--	--	--		21,091	0.486
Total Pool/RS Fairy Shrimp Impacts	--	--	--	--	--	--		7,442	0.171
Total Pool Spadefoot Impacts	--	--	--	--	--	--		4,837	0.111

The Candlelight project will impact 70 pools (0.486 acre), all of which are known or treated as occupied by San Diego fairy shrimp, 1 pool (0.171 acre) that is also occupied by Riverside fairy shrimp, and 6 pools (0.111 acre) that are also known treated as occupied by spadefoot.

Conservation Measures for San Diego Fairy Shrimp and Riverside Fairy Shrimp

The Candlelight project includes the following Conservation Measures (CM) that will be implemented as part of the project in order to avoid, minimize, and offset potential adverse effects of the action on San Diego fairy shrimp and Riverside fairy shrimp (fairy shrimp).

The Candlelight project will offset impacts to pools at a 2:1 ratio by restoring a minimum of 0.972 acre of vernal pools in the Western and Eastern Preserves (preserves; Figure 3). The Candlelight project will also enhance 9 pools (0.07 acre) in the preserves. Vernal pool 1 and its surrounding uplands in the Eastern Preserve will be enhanced to improve the likelihood that this pool is sustained over the long term. Enhancement activities will include removing trash, debris, and the failing berm to the north of the pool. Removing the berm will join vernal pool 1 with pool SV-F and restore the natural watershed of the pool on the adjacent Southview property and will create approximately 0.02 acre of additional vernal pool surface area, increasing the size of this vernal pool to 0.07 acre. All restored pools, and enhanced pools as appropriate, will be inoculated/planted with vernal pool indicator plant species and fairy shrimp cysts. In addition, the pool watersheds and surrounding uplands in the preserves will be restored with maritime succulent scrub.

All of the restored pools will be required to support reproducing San Diego fairy shrimp populations, and 0.342 acre of the pools will be required to support reproducing Riverside fairy shrimp populations. A surplus of vernal pools may be restored to provide a contingency in case some pools do not attain the identified final success criteria. Upon project completion, preserved biological open space will total approximately 17.97 acres in the Western Preserve (15.87 acres) and the Eastern Preserve (2.1 acres) in the MHPA established by the City's SAP and VPHCP.

The project will implement all avoidance and minimization measures in section 5.2.1 of the VPHCP. The applicant will also submit to the Service and City for approval an addendum to the RMP that includes updated fairy shrimp impact/offset information consistent with this streamlined consultation, and all the requirements of section 5.3.2 of the VPHCP, including, but not limited to, all final specifications, and topographic-based grading, planting, and watering plans shall have 0.5-foot contours for the vernal pools, watersheds, and surrounding uplands (including adjacent mima mounds) at the restoration/enhancement sites.

The 17.97-acre on site preserves have been placed in a covenant of easement and will be managed and monitored in perpetuity according to the HMP, consistent with section 8.2 of the VPHCP.

The VPHCP was established to minimize and mitigate habitat loss and impacts to seven covered species in association with specific projects and activities covered by the plan. Fairy shrimp are covered species under the VPHCP. The project is within the VPHCP boundary, is consistent with the VPHCP, and includes all applicable CMs in the VPHCP to avoid and minimize potential adverse effects to the fairy shrimp.

The status of fairy shrimp and the effects of implementing the VPHCP were previously addressed in our 2018 biological opinion for issuance of an incidental take permit to the City. In the 2018 biological opinion, we concluded that the effects of the VPHCP and level of incidental take were not likely to jeopardize the continued existence of the fairy shrimp. Given that the proposed project is consistent with the VPHCP, we do not anticipate any adverse effects to the fairy shrimp that were not previously evaluated in our 2018 biological opinion. Thus, no incidental take and/or adverse effects beyond those anticipated in the 2018 biological opinion will occur as a result of the proposed action, and no further consultation pursuant to the Act is necessary for fairy shrimp.

By this consultation, we are extending to the Corps the incidental take exemption for fairy shrimp already provided to the City through their incidental take permits for their Subarea Plan and VPHCP. Extension of this take exemption to the Corps is limited to the proposed action described in this consultation for activities that are consistent with the City's VPHCP and incidental take permit.

The applicant and/or City will provide documentation that the Candlelight project is covered/permitted under the VPHCP to the Service prior to initiating project construction.

Conservation Measures for Spadefoot

The CMs listed above for fairy shrimp will also be implemented as appropriate to avoid, minimize, and offset potential adverse effects of the action on spadefoot. Impacts to six pools (0.111 acre) known or treated as occupied by spadefoot will be offset at a 2:1 ratio by restoring 0.222 acre of pools supporting reproducing spadefoot. Vernal Pool 1 is likely occupied by spadefoot, so enhancement of this pool is also expected to benefit spadefoot. The vernal pool restoration and enhancement plan and preserve monitoring and management plan will also address spadefoot and may include spadefoot capture/translocation to help establish populations in the restored or enhanced vernal pools.

The Candlelight project also includes the following additional CMs (project activities in CMs include but are not limited to vegetation clearing, grading, soil stockpiling, trenching, hole digging, foot and vehicle traffic, construction, restoration, and enhancement):

- CM 1. Project activities in potential aestivation habitat within 1,600 feet of the 11 pools that are known to be or treated as occupied by spadefoot (i.e., pools 1, 2, 13, 14, 16, 28, 30, 32, 34, 88, and 100), as well as the pools within the adjacent San Ysidro High School vernal pool preserve area will take place from approximately December 1 through June 30 (depending upon seasonal rains) during the spadefoot breeding season when the species is typically more active and closer to breeding habitat.
- CM 2. Project activities within pools 1, 2, 13, 14, 16, 88, and 100 will take place from approximately July 1 through November 30 to avoid the spadefoot breeding season. Project activities will be timed so that work within these pools is

conducted when they are dry and no adults or recent metamorphs/toadlets are present in cracked soil.

- CM 3. Prior to initiating project activities, spadefoot exclusionary fencing will be installed around the impact footprint. The required perimeter silt fencing for stormwater erosion/sedimentation control will serve as the exclusionary fence. A qualified biologist knowledgeable of spadefoot biology and ecology and approved by the Service will ensure that there are no gaps in the silt fence between the spadefoot pools and project development area. All fencing will be removed following completion of all project activities. Ingress and egress of equipment and personnel will use a single access point to the site, which shall be as narrow as possible and closed off by exclusionary fence when personnel are not on the work site. The applicant will submit a plan and photographs of the fenced limits to the Service for approval at least 5 working days prior to initiating project activities.
- CM 4. Prior to initiating project activities, but after exclusionary fence has been installed around the impact footprint, surveys for spadefoot of any life stage will be conducted within the fenced area by the qualified biologist. The biologist will conduct at least three consecutive nightly surveys, and surveys will continue until there have been three consecutive nights without a detection. Surveys will be conducted during the appropriate climatic conditions during the appropriate time of day or night to maximize the likelihood of encountering western spadefoot. If the fencing is damaged, gaps are present, or there is sign of spadefoots, the biologist will repeat surveys. The biologist will capture and translocate any spadefoot found to the closest area of suitable habitat at least 200 feet from the work site. Work in the fenced areas will not begin until authorized by the biologist.
- CM 5. Stockpiled soils, holes, or trenches will be covered with plastic, plates, or other material at the end of each workday. Any covered stockpile, hole, or trench edges will be held in place by sandbag, fabric-wrapped wattles, or hydromulch to avoid creating an attractive nuisance and to prevent spadefoot from becoming trapped.
- CM 6. During the initial soil disturbance and rough grading period, the qualified biologist will be present each morning before construction begins to inspect all spadefoot exclusionary fencing for damage or holes, conduct a sweep of the work area for spadefoot, inspect any covered stockpiles, holes, or trenches for gaps or sign that spadefoot individuals have accessed the soils underneath and will be present when these covers are removed. The biologist will capture and translocate any spadefoot found to the closest area of suitable habitat at least 200 feet from the work site. Work in the fenced areas will not begin until authorized by the biologist.
- CM 7. Nighttime construction will be avoided in or within 1,600 feet of pools 1, 2, 13, 14, 16, 28, 30, 32, 34, 88, and 100.
- CM 8. Contractors will control dust with water and not palliatives.

- CM 9. Construction personnel will secure food and food-related trash items in sealed containers and remove the containers from the job site at the end of each day.
- CM 10. During the initial soil disturbance and rough grading period, the biologist will submit weekly letter reports (including photographs of fenced areas) via email to the Service during project activities in or within 1,600 feet of pools 1, 2, 13, 14, 16, 28, 30, 32, 34, 88, and 100. The report frequency will be reduced to monthly once the entire site has been rough graded. The weekly reports will document that authorized impacts were not exceeded and general compliance with all CMs. The reports will also outline the duration of spadefoot monitoring, the location of project activities, the type of construction that occurred, and equipment used. These reports will specify numbers, locations, and sex of any spadefoot captured and where they were translocated to. Raw field notes will be available upon request by the Service.
- CM 11. The addendum to the RMP will also include impacts/offset information, restoration/enhancement methods (depth/duration of ponding required in pool design, circumstances and methods for salvage/capture and translocation of spadefoot), success criteria, and monitoring for spadefoot consistent with this conference opinion and applicable requirements of section 5.3.2 of the VPHCP. The applicant will also submit an addendum to the HMP that includes management and monitoring of spadefoot consistent with this conference opinion and applicable requirements of section 7 of the VPHCP. If salvage/capture and translocation of spadefoot is proposed during the 5-year vernal pool restoration/enhancement period and/or during HMP management to help establish/maintain populations in the restored or enhanced vernal pools, the applicant will work with the Service to develop additional CMs to avoid and minimize potential impacts prior to initiating these activities.

Action Area

Regulations implementing the Act (50 CFR § 402.02) describe the action area as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area. The action area for the proposed project has been defined as the approximately 46.42-acre project footprint (Table 1).

ANALYTICAL FRAMEWORK FOR THE SECTION 7(A)(2) DETERMINATIONS

Jeopardy Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a

listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this conference opinion relies on four components: (1) the Status of the Species, which describes the range-wide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the Effects of the Action, which are all consequences to listed species caused by the proposed action that are reasonably certain to occur; and (4) the Cumulative Effects, which evaluate the effects of future, non-Federal activities in the action area on the species.

For the section 7(a)(2) determination regarding jeopardizing the continued existence of the species, the Service begins by evaluating the effects of the proposed Federal action and the cumulative effects. The Service then examines those effects against the current status of the species to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the species in the wild.

STATUS OF THE SPECIES

Species Description

The spadefoot is a small (approximately 1.5 to 2.5 inch), dusky green to gray Anuran (frogs and toads order) of the family *Scaphiopodidae*. The spadefoot may have four irregular, light-colored stripes on the back, skin tubercles tipped with orange or red, and a whitish to light gray venter lacking markings (Stebbins 2003). Spadefoots are distinguished from true toads (genus *Bufo*) by their vertically elliptical pupils, the presence of a wedge-shaped, glossy black spade on their hind feet, lack of parotoid gland, presence of teeth in their jaws, and rather smooth skin. The vocalization of the spadefoot is hoarse or snore-like and approximately 0.50 to 1 second in duration (Stebbins 2003).

Habitat Affinities

Spadefoot may be found in coastal sage scrub, chaparral, and grasslands habitats, but it is most common in grasslands or mixed grassland/coastal sage scrub with vernal pools and areas of open vegetation and short grasses where the soil is sandy or gravelly (Holland and Goodman 1998). Within these habitats, spadefoot requires rain pools with water temperatures between 48 degrees and 86 degrees Fahrenheit (°F), in which to reproduce (Brown 1966, 1967), and that persist with more than 3 weeks of standing water (Feaver 1971), in which to metamorphose successfully. Additionally, according to Holland and Goodman (1998), riparian habitats with suitable water resources may also be used. Rain pools must lack fish, bullfrogs, and crayfish for spadefoots to successfully reproduce and metamorphose (Jennings and Hayes 1994). Though not observed specifically for this taxon, soil characteristics of burrow refuge sites likely become hard and compact during the period of summer aestivation (Ruibal *et al.* 1969; Jennings and Hayes 1994). Spadefoots aestivate in upland habitats adjacent to potential breeding sites in burrows approximating 3.3 feet in depth (Stebbins 1972). The distance that spadefoots travel from aquatic resources for

dispersal, foraging, and aestivation has wide spatiotemporal variation. Halstead *et al.* (2021) found adult spadefoot home ranges to be from <1 acre to >15 acres, with most individuals found within 1,594 feet of their breeding pool; the maximum observed distance from a breeding pool was 1,972 feet, but during another study by Baumberger *et al.* (2019) at the same location during a dry year, the maximum distance observed was only 860 feet.

Life History

Spadefoot tadpoles consume planktonic organisms and algae, but they are also carnivorous and will forage on dead vertebrates and invertebrates (Bragg 1964). Also, spadefoot tadpoles are known to pursue and eat fairy shrimp (Bragg 1962).

Adult spadefoots are known to consume butterfly and moth larvae, beetles, termites, and ants (Dimmitt and Ruibal 1980a). Additional food items include crickets, flies, ants, earthworms, and other invertebrates (Stebbins 1972). Spadefoots can consume approximately 11 percent of their body mass at a single foraging event (Dimmitt and Ruibal 1980a).

Spadefoots are almost entirely nocturnal (Holland and Goodman 1998), with most above ground movement and breeding occurring during rainy nights (Ziener *et al.* 1988). Typically, spadefoots are not found above the surface; instead, they are found in underground burrows for most of the year (Stebbins 1972). Spadefoots remain underground 8 to 10 months of the year (Jennings and Hayes 1994; Holland and Goodman 1998; Storey *et al.* 1999), following which adults emerge from underground burrows during relatively warm (≥ 50 degrees to 55°F) rainfall events to breed, typically from January through March; however, they may also emerge in any month between October and April if rain thresholds are met (Stebbins 1972; Morey and Guinn 1992; Jennings and Hayes 1994; Holland and Goodman 1998).

Spadefoots typically breeds during the winter and spring (January through May), usually in ephemeral ponds and vernal pools, with water temperatures between 48 and 86°F (State of California 2006). During the dry season, spadefoots live beneath the soil surface in burrows in upland habitats adjacent to the pools. After periods of warm rains, spadefoots emerge from burrows and form explosive and sometimes large ($>1,000$ individuals; Jennings and Hayes 1994) aggregations. This typically occurs in late-winter and early-spring, but such events may also occur during the fall (Storer 1925; Feaver 1971; Jennings and Hayes 1994). Holland and Goodman (1998) note that breeding efforts are probably tied to the amount of rainfall. A single female spadefoot may lay more than 500 eggs in one season (Stebbins 1951). Eggs are deposited in irregular small clusters of 10–42 eggs, about 9.8 to 11.8 inches in diameter (Holland and Goodman 1998), attached to vegetation or debris (Storer 1925) in shallow temporary pools or sometimes ephemeral stream courses (Stebbins 1985; Jennings and Hayes 1994). The spadefoot exhibits numerous adaptations for breeding in temporary pools: rapid embryonic and larval development, tadpole cannibalism, production of growth inhibitors by tadpoles, and high heat tolerance of tadpoles (Low 1976). Larval development can be completed in 3 to 11 weeks depending on food resources and temperature (Service 2023).

Status and Distribution

The spadefoot is a California near endemic, ranging from Shasta County southward into Baja California (Stebbins 1985). This species occurs west of the coastal ranges, southward from Point Conception to northern Baja California, Mexico, and northward in the Central Valley and southern Coast Ranges of California (Zeiner *et al.* 1988). Its known elevation range extends from near sea level to 4,921 feet (Zeiner *et al.* 1988; Ervin *et al.* 2001). Estimates of loss of historical habitat range from 30 percent in northern California to 80 percent in southern California (Jennings and Hayes 1994).

The range of the spadefoot in San Diego County may closely follow the vernal pool habitat along the coast and foothills, including areas such as Otay Mesa, Kearny Mesa, Del Mar Mesa, and Ramona. They are also found distributed along many drainages, including portions of the San Luis Rey, San Dieguito, and Santa Margarita rivers; the Santa Maria and Santa Ysabel creeks; and various tributaries and areas of pooling water.

Protocol surveys for spadefoot were conducted by the U.S. Geological Survey (USGS) throughout much of southern California in 2016, 2019, and 2020 (Baumberger *et al.* 2020). Spadefoots were detected at 55 of 239 historic pool locations (23 percent); 22 of the pools no longer exist; and 47 of the pools were dry at the time of surveys, despite average to above average rainfall. The USGS rapid assessment could indicate that other climatic variables such as temperature are limiting pool inundation to less than the 30 days required for larval development (Baumberger *et al.* 2020).

Using a species distribution model, Rose *et al.* (2022) graded the remaining suitable spadefoot habitat in southern California into four categories of predicted probability of occupancy: very low (0–0.1), low (0.1–0.3), medium (0.3–0.5), and high (≥ 0.5). There is an estimated 512,250 acres of high-quality, 634,814 acres of medium-quality, 1,592,594 acres of low-quality, and 4,413,796 acres of very low-quality habitat remaining for spadefoot in southern California (Rose *et al.* 2022).

The Service published a Species Status Assessment (SSA) in 2023 for the spadefoot (Service 2023). In the Central San Diego Region, the overall current condition of spadefoot was rated as Low-Moderate (1.62); with habitat quantity/distribution and habitat quality rating High, rainfall rating Moderate, and abundance rating Low. There must be an estimated 12 spadefoot local populations in the Central San Diego region for the species to be in a high condition of resiliency; any occurrences falling within a 3,281-foot buffer of each other were identified as part of the same local population. As of 2023, there was estimated to be 110 spadefoot local populations in Central San Diego, with 33 of the local populations existing on conserved land. The number of effective breeders present per local population was estimated to be only 3.8 in Central San Diego (Service 2023).

Threats and Conservation Needs

Spadefoots are threatened by urbanization, road construction, off-road vehicular traffic, illegal dumping, livestock grazing, and other edge effects that degrade habitat quality. The continued

placement of mosquito fish by mosquito abatement programs in rain pools threatens some populations (Jennings and Hayes 1994). Bullfrogs emigrating into rain pool breeding sites may also pose a threat (Hayes and Warner 1985; Morey and Guinn 1992). By far the largest threat is continued conversion of habitat in southern California. Grazing, off-road vehicles, mining, and projects that impact fluvial processes in burrow areas have a significant impact on local populations. Emergence from dormancy depends on low frequency sound caused by rainfall events, but work completed by Dimmitt and Ruibal (1980b) showed that the vibration caused by an electric motor consistently induced 100 percent emergence from dormancy under very arid conditions.

ENVIRONMENTAL BASELINE

The regulations implementing the Act (50 CFR § 402.02) define the environmental baseline as the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The impacts to listed species or designated critical habitat from Federal agency activities or existing Federal agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR § 402.02).

Site Characteristics and Surrounding Land Uses

The 46.42-acre project site consists mainly of a mesa top previously used for agriculture that is undeveloped and supports mainly nonnative/disturbed habitats (Table 1). Soils on the mesa top consist of Olivenhain cobbly loam, Stockpen gravelly clay loam, and Huerhuero loam (Bowman 1973), which typically support vernal pools when they occur in flat areas like Otay Mesa. Historic aerial photographs of the site dating back to 1928 show mima mound features typically associated with vernal pool habitat on Otay Mesa. However, the majority of the property has been actively farmed (i.e., disked and tilled) from approximately 1955 to 2004. The past farming appears to have removed most of the historic mima mound topography which likely supported vernal pools on project site.

In addition, earthen berms and associated roads have been constructed along the site property boundaries in all directions to restrict access and illegal dumping. Based on the historic aerial photographs, it appears that the berms were constructed sometime between 1995 and 1997.

Construction of the berms and roads has altered the drainage patterns so that the only remnants of the past vernal pool habitat on site occur in depressions in the roads and/or near the bases of the berms, and not in a natural configuration among mima mounds. The project site currently supports 0.107 acre of vernal pools and 0.474 acre of road pools (i.e., no vernal pool vegetation) that have been subject to impacts from OHV and illegal dumping. In addition, many of the pools are slowly filling in with soil as the constructed berms erode.

Status of Spadefoot in the Action Area

Spadefoot were observed in one pool (i.e., pool 16) within the project impact footprint (Figure 3). Most of the basins within the project footprint appear too shallow and/or do not hold water long enough to support spadefoot breeding activities. Based on their depth and anticipated ponding duration, an additional six pools (i.e., pools 1, 2, 13, 14, 88, and 100) within the project site are also treated as occupied by the species (Figure 3). Therefore, a total of seven pools with a combined area of 0.165 acre are known to be or treated as occupied by spadefoot in the action area (Figure 3; Table 2). Additional known and potential spadefoot breeding pools also occur in the IOD area and San Ysidro High School vernal pool mitigation site (Figure 3).

Because the entire project site is within potential dispersal distance from known or assumed breeding pools, the remaining 43.74 acres of habitat on the project site may support low quality aestivating spadefoot outside the breeding season.

EFFECTS OF THE ACTION

Regulations implementing the Act (50 CFR § 402.02) define the effects of the action as all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR § 402.17).

The regulations for section 7(a)(2) note that “a conclusion of reasonably certain to occur must be based on clear and substantial information, using the best scientific and commercial data available” [50 CFR § 402.17(a)]. When considering whether activities caused by the proposed action (but not part of the proposed action) or activities reviewed under cumulative effects are reasonably certain to occur, we consider factors such as (1) past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action; (2) existing plans for the activity; and (3) any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

Project impacts include ground disturbance from operation of equipment and staging, spread of invasive weeds, which could occur after construction is completed, impacts to aquatic resources located outside the project footprint, and increased noise, and artificial illumination.

Habitat Loss and Death or Injury of Individuals

The Candlelight project will permanently impact pools 2, 13, 14, 16, 88, and 100 (0.111 acre) that are known to be or treated as occupied by breeding spadefoot (Table 2). The project will also permanently impact approximately 27.53 acres of low-quality potential spadefoot aestivating habitat (Table 3). Vernal pool restoration grading will also temporarily impact approximately 9.9 acres of low-quality potential aestivating habitat and permanently convert 0.96 acre of potential low-quality aestivating habitat into high-quality breeding habitat, within the preserves.

To offset these impacts, the project will restore and enhance 0.222 acre and 0.07 acre of spadefoot vernal pool habitat, respectively, in the preserves according to an Addendum to the RMP approved by the Service (CM 11). The pool watersheds in the preserves will also be restored with native habitat. Therefore, the proposed project will result in a net gain of high-quality spadefoot breeding and aestivation habitat in the preserves that will be conserved in a Covenant of Easement and managed and monitoring in perpetuity according to an Addendum to the HMP approved by the Service (CM 11).

Table 3. Impacts to Vegetation Communities^{1,2}

Community Type	Vegetation Community/Resource	On-Site	Off-Site	Total
Upland	Maritime Succulent Scrub	0.29	-	0.29
Upland	Non-native Grassland	22.92	0.09	23.01
Upland	Eucalyptus Woodland	0.70	0.03	0.73
Upland	Disturbed Land	1.40	1.18	2.58
Upland	Developed Land	-	0.33	0.33
Subtotal Uplands		25.31	1.63	26.94
Wetland ³	Vernal Pool	0.039	-	0.039
Wetland ³	Road Pool	0.413	0.034	0.447
Wetland ³	Willow-Mulefat	0.08	0.04	0.12
Wetland ³	Freshwater Marsh	0.06	-	0.06
Wetland ³	Ephemeral Drainage	0.03	-	0.03
Subtotal Wetlands		0.62	0.07	0.70
Total		25.93	1.70	27.64

¹ Numbers are in acres and reflect rounding.

² All impacts are outside of the MHPA and VPHCP conservation area.

³ Wetland³ reflects vegetation mapping and not agency jurisdiction.

Mortality or injury could occur to individuals during project activities, including but not limited to, vegetation clearing, grading, soil stockpiling, trenching, hole digging, foot and vehicle traffic, construction, restoration, and enhancement. Operation of equipment or vehicles and foot traffic over friable soil could collapse occupied burrows, potentially killing or injuring individuals burrowed in the substrate. In addition, vibration from operating equipment could collapse nearby burrows leading to mortality or injury. Finally, individuals could be crushed by equipment, vehicles, or foot traffic if they are above ground during project activities.

The project includes CMs to avoid and minimize mortality or injury to spadefoots. Project activities in spadefoot aestivating habitat will be limited to the rainy season, when spadefoots are most likely to have migrated to breeding habitat (CM 1), and work in breeding habitat will be limited to when pools are dry and no adults or recent metamorphs/toadlets are present in cracked soil (CM 2). Prior to initiating project activities, spadefoot exclusionary fencing will be installed around the impact footprint (CM 3). The required perimeter silt fencing for stormwater

erosion/sedimentation control will serve as the exclusionary fence. A qualified biologist knowledgeable of spadefoot biology and ecology and approved by the Service, will ensure that there are no gaps in the silt fence between the spadefoot pools and project development area. Ingress and egress of equipment and personnel will use a single access point to the site, which shall be as narrow as possible and closed off by exclusionary fence when personnel are not on the work site (CM 3). Prior to initiating project activities, but after exclusionary fence has been installed around the impact footprint, surveys for spadefoot of any life stage will be conducted within the fenced area by the qualified biologist (CM 4). The biologist will capture and translocate any spadefoot found to the closest area of suitable habitat at least 200 feet from the work site. Work in the fenced areas will not begin until authorized by the biologist. Stockpiled soils, holes, or trenches will be covered with plastic, plates, or other material at the end of each workday (CM 5). During the initial soil disturbance and rough grading period, the qualified biologist will be present each morning before construction begins to inspect all spadefoot exclusionary fencing for damage or holes, conduct a sweep of the work area for spadefoot, inspect any covered stockpiles, holes, or trenches for gaps or sign that spadefoot individuals have accessed the soils underneath and will be present when these covers are removed (CM 6). Nighttime construction will be avoided (CM 7).

The precise number of spadefoots that will be killed or injured is not possible to estimate and will be difficult to track because the number of individuals is likely to vary greatly depending on whether spadefoots have successfully bred in pools near the project site recently and on environmental conditions at the time the project is implemented. In addition, during much of the year, spadefoots are aestivating underground and will not be visible during construction activities. The effects of project-related habitat loss and mortality on spadefoot toad recovery is discussed in more detail in the “Effect on Recovery” section below.

Capture and Translocation

Capture and translocation have the potential to effectively minimize death and injury of spadefoots during project construction. Toads often release their bladder contents upon capture (Stebbins and McGinnis 2012) and may experience increased stress levels; these responses could reduce spadefoot survival and reproduction following capture and translocation. However, foraging and aestivating spadefoots are not known to be territorial, so individuals have the potential to continue foraging or aestivating without substantial disruption following translocation.

We have little data on the proportion of spadefoots likely to be captured within the proposed exclusion areas. However, due to implementation of proposed CMs, including work windows (CM 1 and 2), we believe that very few spadefoots should be present in work areas. Capture and translocation efforts will be conducted by a qualified biologist familiar with spadefoot biology and ecology approved by the Service (CM 3), and few adult or juvenile spadefoots (if any) are anticipated to be captured and translocated. If capture and translocation of spadefoot is proposed during the 5-year vernal pool restoration/enhancement period or during the HMP management to help establish/maintain populations in the restored or enhanced vernal pools, the applicant will work with the Service to develop additional CMs to avoid and minimize potential impacts prior to initiating these activities (CM11).

Because of the dramatic fluctuations in the numbers and densities of individual spadefoots of different life history stages on a seasonal and annual basis, it is not possible to quantify exactly how many spadefoots will be captured and translocated. We are not limiting the number of spadefoots that will be captured and translocated pursuant to this conference since this is CM intended to move individuals out of harm's way. However, the number of spadefoots captured and translocated will be reported to the Service (CM 10). Although spadefoots could be killed, injured, or stressed during capture and translocation, capture and translocation will minimize the likelihood that spadefoots will be killed or injured during implementation of project activities.

Noise, Artificial Light, Dust, and Human Activity during Construction

Low frequency noise generated by equipment may cause individuals to stop aestivating and emerge from burrows at inappropriate times (Dimmitt and Ruibal 1980b; Service 2005; Ouren *et al.* 2007). Emerging during dry periods could result in mortality because the species depends on moisture inside of burrows to survive hot and dry summers (Ruibal *et al.* 1969; Dimmitt and Ruibal 1980b). In addition, motion from equipment operation and foot traffic may agitate individuals during natural migrations, causing them to deviate from their normal dispersal patterns. Capture and translocation of spadefoot out of the impact footprint is expected to minimize the potential for noise and motion from equipment operation and foot traffic to impact spadefoot (CM 3).

Artificial illumination generated by nighttime construction may negatively affect individual spadefoots. Frog eyes typically adapt to the brightest available source of illumination. After eyes become adapted to the single source, frogs may have difficulty migrating through areas with varying sources of illumination and shadows (Perry *et al.* 2008). This type of reduced visual capability may interfere with predator avoidance and feeding, thus reducing the fitness of affected individuals (Buchanan 2006). Nighttime construction will be avoided to avoid such impacts (CM 7).

Fugitive dust will be minimized through watering and other appropriate measures (CM 8). Human activity in the project area during construction may result in accumulation of trash and food, attracting predators that may prey on spadefoot. However, the project measures require that trash and debris be removed from the site regularly to avoid attracting predators (CM 9). Project personnel will also be prohibited from bringing domestic pets to construction sites to ensure that domestic pets do not disturb or depredate wildlife in adjacent native habitats (CM 6). Also, temporary fencing will be installed along the project footprint during construction which should limit encroachment into adjacent habitat by construction personnel (CM 3). The project biologist will develop and implement an employee education program to make all personnel aware of listed species within the action area and their responsibility to reduce impacts to these species (CM 7). With implementation of these measures, we anticipate that these effects will be minimized to the point where such effects are insignificant.²

² For the purposes of section 7 consultation, an insignificant effect is one that is sufficiently small that a person would not be able to meaningfully measure, detect, or evaluate it.

Water Quality Impacts

Stormwater discharges could flush silt, sediment, or hazardous material (solvents, fuels, etc.) into breeding pools located outside of the impact footprint if erosion control devices are improperly installed or missing. The same scenario may occur if ground disturbed during construction is not properly stabilized after construction is completed. To minimize the potential for water quality impacts to adjacent pools from the project, an exclusionary/silt fence will be installed around the impact footprint (CM 3). CMs for fairy shrimp under the VPHCP to prevent pollution/spills from entering avoided pools will also be implemented. Implementation of these CMs is anticipated to minimize the impacts of pollution and siltation resulting from project implementation on spadefoot habitat to the point where such effects are insignificant.

Habitat Degradation from Weeds

Inadequate weed control may result in the introduction or spread of invasive weeds or unwanted vegetation. Excessively vegetated breeding pools dry quicker than expected if they are over vegetated, which impacts reproduction (Service 2023). The project will restore, enhance, manage and monitor the total 17.97-acre preserves onsite which will remove and control weeds. Implementation of these CMs is anticipated to minimize the impacts of invasive species from project implementation on spadefoot habitat to the point where such effects are insignificant.

Effect on Recovery

The project will result in the permanent loss of 27.64 acres (0.111 acre of breeding habitat and 27.53 acres of aestivating habitat) from the proposed development and temporary loss of 9.9 acres of aestivating habitat from the vernal pool restoration. The habitat that will be impacted consists mostly of disturbed habitat that comprises a very small percentage of the 1,147,064 acres of modeled high to medium-quality habitat predicted to be occupied by spadefoot in southern California. Based on the limited extent of the project footprint and the implementation of CMs, the number of individuals impacted by the project are expected to comprise a small fraction of the spadefoot population within the southern San Diego region. In addition, temporarily impacted habitat will be restored upon project completion, and because spadefoots are not dependent on mature vegetation, we expect temporarily impacted areas to be re-occupied shortly following project completion.

To offset these impacts, the project will restore and enhance 0.222 acre and 0.07 acre of spadefoot vernal pool habitat, respectively, in the total 17.97-acre preserves. Therefore, the proposed project will result in a net gain of high-quality spadefoot breeding habitat in the preserves that will be managed and monitored in perpetuity. Based on the above, the proposed project is not likely to result in an appreciable reduction in the reproduction, numbers, or distribution of the spadefoot population in the project vicinity or of the species as a whole.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this conference opinion. Future

Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. We are unaware of any non-Federal actions affecting listed species that are reasonably certain to occur in the action area considered by this opinion.

CONCLUSION

After reviewing the current status of the species, environmental baseline for the action area, effects of the proposed action, and cumulative effects, it is our conference opinion that the proposed action is not likely to jeopardize the continued existence of spadefoot. Our conclusions are based on the following:

1. With implementation of the CMs, including project timing, exclusionary fencing, pre-construction surveys, capture, and translocation, impacts to spadefoot are expected to be minimized and are not expected to appreciably reduce the numbers, reproduction, or distribution of the spadefoot in the action area or throughout the species range.
2. The permanent loss of 27.64 acres (0.111 acre breeding habitat and 27.53 aestivating habitat) from the project development and temporary loss of 9.9 acres of aestivating habitat from the vernal pool restoration that are mostly nonnative/disturbed habitat comprises a very small percentage of the 1,147,064 acres of modeled high to medium-quality habitat predicted to be occupied by spadefoot in southern California.
3. Capture and translocation of spadefoot within the project site is expected to affect few individuals and is not expected to substantially reduce the overall population of spadefoot within the action area and thus is not expected to impede the overall recovery of the species.
4. The project will result in a net gain of high-quality spadefoot breeding habitat by restoring and enhancing 0.222 acre and 0.07 acre of spadefoot vernal pool habitat, respectively, in the total 17.97-acre preserves that will be managed and monitored in perpetuity.

INCIDENTAL TAKE STATEMENT

INTRODUCTION

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act **prohibit the take of endangered and threatened species**, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Harass is defined as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose

of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and 7(o)(2) of the Act, taking that is incidental to and not intended as part of the proposed action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The prohibitions against taking the spadefoot found in section 9 of the Act do not apply until the species is listed. However, the Service advises the applicant to consider implementing the following reasonable and prudent measure for spadefoot. If this conference opinion is adopted as a biological opinion following a listing or designation, this measure, with its implementing term and condition, will be non-discretionary.

AMOUNT OR EXTENT OF TAKE

The regulations for section 7(a)(2) clarify that the Service may use surrogates to express the amount or extent of anticipated take when “exact numerical limits on the amount of anticipated incidental take may be difficult” (80 FR 26832). The implementing regulations [50 CFR § 402.14(i)(1)(i)] require that the Service meet three conditions for the use of a surrogate. To use a surrogate, the Service must:

1. Describe the causal link between the surrogate and take of the listed species.
2. Describe why it is not practical to express the amount of anticipated take or to monitor take-related impacts in terms of individuals of the listed species.
3. Set a clear standard to determine when the proposed action has exceeded the anticipated amount or extent of the taking.

Incidental take of spadefoot in the form of harm and mortality could occur in the 27.64 acres of habitat directly impacted during project implementation. Mortality and injury could occur via the crushing of individuals. Harm could occur as a result of capture and translocation, and harm could also occur as a result of noise, artificial lighting, and human activity during construction. It is our best professional judgment that the number of spadefoots that may be taken will be low due to the factors described in the Effects of the Action section above. However, quantifying the precise number of spadefoots that may be incidentally taken is not possible because we do not know the number and proximity of spadefoot breeding pools relative to the project site, the observance or detection of mortality is highly unlikely since they spend much of the year aestivating underground, and numbers will fluctuate substantially on a seasonal and annual basis.

Because we cannot reasonably identify or predict the precise number of spadefoots likely to be taken, we are establishing a level of incidental take (IT) based on the amount of habitat subject to alteration from pavement rehabilitation activities. Take is exempted as follows:

- IT 1. Death and injury of spadefoot from permanent impacts to 0.111 acre of breeding pool habitat and permanent and temporary impacts to 27.53 acres and 9.9 acres of aestivation habitat, respectively, within the Candlelight project footprint. The amount or extent of incidental take will be considered exceeded if more than

0.111 acre of breeding pool habitat is permanently impacted or more than 27.53 acres and 9.9 acres of aestivation habitat are permanently and temporarily impacted, respectively.

- IT 2. Death or injury of spadefoots of different life history stages during capture and translocation to avoid or minimize death or injury from project activities, including construction and vernal pool restoration and enhancement. Because of the dramatic fluctuations in the numbers and densities of individual spadefoots of different life history stages on a seasonal and annual basis, it is not possible to quantify exactly how many spadefoots may be subject to capture and translocation. We are not limiting the number of spadefoots that will be moved pursuant to this conference since this is CM intended to move individuals out of harm's way. However, the number of spadefoots observed within project footprints will be reported to the Service. Although spadefoots could be killed, injured, or stressed during capture and translocation, capture and translocation will minimize the likelihood that spadefoots will be killed or injured during implementation of project activities.

EFFECT OF THE TAKE

In this conference opinion, we determined that the level of anticipated take is not likely to result in jeopardy to the spadefoot.

REASONABLE AND PRUDENT MEASURE

We have determined that the following reasonable and prudent measure (RPM) is necessary and appropriate to minimize incidental take of spadefoot:

- RPM 1. The Corps and/or applicant will conduct monitoring of potential impacts to spadefoot and report impacts to CFWO.

TERM AND CONDITION

To be exempt from the prohibitions of section 9 of the Act, the applicant must comply with terms and conditions, which implement the reasonable and prudent measures, described above and outline reporting and monitoring requirements. Terms and conditions are nondiscretionary. The following term and condition implement the reasonable and prudent measure.

- TC 1. Within 2 days following project implementation for a given year, the site will be visited to ensure that project activities did not occur outside the project area. If project activities occurred outside the project area or spadefoot were affected, it will be reported to the CFWO via email within 1 week.

DISPOSITION OF SICK, INJURED, OR DEAD SPECIMENS

Upon locating dead, injured, or sick individuals of threatened or endangered species, initial notification must be made to our Division of Law Enforcement in either San Diego, California,

at 619-557-5063 or in Torrance, California, at 310-328-6307 within 3 working days. Notification should also be sent by telephone and writing to this office in Carlsbad, California, at 2177 Salk Avenue, Suite 250 Carlsbad, California 92008, 760-431-9440. Written notification must be made within 5 calendar days and include the collection date and time, the location of the animal, and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. The remains of intact specimens shall be placed with educational or research institutions holding the appropriate State and Federal permits. Remains shall be placed with the San Diego Natural History Museum, San Diego. Arrangements regarding proper disposition of potential museum specimens shall be made with the institution by the authorized biologist prior to implementation of the action.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. We have not identified any conservation recommendation that would provide further benefit to the spadefoot in the action area of the project.

REINITIATION NOTICE

This concludes the conference for the candidate spadefoot. You may ask the Service to confirm the conference opinion as a biological opinion issued through formal consultation if the spadefoot is listed. The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the conference opinion as the biological opinion on the project and no further section 7 consultation will be necessary.

After listing of the spadefoot as endangered or threatened and any subsequent adoption of this conference opinion, the Federal agency shall request reinitiation of consultation if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect the species or critical habitat in a manner or to an extent not considered in this conference opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the species or critical habitat that was not considered in this conference opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

The incidental take statement provided in this conference opinion does not become effective until the species is listed, and the conference opinion is adopted as the biological opinion issued through formal consultation. At that time, the project will be reviewed to determine whether any take of the spadefoot has occurred. Modifications of the opinion and incidental take statement may be appropriate to reflect that take. No take of the spadefoot may occur between the listing of and the

adoption of the conference opinion through formal consultation, or the completion of a subsequent formal consultation.

If you have any questions regarding this conference opinion, please contact [Anita Eng](#)³ of this office.

Sincerely,

for Scott A. Sobiech
Field Supervisor

³ Anita_Eng@fws.gov.

LITERATURE CITED

- [Alden] Alden Environmental. 2013. Biological Technical Report for the Candlelight Project. June 27, 2013. Project No. 40329.
- [Alden] Alden Environmental. 2023. 2023 Dry Season Fairy Shrimp Sampling Results Report for the Candlelight Project.
- Baumberger, K.L., M.V. Eitzel, M.E. Kirby, and M.H. Horn. 2019. Movement and habitat selection of the western spadefoot (*Spea hammondi*) in southern California. PLoS ONE 14(10): e0222532. <https://doi.org/10.1371/journal.pone.0222532>.
- Baumberger, K.L., A.R. Backlin, J.P. Rose, D.R. Clark, B.J. Halstead, and R.N. Fisher. 2020. Western Spadefoot (*Spea hammondi*) Surveys in California, Draft Final, 2020. Data Summary. U. S. Geological Survey, Western Ecological Research Center, Santa Ana, CA. 46 pp.
- Bowman, R. H. 1973. Soil Survey - San Diego Area, California Part I. United States Department of Agriculture. Soil Conservation Service and Forest Service in cooperation with University of California Agricultural Experiment Station. United States Department of the Interior.
- Bragg, A.N. 1962. Predation on arthropods by spadefoot tadpoles. *Herpetologica* 18:144.
- Bragg, A.N. 1964. Further study of predation and cannibalism in spadefoot tadpoles. *Herpetologica* 20:17-24.
- Brown, H.A. 1966. Temperature adaptation and evolutionary divergence in allopatric populations of the spadefoot toad, *Scaphiopus hammondi*. PhD Dissertation, University of California, Riverside, California.
- Brown, H.A. 1967. Embryonic temperature adaptations and genetic compatibility of two allopatric populations of the spadefoot toad, *Scaphiopus hammondi*. *Evolution* 21(4):742-761.
- Buchanan, B.W. 2006. Observed and Potential Effects of Artificial Night Lighting on Anuran Amphibians. Chapter 9, *Ecological Consequences of Artificial Night Lighting* (edited by C. Rich and T. Longcore). Island Press. Washington, D.C.
- [City] City of San Diego. 2018. Candlelight TM/PDP/SDP Final Environmental Impact Report.
- Dimmett, M.A. and R. Ruibal. 1980a. Exploitation of food resources by spadefoot toads (*Scaphiopus*). *Copeia* 4:854-862.
- Dimmett, M.A. and R. Ruibal. 1980b. Environmental correlates of emergence in spadefoot toads (*Scaphiopus*). *Journal of Herpetology* 14(1):21-29.

- Ervin, L.E., A.E. Anderson, T.L. Cass, and R.E. Murcia. 2001. *Spea hammondi* (Western spadefoot) elevation record. *Herpetological Review* 32(1):36.
- Feaver, P.E. 1971. Breeding pool selection and larval mortality of three California amphibians: *Ambystoma tigrinum californiense* Gray, *Hyla regilla* Baird and Girard, and *Scaphiopus hammondi* Girard. MA Thesis, Fresno State College, Fresno, California.
- Halstead, B.J., K.L. Baumberger, A.R. Backlin, P.M. Kleeman, M.N. Wong, E.A. Gallegos, J.P. Rose, and R.N. Fisher. 2021. Conservation Implications of Spatiotemporal Variation in the Terrestrial Ecology of Western spadefoot. *The Journal of Wildlife Management* 85(7):1377-1393.
- Hayes, M.P. and J. Warner. 1985. Life history notes: *Rana catesbeiana*, food. *Herpetological Review* 16(4):109.
- HELIX Environmental Planning, Inc. 2004. 2004 Report USFWS protocol level presence/absence surveys for the Quino checkerspot butterfly (*Euphydryas editha quino*). June 2.
- HELIX Environmental Planning, Inc. 2005. 2004/2005 Report USFWS protocol level presence/absence surveys for the Quino checkerspot butterfly (*Euphydryas editha quino*). May 23.
- Holland, D.C. and R.H. Goodman Jr. 1998. A guide to the amphibians and reptiles of MCB Camp Pendleton, San Diego County, California. Final report prepared for AC/S Environmental Security Resources Management Division under Contract M00681-94-0039.
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and reptile Species of Special Concern in California. Final report submitted to California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California, under Contract 8023.
- Low, B. 1976. The evolution of amphibian life histories in the desert. Pages 149-195 in *Evolution of Desert Biota*. University of Texas Press, Austin, Texas.
- Morey, S.R., and D.A. Guinn. 1992. Activity patterns, food habits, and changing abundance in a community of vernal pool amphibians. Pp. 149-158 In: D.F. Williams, S. Byrne, and T.A. Rado (editors), *Endangered and sensitive species of the San Joaquin Valley, California: Their biology, management, and conservation*. The California Energy Commission, Sacramento, California, and the Western Section of the Wildlife Society.
- Ouren, D.S, C. Haas, C.P. Melcher, S.C. Stewart, P.D. Ponds, N.R. Sexton, L. Burris, T. Francher, and Z.H. Bowen. 2007. Environmental Effects of Off-highway Vehicles on Bureau of Land Management Lands: A Literature Synthesis, Annotated Bibliography, Extensive Bibliographies, and Internet Resources. USGS Open-file Report 2007-1352.

- Perry, G., B.W. Buchanan, R.N. Fisher, M. Salmon, and S.E. Wise. 2008. Effects of Artificial Night Lighting on Amphibians and Reptiles. Chapter 16, Urban Herpetology (edited by J.C. Mitchell, R.E., Jung Brown, and B. Bartholomew). Society for the Studies of Amphibians and Reptiles. Salt Lake City, UT.
- Recon. 2022. Vernal Pool Establishment and Watershed Restoration Mitigation Plan for the Candlelight Project.
- Recon. 2023. Vernal Pool Habitat Management Plan for the Candlelight Project.
- Rose, J.P., B.J. Halstead, R.H. Packard, and R.N. Fisher. 2022. Projecting the remaining habitat for the western spadefoot (*Spea hammondi*) in heavily urbanized southern California. *Global Ecology and Conservation* 33:e01944
- Ruibal, R., L. Tevis, Jr., and V. Roig. 1969. The terrestrial ecology of the spadefoot toad *Scaphiopus hammondi*. *Copeia* 3:571-584.
- State of California. 2006. Special Animals. California Natural Diversity Database. Biogeographic Data Branch, Department of Fish and Game. Quarterly publication, February.
- Stebbins, R.C. 1951. Amphibians of western North America. Univ. California Press, Berkeley. 538 pp.
- Stebbins, R.C. 1972. Amphibians and reptiles of California. California Natural History Guides (31). University of California Press, Berkeley, Los Angeles, London.
- Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. McGraw Hill Book Company, New York, New York.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin, Boston, MA.
- Stebbins, R.C. and S.M. McGinnis. 2012. *Field guide to amphibians and reptiles of California: revised edition* (Vol. 103). Univ of California Press.
- Storer, T.I. 1925. A synopsis of the Amphibia of California. University of California Publications in Zoology 27:1-342.
- Storey, K.B., M.E. Dent, and J.M. Storey. 1999. Gene expression during estivation in spadefoot toads, *Scaphiopus couchii*: Upregulation of riboflavin binding protein in liver. *Journal of Experimental Zoology* 284:325-333.
- [Service] U.S. Fish and Wildlife Service. 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Oregon Fish and Wildlife Office. Portland, OR. 634 pp.

[Service] U.S. Fish and Wildlife Service. 2023. Species Status Assessment Report for Western Spadefoot (*Spea hammondi*). Version 1.1. May 2023. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California. 129 pp.

Zeiner, D.C., W.F. Laudenslayer, Jr., and K.E. Mayer (compiling editors). 1988. California's wildlife. Volume I. Amphibians and reptiles. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento, California.

