



THE CITY OF SAN DIEGO

February 28, 2013

Mr. David Zoutendyk
U.S. Fish and Wildlife Service
Carlsbad Field Office
6010 Hidden Valley Road
Carlsbad, CA 92009

Mr. David Mayer
California Department of Fish and Game
3883 Ruffin Road
San Diego, CA 92123

Dear Mr. Zoutendyk and Mr. Mayer:

Subject: Final 2012 MSCP Annual Report

Enclosed is the City of San Diego's Final 2012 MSCP Annual Report. In developing this report, the City of San Diego has utilized Habitrak, the GIS extension developed by CDFG for tracking loss and gain of habitat. Each project that was issued a grading permit within the year 2012 was evaluated for impacts to environmentally sensitive lands, and all impacts were entered as project loss for the 2012 calendar year. The updated digital data for habitat loss and gain within the City of San Diego through 2012 is attached.

The regional and project specific maps that are generated by Habitrak are currently of little use and costly to print. If desired, the digital data supplied to your offices may be used to generate maps through Habitrak.

ANNUAL REPORT SUMMARY

As the enclosed Summary of Habitat Losses and Gains table shows, to date the City has conserved a total of 33,839 acres inside the MHPA. This represents 65 percent of the City's conservation target in the MSCP Subarea Plan. In 2012, a total of 24.88 acres were lost inside the MHPA and 1,235 acres were conserved inside the MHPA. Additionally, 47.61 acres were lost outside the MHPA while 44.34 acres were conserved outside the MHPA.

In 2012, the Park and Recreation Department, Open Space Division also reported two gains to open space land. One area is 1,097 acres within East Elliott that was dedicated to the City as "an extraordinary benefit associated with the Rancho Encantada Development entitlements. This acreage consists primarily of pristine open space located east of the Montecito and Sycamore Estate developments which make up Rancho Encantada and abuts the west side of Miramar



Development Services • Planning Division

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Marine Corps Air Station (MCAS). Biological value associated with this land includes east/west and north/south wildlife corridors and acres of high quality Diegan coastal sage, southern maritime chaparral, native and non-native grasslands, and other chaparral types. A small portion within this acreage is planned to be deeded to the City in the future once SDG&E staging/construction equipment is removed and the site is acceptable.

Park and Recreation also reported that 127 acres previously protected for mitigation by a covenant of easement in 2002 became dedicated to the City in December 2012 and will be managed in perpetuity by City Park and Recreation Open Space Division. This area was associated with required mitigation for the Otay Mesa-Hidden Trails/Campus Pointe Project and contains high quality maritime succulent scrub among other plant communities.

CORNERSTONE LANDS AND CONSERVATION BANKS

On a monthly basis, the Public Utilities Department Division of Long Range Planning and Water Resources manages 39 small habitat restoration and erosion control sites and has completed various projects at MSCP Cornerstone lands including routine patrols, trash removal, signage and general enforcement, weed management, vernal pool monitoring, protection, and enhancement. This Division has also continued monthly maintenance of mitigation sites in Soledad Valley (restoration), and Watson Creek (wetland enhancement).

Marron Valley (Cornerstone Lands) - On December 7, 1999 the City placed a conservation easement over 2,600 acres of property, known as Marron Valley, which is located east of Otay Mountain along the border. This is the first of the four lands (i.e. the cornerstone lands) owned by the Water Department to be proposed for a mitigation bank. The City has been granted by the Wildlife Agencies 1,000 acres of upland mitigation credit for Marron Valley. In 2012, City's Marron Valley Cornerstone Mitigation Bank a total of 1.77 acreage/credits. Therefore, the Maroon Valley Bank has sold 63.165 credits and maintains 936.84 of remaining credits as of December 31, 2012 (attached).

Soledad Canyon - On April 6, 2006 a group of private investors and the City of San Diego entered into a Conservation Bank and Mitigation Agreement to create a bank, restore portions of it, and use land credits from a 9.39-acre site in the Miramar area to mitigate for several anticipated development projects. In 2012, the Soledad Canyon Mitigation Bank completed its environmental credit sales and is in the process of turning the property over to the City of San Diego as required in the Banking Implementation Agreement. In 2013, it is anticipated that additional meetings with MSCP staff, the Real Estates Assets Department (READ), and the Park and Recreation Department will be held to discuss inclusion of a 5.90 acre restored portion of the Bank into the MHPA; and transfer the entire 9.39 acre bank area from private ownership to City Open Space. It is anticipated that the Soledad Canyon property would be accepted by the City Council in 2013.

HAF CONTRIBUTIONS

In 2012 a total of \$232,211.38 Habitat Acquisition Funds were collected which consisted of \$210,038.25 collected for mitigation (mit.) land purchase and \$22,173.13 collected for administration (admin). These monies were related to Fairbrook Estates (\$105,187.00 mit.; \$11,688.00 admin), Quarry Falls (\$98,306.25 mit.; \$9,830.63 admin.), and the Alvarado Trunk Sewer CIP Phase III public project (\$6,545.00 mit.; \$654.50 admin). It is expected in 2013, that habitat loss and gains would be reported for Quarry Falls and Fairbrook Estates as the grading permits were still pending as of December 31, 2012.

STATUS OF NATURAL RESOURCES MANAGEMENT PLANS (NRMPs)

The NRMP status' are as follows:

Black Mountain Open Space Park NRMP – The draft CEQA document has been finalized and was posted to the City website for a public review period starting January 30, 2013.

Carmel Mountain/Del Mar Mesa NRMP – Archaeology surveys are underway per a CEQA analysis requirement.

Mission Trails Regional Park NRMP and Master Plan Update – The City's review of the draft document is complete, a revised version is being sent to Wildlife Agencies for review.

Pacific Highlands Ranch NRMP – A scope of work is being developed with the consultant via a public/private partnership.

Tecolote Canyon Natural Park NRMP – The 2006 draft document is being updated. The next step will be to obtain public input.

MANAGEMENT AND MONITORING

The City of San Diego Park and Recreation Department, Open Space Division has prepared and sent the "City of San Diego 2012 MSCP Rare Plant Monitoring Report" to the wildlife agencies under separate cover. Meanwhile, contained herein is the "MSCP Management Actions Report, January 1, 2012-December 31, 2012" prepared by the City of San Diego Park and Recreation Department, Public Utilities Department, and Environmental Services Department. This report provides a summary of the myriad of management projects that were undertaken in 2012. In addition to on-going stewardship and land management activities (see MSCP Management Actions Report 2012), the Park and Recreation Department Open Space Division has collaborated with several groups conducting grant-funded invasive species mapping and restoration in City Open Space. Some of these include mapping of invasive species and weed treatment in Crest Canyon, restoration of vernal pools at Carmel Mountain, and cactus wren habitat restoration on Black Mountain.

In 2012, City Parks and Recreation Department reported that the actual impact numbers to Park and Recreation Open Spaces lands for the construction of Phase 1 of the Gonzalez Canyon to Old El Camino Real Trail Connection. In the fall of 2011, 0.29 acres of mitigation credits from the Cornerstone Lands Mitigation Bank were purchased for credit within the MHPA for anticipated impacts to 0.29 acres of habitat. The actual impacts from Phase I of the project were then calculated to be 0.241 acres using a global positioning unit (GPS) and Geographical Information System (GIS) software. Impacts from the trail consisted of a combination of Tier I and II habitat within the MHPA and all mitigation was purchased within the MHPA. Habitat and acreage breakdown is provided in the attachments.

MHPA BOUNDARY LINE ADJUSTMENTS 2012

Site specific MHPA Boundary Line Adjustments that took place in 2012 include Call Residence, McCaw Property, the San Diego River Creation Site, Saint John Garabed, and the Torrey Pines General Development Plan.

Call Residence – On June 13, 2012, a MHPA BLA was approved with 0.13 acre added and 0.13 acre subtracted by the Wildlife Agencies for this property. The subtraction area consists of mainly ornamental/disturbed vegetation and the addition area consists of high quality Diegan coastal sage scrub/chaparral including scrub oak and barrel cactus

McCaw Residence – On December 13, 2012, the McCaw Property BLA was approved contingent that the City of San Diego takes over ownership and maintenance of the Soledad Canyon Mitigation Bank in the Mira Mar area.

San Diego River Creation Site – On January 10, 2012 a MHPA BLA was approved for the San Diego River Creation Site. The Public Utilities Department implemented a wetland creation project within a larger Public Utilities Department owned property along Camino Del Rio North along the south bank of the San Diego River. The western portion of the property (hereafter referred to as the “proposed exclusion area”) are within the MHPA, while almost the entire wetland creation area to the east hereafter referred to as the “proposed inclusion area” are outside of the MHPA. The Public Utilities Department is proposed to adjust the MHPA boundary so that the entire wetland creation site is added to the MHPA and the westerly portion of the property is removed. Additional acreage of City-owned land outside of the MHPA located on the south side of Mission Valley is included in this analysis in order to ensure parity of acreage in the MHPA. Total lands exchanged equaled 8.16 acre inclusion and 8.16 acre exclusion.

Saint John Garabed – On December 13, 2012, the St. John’s Garabed Church BLA was tentatively approved pending the submittal of a wetland restoration (WR) plan. This WR plan is needed as the applicants are asking for 0.88 acres of take beyond their 25% in a MHPA area that has no current habitat (currently consists of half road & half church features). In lieu of a land exchange, the applicant proposed a 5-year wetland restoration of 1.76 acres in the wetland mouth area on the south side of the El Camino Real Road Wildlife Undercrossing. The land to be

restored would involve no wetland impacts as the land consists of disturbed habitat that was formerly used for agriculture. The applicant will provide a draft concept restoration plan for Wildlife Agency review and comment. Directional fencing, corridor canopy development, and other features to address the wildlife connection will be included in the restoration plan. Talks are also on-going with San Dieguito River Partners regarding trail placement in the area. The Agencies expressed that only wildlife use should occur in the corridor area. The City assured the Agencies that discussion and approval of any designated trails in the area will occur in the future with the City, San Dieguito River Park Joint Powers Authority (SD JPA), and the Wildlife Agencies included, and that further environmental review would be required. In addition, any irrevocable offer to dedicate (IOD) would include Agency involvement to ensure maintenance in perpetuity (including culvert maintenance such as regular removal of sediment). Church representatives have stated that the area, once restored, would be likely transferred in title to the SD JPA for professional maintenance.

Torrey Pines General Development Plan (GDP) – On September 18, 2012, Torrey Pines City Park General Development Plan MHPA BLA was approved. The Torrey Pines GDP is a resource-based park first established in 1899. Previous master plans have studied the site and recommended improvements, but were not processed for approval. The project would include revisions to the MHPA boundary line. The approved MHPA BLA would subtract 0.5 acre currently within the MHPA and would add 22.5 acres. This BLA was included in the 2011 MSCP Annual Report and it was formally approved in 2012. With the obtainment of the future Site Development Permit(s) and Coastal Development Permit(s) for implementation of the GDP would report habitat loss and gain via Habitrak at that time in the future.

MHPA BOUNDARY LINE CORRECTIONS 2012

During 2012, mutual understandings of the intent of Boundary Line Corrections were discussed with the Wildlife Agencies. It was reiterated that all Boundary Line Correction information would continue to be discussed with the Wildlife Agencies prior to distribution of the environmental document.

The City and Agencies have a mutual understanding that the MHPA boundary corrections are allowed under the City's MSCP to rectify minor mapping inaccuracies at the project level, and can be processed with the project's discretionary review. For a MHPA correction to be supported by City staff, it must be clearly demonstrated that: 1) the proposed area to be corrected out was legally permitted; 2) no habitat, including wetlands, would be removed; 3) no buffer area (e.g., wetland buffer, wildlife corridor) would be impacted; and, 4) removing the area from the MHPA would not avert the applicant from having to otherwise comply with the City's MSCP Land Use Adjacency Guidelines. Several of these corrections are also associated with boundary line adjustments.

Site specific MHPA Corrections that took place in 2012 include Albert's Apartments, Call Residence, Rancho del Sol, the San Diego River Creation Site, and Torrey Pines General Development Plan.

Albert's Apartments - In response to Wildlife Agency comment on the December 2012 draft Mitigated Negative Declaration, the original boundary line correction for 1.68 acres to remove a portion of an existing parking lot built in 1959 and an ornamentally disturbed slope for a total of 1.68 acres, was reduced to a 0.2-acre portion of the existing parking lot. Following publication of the draft MND, it was mutually agreed upon by the Agencies and the City that the ornamental slope area within the MHPA serves as a wetland buffer area for a stream located in the northwest corner of the property as it is to remain in the MHPA.

Call Residence - At the June 2012 BLA meeting, two boundary line corrections were approved by the Agencies for this property. One BLC was to remove 0.31 acres of land from the MHPA that was determined to have been developed with a sport court and other features in 1973. This corrected line moves the MHPA boundary down slope to the 385-foot contour line.

At the June meeting, a second correction was processed to remove 1.08 acres on site due to the presence of an existing City street easement for Montezuma Road. For this area, the applicant agreed to retain lands adjacent to road where native coastal sage scrub habitat was still present. The overall total of MHPA area corrected out was therefore 1.39 acres for this project.

San Diego River Creation Site - A component of the aforementioned MHPA BLA was a correction of the MSCP's GIS data layer of the MHPA boundary. A correction is required because the vicinity of the proposed BLA overlays lands that the MSCP and wildlife agencies did not intend to include in the MHPA, including roads, office buildings, and a portion of the I-8 Freeway. The GIS layer also excludes lands north of the proposed BLA that appear to have high biological value. Therefore, the lands to the north were added into Habitak as habitat gain, while the erroneous mapping of the MHPA over developed lands was included as Habitak loss.

Rancho Del Sol - In March 2012, a Boundary Line Correction for Rancho Del Sol was presented to the Agencies. The following BLC information has been included in the initial study for the draft MND that is currently being drafted by the City: "A Multiple Species Conservation Plan (MSCP) Multi-Habitat Planning Area (MHPA) Boundary Line Correction would also be processed to remove a 0.7 acre portion of a currently developed lot and Caminito Mendiola roadway area that are currently within the MHPA and to add 2.7 acres on the northern boundary of Lot 20 which contains a portion of the north bank area with existing southern riparian scrub associated with McGonigle Creek.

Torrey Pines General Development Plan (GDP) - A component of the aforementioned Torrey Pines City Park General Development Plan MHPA BLA included revisions to the MHPA boundary line. Approximately 2.4 acres of land that have been in Gliderport use since the 1930s would be removed from the MHPA through a MHPA Boundary Line Correction.

ENVIRONMENTALLY SENSITIVE LAND (ESL) REGULATION AMENDMENT

In April 2012, the City's Environmentally Sensitive Lands Regulations (Chapter 14, Division 1, Section 143.0141) and the OR-1-2 Zone (Chapter 13, Division 2, Section 131.0230) were amended along with the City's Biology Guidelines.

ESL Amendments -The City's Land Development Code (LDC) previously included regulations for development which proposed impacts to wetlands; however impacts were only allowed if a project obtained a Site Development Permit and made findings in accordance with LDC. The new amendments allow three new options/circumstances (as described below) in which a deviation from the sensitive biological resource regulations may be requested. The amendments do not specify which type of exemption should be used or delete any existing findings that must be made in order to approve a deviation. Projects making application in these instances must still process a permit to allow for a deviation. This process requires biological analysis, environmental review, public participation, findings, and a public hearing.

The Essential Public Project (EPP) Option allows for a wetland deviation in cases where it is not feasible for the City to avoid wetland impacts for necessary public facilities and infrastructure projects. This option defines and limits public projects to the following: a) specific design/construction projects identified in a community or implementing plan and identified on the EPP list, b) linear infrastructure, c) maintenance of existing infrastructure, and d) City projects that meet state and federal regulatory requirements.

The Economic Viability Option allows a deviation to preserve an applicant's right to an economically viable use of property, only for circumstances not of the applicant's making and where avoidance of wetland impact is infeasible. Applicants are required to provide information related to the site in question including but not limited to: purchase price, date of acquisition, fair market value, land use/zoning at time of acquisition and any changes to such, development restrictions at time of acquisition, change in size, offers for purchase, a biological report with a no project alternative and a wetland avoidance alternative, and ownership costs. This amendment is consistent with the existing economic analysis requirements within the Coastal Overlay Zone. Projects that propose less than full biological mitigation require concurrence from the Wildlife Agencies prior to project approval.

The Biologically Superior Option limits potential deviations to low quality wetland resources and no deviations would be allowed within tidal-influenced wetlands. Criteria have been added to aid in the determination of wetland quality. The criteria include both general and habitat-specific factors related to vernal pools, salt marsh/salt panne/mudflats, and freshwater, riparian or brackish wetlands. The general criteria covers use of wetlands by species, diversity of flora and fauna, enhancement/restoration potential, habitat function, connectivity, long-term viability, hydrologic function, status of the watershed, and source/quality of water. Other requirements include a biology report with analyses of the "no project", "wetland avoidance project", and the

"biologically superior project"; concurrence by the Wildlife Agencies; two mitigation options; wetland management and monitoring provisions; and forwarding the recommendation of the Wetland Advisory Board to the decision-maker.

Biology Guidelines Update - The Land Development Manual–Biology Guidelines were also revised in June 2012 and recently posted on the City's website. The revisions establish criteria for each development scenario to assist in making the existing deviation findings. Other additional minor clarifications include addition of language consistent with Appendix A of the MSCP Subarea Plan with respect to the burrowing owl and an update of the reference list.

PUBLIC OUTREACH AND EDUCATION

The City of San Diego Park and Recreation Department operates numerous environmental education opportunities, both based at the two nature centers, and throughout the open space parks and canyons. In 2012, 79,804 people visited the Mission Trails Visitor Center, and 15,330 people visited the Tecolote Nature Center. Programs for children include Nature Adventure and Kidz Watch at Mission Trails Regional Park, among many others. Several hundred volunteers participated in one-day restoration or clean-up events such as Coastal Cleanup Day, Walk the Watershed Day, Arbor Day, Creek to Bay Cleanup, and Explore Mission Trails Day, as well as other special work days. Ranger's at all regional parks and open space areas regularly lead nature walks, give informal talks and presentations, and provide information through interpretive signs, kiosks, and hand-outs to enhance visitor experience.

ENVIRONMENTAL SERVICES DEPARTMENT GRANT IMPLEMENTATION

Chollas Creek - In 2011, the City's Environmental Services Department received a grant for Chollas Creek watershed improvement. This Creek, in essence, has become a vegetated flood control channel amid a highly urbanized community. Residential and commercial buildings occupy the perimeter of the Creek. Proposed restoration site would occur within the City's Multiple Habitat Planning area (MHPA). The site contains primarily riparian wetland habitat, with upland habitat along the banks. The project site is owned by the City of San Diego and administered by the Water Department and the Department of Parks and Recreation. Access points to the site are located along the entire southern portion of Chollas Parkway. Interpretive signage placed at access points along the project boundary, to offer viewer information about the Creek's native flora and fauna, as well as the City of San Diego, community, and California Conservation Corps involvement. Exotic plants will be hand removed and native habitat will be planted along the entire project area.

The project consists of restoring 4.03 acres of riparian and upland habitat one-quarter mile east of 54th Street within Chollas Creek. Restoration of is scheduled to occur in three phases. In 2012, the first phase was in process and consists of the removal of transients and debris from the site, using the standard practices associated with transient abatement. Transient abatement has been and will continue to be conducted throughout the project area.

In 2012, the second phase was also underway. This phase includes the removal of more than a dozen non-native plant species. Vegetation removed from the site is taken to the Miramar Landfill for composting. Removal activity focuses largely on the interior riparian corridor, with additional removal of upland nonnative plants approximately 10-20 meters above the riparian zone. All activities are conducted outside the breeding season for sensitive birds (i.e. work only occurs from October to December). Additionally, the removal of debris and non-native vegetation is done by hand, reducing associated impacts such as with noise equipment noise to below a level of significance. Removal of healthy, mature, and/or scenic trees will not occur with the project and no staging areas must be created, as existing streets and parking areas are available for all such activities. Impacts to native vegetation are avoided by limiting off-trail activity to only those areas with existing nonnative vegetation.

The final phase of the project will be the revegetation of native plants in the areas where nonnative vegetation has been removed. Both riparian obligate and upland vegetation will be used. The mosaic of plants used in the revegetation will attempt to mimic natural vegetative conditions, integrating information on the surrounding native vegetation in the selection of plants. This phase is expected to commence in 2013. Revegetation would be accomplished using seeds from S&S Seeds, a source of local plant materials. A majority of native potted plants needed are already available through the City's Environmental Services Department. No additional irrigation will be necessary for this project as planting will occur in the wet season.

The completed restoration project will increase available habitat for local and migratory animal species as well as improve the water quality of this urbanized Creek and safety for the surrounding community. The habitat restoration effort will also decrease the reoccurring transient populations by removing non-native plant hideouts and in return will decrease the source of transient related pollutants. The restoration of the Creek is well integrated into the goals of the City's Multi-Species Conservation Program, by providing a net benefit to the ecosystem by removing nonnative plants and restoring the site with native species. Additional cascading effects will occur throughout the system, by providing suitable habitat for native species of vertebrate and invertebrate animals, including those covered by the MSCP.

In 2013, the project will be in year three of a five-year maintenance and monitoring schedule that is being followed for the project. Quarterly site visits are conducted to monitor the condition and establishment of native plantings and the success of exotic plant eradication. ESD biologists will be responsible for implementing the exotic plant eradication monitoring and management concurrently with the revegetation and restoration of the site. Additionally, volunteers and/or staff monitor transient repopulation levels, provide graffiti control, and regularly schedule cleanup efforts within the area. Support services crew are called to assist if additional staff or equipment is needed in the field. At the end of the five-year project term, management of this site will return to City Water and Park and Recreation departments. They will not be responsible for subsequent monitoring or non-native plant removal after the term of the project has ended.

Rose Creek -In 2003, the Environmental Services Department received a grant for Rose Creek watershed improvement. This urban creek watershed is approximately 40-square miles and includes Rose Creek and San Clemente Creek. The watershed receives a substantial amount of stormwater and urban runoff from the surrounding upland communities throughout the year and the lower reach of Rose Creek is densely infested with hearty non-native plants extending about three miles upstream from the mouth of the creek. The exotic plants act as a cover for transient populations that are associated with human waste pollutants, garbage and debris. The area closest to the creek mouth, approximately eight acres, is less infested with exotics and has a higher potential to be restored through simple but effective measures.

The Lower Rose Creek Restoration Project proposes restore those eight acres to riparian and riverine habitat. The Project includes the removal and control of non-native plants and revegetation with native riparian and riverine shrub and tree species to improve overall habitat value. The completed Project had increased habitat for local and migratory animal species, as well as, improve the water quality of this urbanized creek. The habitat restoration effort also has decreased the reoccurring transient populations by removing non-native plant hideouts and in return, decreases the source of transient related pollutants. The exotic plant removal and native revegetation efforts are estimated to cost approximately \$32,000. The total amount requested from the California State Parks Grant for this Project is \$40,000. The Project also includes the placement of educational interpretive signs along the existing public trail featuring the riparian habitat characteristics, riparian and riverine plant and animal species and their role in this habitat and the beneficial functions of wetlands such as improving water quality.

This project is part of the Governor's Clean Beaches Initiative for Rose and Tecolote Creeks. The Project aims to filter water pollutants associated with urban runoff with native riverine plants such as cattails and bulrush. The Project has restored 3670.4 linear feet of riparian and riverine habitat and has added three acres of riparian habitat to the area through the restoration effort.

The restoration project also enhances the pedestrian and bike trail experience in the area by improving the natural setting and including interpretive signs to guide and educate the public about the valuable and interrelated functions of the native creek ecosystem. The Project also trims back or removes any overgrowth of riparian or riverine vegetation that obstructs the natural flow of water through the creek. Additionally, the Project proposes to add upland trees and shrubs to the stream banks and terraces to control erosion and further increase habitat value and foraging opportunities for local and visiting birds, small mammals, insects and reptiles.

The project site is located in Pacific Beach, California within the section of Rose Creek just southwest of Mission Bay Drive bridge downstream toward the Mission Bay park and ending about 1400 feet past Grand Avenue. It is within close proximity and just upstream from the City of San Diego's Northern Wildlife Preserve, consisting of mudflats and open water, and the University of California's Kendall-Frost Mission Park Marsh Reserve. These protected areas are

home to sensitive bird species reside or visit year-round, including the endangered Belding's savannah sparrow and the light-footed clapper rail. Additionally, a large number of waterfowl are present in the Northern Wildlife Preserve and extends approximately a quarter mile up Rose Creek channel during the winter months. These birds include the American widgeon, piebilled grebe, buffleheads, and many more birds that come to these sites to forage and rest.

In 2012, monitoring and maintaining the signage (i.e. replacement as necessary, graffiti removal) required by the grant continued.

CONCLUSION

I look forward to your comments on the enclosed information, and hope to have an opportunity to discuss the results and future needs of the City and the Wildlife Agencies as they pertain to Habitak and the annual report requirements. Your timely review of the annual report is appreciated.

Please call Kristy Forburger, Senior Planner at (619) 236-6583 or Holly Smit Kicklighter, Associate Planner (619) 446-5378 if you have any questions.

Sincerely,



Kelly Broughton, Director
Development Services Department

KF:hask

Enclosure: MSCP Annual Report 2012
MSCP Management Actions Report, 2012
City of San Diego Public Utilities Department (PUD) -Wastewater- Canyon Sewer
Cleaning Program and Long Term Sewer Maintenance Program Progress
Report, 2012
City of San Diego PUD- Water Dept -Summary of Marron Valley Cornerstone
Mitigation Bank Debits
City of San Diego Public Utilities Department Impact Totals, Totals by Project
and Totals by Tier 2012
City of San Diego Transportation and Stormwater Department - Habitat Impacts
and Mitigation Table
City of San Diego, Park and Recreation Department, MSCP Open Space Division,
Habitat Impacts and Mitigation Table
Education Pamphlets
General City Department Environmental Guidelines
ESD- Environmentally Sensitive Construction and Maintenance

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ESD- Environmentally Sensitive Brush Management
Park and Rec. - Otay Valley-Spanish
Park and Rec. - Otay Valley-English
Park and Rec- Mission Trails- Adopt a Trail Program
Park and Rec- Mission Trails - Nature Club Flyer
Park and Rec- Mission Trails- Mission Trails Day Flyer
Park and Rec- Mission Trails- Trail 1 Explorer Flyer
Park and Rec- Mission Trails- Hidden Treasures of Mission Trails Newsletter

CC: Honorable Mayor Bob Filner
Betsy Miller, Senior Planner, Park and Recreation Department; Open Space
Division
Kim Roeland, Biologist III, Park and Recreation Department; Open Space
Division
Stacey LoMedico, Director Park and Recreation Department
Nicole McGinnis, Senior Planner, Public Utilities Department
Keli Balo, Senior Planner, Public Utilities Department
Kerry Santoro, Project Officer II, Public Works Department
Keith Greer, SANDAG

Habitat Conservation Accounting Model

MSCP South San Diego County

From 1/1/2012 To 12/31/2012

Project Gain Status: Gain

Project Loss Status: Loss

<i>City of San Diego</i>	Total Subarea Habitat Preserve	Conservation Target	Estimated Take	Conservation Ratio	Cumulative Conservation Inside Habitat Preserve	Max. Allowable Impacts for the Current Period	Actual Loss Inside Habitat Preserve for Current Period	+ or - Max. Allowable Impacts
Beach	115	115	0	0.00	77.14	0.00	0.00	n/a
Saltpan	136	136	0	0.00	138.92	0.00	0.00	n/a
Southern Foredunes	10	9	1	9.00	9.92	1.09	0.00	-
Southern Coastal Bluff Scrub	144	137	7	19.57	141.01	7.18	0.00	-
Coastal Sage Scrub	21,185	19,260	1,925	10.01	12,395.90	1,307.55	18.22	-
Maritime Succulent Scrub	721	694	27	25.70	704.46	27.37	0.00	-
Chaparral	11,652	10,574	1,078	9.81	8,022.12	843.86	0.43	-
Southern Maritime Chaparral	1,231	1,128	103	10.95	946.75	88.11	0.00	-
Coastal Sage-Chaparral Scrub	118	98	20	4.90	267.16	51.07	0.00	-
Grassland	5,387	5,014	373	13.44	3,344.61	261.23	3.41	-
Southern Coastal Salt Marsh	936	936	0	0.00	732.87	0.00	0.00	n/a
Freshwater Marsh	232	232	0	0.00	75.64	0.00	0.00	n/a
Riparian Forest	614	614	0	0.00	433.31	0.00	0.02	+
Oak Riparian Forest	469	469	0	0.00	312.12	0.00	0.00	n/a
Riparian Woodland	567	567	0	0.00	512.02	0.00	0.00	n/a
Riparian Scrub	2,749	2,749	0	0.00	1,776.20	0.00	1.08	+
Oak Woodland	362	332	30	11.07	181.50	17.76	0.00	-
Torrey Pine Forest	153	145	8	18.13	144.50	7.98	0.00	-
Tecate Cypress Forest	2	2	0	0.00	0.00	0.00	0.00	n/a
Eucalyptus Woodland	189	183	6	30.50	126.05	4.32	0.00	-
Open Water	3,699	3,699	0	0.00	519.75	0.00	0.00	n/a
Disturbed Wetland	583	583	0	0.00	141.37	0.00	0.00	+
Natural Floodchannel	295	295	0	0.00	43.70	0.00	0.00	n/a
Shallow Bays	225	225	0	0.00	76.86	0.00	0.00	n/a
Pacific Ocean/Deep Bay	2	0	2	0.00	1.95	0.00	0.00	n/a
Disturbed Land	2,763	0	2,763	0.00	1,775.81	0.00	0.07	+
Agriculture	2,097	0	2,097	0.00	1,103.83	0.00	0.00	n/a
Urban/Developed	0	0	0	0.00	833.14	0.00	1.63	+
Total Acres for Agency: City of San Diego					34,838.60		24.88	

Note: The Agriculture and Urban/Developed category is included to account for all land included within a project and habitat preserve planning area.

Summary of Habitat Losses and Gains

Plan: MSCP South San Diego County

Project Gain Status: Gain

Date Range: 1/1/2012 - 12/31/2012

Project Loss Status: Loss

City of San Diego

Habitat Type	Target Cons.	Acres Inside the Habitat Preserve Planning Area					Acres Outside the Habitat Preserve				Total Acres			
		Habitat Loss		Habitat Gain			Habitat Loss		Habitat Gain		Habitat Loss		Habitat Gain	
		Current Period	Cummulative	Current Period	Cummulative	Cons. to Date %	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative
Beach	115	0.0	0.0	0.0	77.1	67.1 %	0.0	0.0	0.0	18.0	0.0	0.0	0.0	95.2
Saltpan	136	0.0	0.0	0.0	138.9	102.1 %	0.0	0.0	0.0	0.1	0.0	0.0	0.0	139.0
Southern Foredunes	9	0.0	0.0	0.0	9.9	110.2 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Southern Coastal Bluff Scrub	137	0.0	0.0	0.0	141.0	102.9 %	0.0	0.0	0.0	1.7	0.0	0.0	0.0	142.7
Coastal Sage Scrub	19,260	18.2	243.5	560.2	12,395.9	64.4 %	19.3	1,214.3	10.4	432.2	37.5	1,457.8	570.7	12,828.1
Maritime Succulent Scrub	694	0.0	38.7	0.0	704.5	101.5 %	0.0	183.2	0.0	57.9	0.0	221.8	0.0	762.4
Chaparral	10,574	0.4	135.5	580.1	8,022.1	75.9 %	6.8	1,114.7	13.8	450.4	7.2	1,250.3	594.0	8,472.6
Southern Maritime Chaparral	1,128	0.0	42.5	0.0	946.8	83.9 %	0.0	97.1	0.0	36.4	0.0	139.7	0.0	983.1
Coastal Sage-Chaparral Scrub	98	0.0	6.8	0.0	267.2	272.6 %	0.0	11.9	0.0	35.1	0.0	18.6	0.0	302.3
Grassland	5,014	3.4	226.2	56.5	3,344.6	66.7 %	2.1	3,538.9	1.1	549.4	5.5	3,765.1	57.6	3,894.0
Southern Coastal Salt Marsh	936	0.0	0.0	0.0	732.9	78.3 %	0.0	0.0	0.0	69.1	0.0	0.0	0.0	802.0
Freshwater Marsh	232	0.0	1.5	0.7	75.6	32.6 %	0.0	2.5	0.8	1.8	0.0	4.0	1.5	77.4
Riparian Forest	614	0.0	0.3	0.5	433.3	70.6 %	0.0	3.1	3.8	5.6	0.0	3.4	4.3	438.9
Oak Riparian Forest	469	0.0	0.2	0.0	312.1	66.5 %	0.0	0.1	0.0	3.2	0.0	0.3	0.0	315.3
Riparian Woodland	567	0.0	0.0	0.2	512.0	90.3 %	0.0	0.0	0.0	1.3	0.0	0.0	0.2	513.3
Riparian Scrub	2,749	1.1	31.0	4.0	1,776.2	64.6 %	0.0	48.5	0.4	27.1	1.1	79.6	4.4	1,803.3
Oak Woodland	332	0.0	1.2	1.9	181.5	54.7 %	0.0	0.8	0.0	3.3	0.0	2.1	1.9	184.8
Torrey Pine Forest	145	0.0	0.0	0.0	144.5	99.7 %	0.0	0.0	0.0	0.5	0.0	0.0	0.0	145.0
Tecate Cypress Forest	2	0.0	0.0	0.0	0.0	0.0 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eucalyptus Woodland	183	0.0	3.5	2.1	126.0	68.9 %	0.0	18.8	0.0	9.7	0.0	22.3	2.1	135.7
Open Water	3,699	0.0	3.1	0.0	519.8	14.1 %	0.0	1.0	1.1	5.1	0.0	4.1	1.1	524.8
Disturbed Wetland	583	0.0	0.0	0.0	141.4	24.2 %	0.0	2.5	0.2	0.2	0.0	2.5	0.2	141.5
Natural Floodchannel	295	0.0	0.0	0.0	43.7	14.8 %	0.0	1.3	0.0	0.0	0.0	1.3	0.0	43.7
Shallow Bays	225	0.0	0.0	0.0	76.9	34.2 %	0.0	0.0	0.0	191.8	0.0	0.0	0.0	268.7
Pacific Ocean/Deep Bay	0	0.0	0.0	0.0	1.9		0.0	0.0	0.0	4.1	0.0	0.0	0.0	6.0
Disturbed Land	0	0.1	40.2	3.0	1,775.8		2.7	684.2	1.2	218.2	2.7	724.3	4.2	1,994.0
Agriculture	0	0.0	185.5	0.0	1,103.8		0.0	1,033.1	0.0	312.5	0.0	1,218.6	0.0	1,416.3

City of San Diego

Habitat Type	Target Cons.	Acres Inside the Habitat Preserve Planning Area					Acres Outside the Habitat Preserve				Total Acres			
		Habitat Loss		Habitat Gain			Habitat Loss		Habitat Gain		Habitat Loss		Habitat Gain	
		Current Period	Cummulative	Current Period	Cummulative	Cons. to Date %	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative
Urban/Developed	0	1.6	51.2	25.7	833.1		16.7	1,239.0	11.6	224.7	18.4	1,290.2	37.4	1,057.8
Agency Total:		24.9	1,011.0	1,235.1	34,838.6		47.6	9,195.0	44.3	2,659.2	72.5	10,205.9	1,279.4	37,497.8

Note: The Agriculture and Urban/Developed category is included to account for all land included within a project and habitat preserve planning area.

Summary of Project Gains

MSCP South San Diego County

From 1/1/2012 To 12/31/2012

City of San Diego

Project Tracking #	Project Name	Location	Applicant	APN	Date Cons.	Status	Mgmt Resp.	Conservation Type	Mit. Bank Credits Used	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
12-190957	47th Street Warehouse	1740 47th Street	Peter Aardema	541-190-1700	12/12/2012	Gain	Private	Covenant	0.00	0.26	0.00	0.26
12-002	Alvarado, PS77, Stevenson Cyn		City of SD Public Utilities		2/28/2012	Gain	Local	Mitigation Bank Debit	1.02	0.00	0.00	0.00
12-149627	Arroyo Verde	DMM - 6739 Rancho Town Place	Earl H. Maas III, Patricia Maas	308-180-2200	8/30/2012	Gain	Private	Covenant	0.00	0.00	1.85	1.85
12-004	Balboa Trunk Sewer		City of SD Public Utilities		8/17/2012	Gain	Local	Mitigation Bank Debit	0.35	0.00	0.00	0.00
12-214901	Benson Residence	5950 & 5960 Camino de la Costa	Eric Benson c/o Cooper Engineering Associates	357-220-0300 357-220-0400	3/29/2012	Gain	Private	Covenant	0.00	0.12	0.00	0.12
12-184946	Crescent Heights	Mira Mesa	Pardee Homes	308-040-1500 311-020-4400 311-020-4500 311-021-0800 311-021-1000 311-031-2300 311-031-2400 311-031-2500	1/1/2012	Gain	Local	Covenant	0.00	18.81	154.26	173.06
12-192334	First Unitarian Church	4190 Front Street	First Unitarian Universalist Church	444-363-2000 444-460-1000 444-481-1200	5/24/2012	Gain	Private	Covenant	0.00	3.68	1.49	5.17
12-181507	Hamidy Residence	11490 Alamazon Street	Thomas Fitzmaurice MND /Indigo Surveying CE	313-180-0100	1/8/2012	Gain	Private	Covenant	0.00	0.77	0.00	0.77
12-255329	Hampton Inn – Mission Valley	2157 Hotel Circle South	T-2 Development	443-040-2500	4/5/2012	Gain	Private	Covenant	0.00	0.00	0.33	0.33
12-003	Juniper St		City of SD Public Works		6/12/2012	Gain	Local	Mitigation Bank Debit	0.22	0.00	0.00	0.00
12-005	Lakside Water Repair		City of SD Public Utilities		11/29/2012	Gain	Local	Mitigation Bank Debit	0.12	0.00	0.00	0.00
12-006	Otay Valley Trunk Sewer		City of SD Public Utilities		11/29/2012	Gain	Local	Mitigation Bank Debit	0.06	0.00	0.00	0.00
12-194092	Pace Residence	1405 Inspiration Drive	John Oleinik, Architect	357-132-0800	1/1/2012	Gain	Private	Covenant	0.00	0.21	0.00	0.21
12-194050	Poliak Residence	4704 Yerba Santa Dr	Eric Poliak	461-410-1900	2/10/2012	Gain	Private	Covenant	0.00	0.69	0.01	0.70

City of San Diego

Project Tracking #	Project Name	Location	Applicant	APN	Date Cons.	Status	Mgmt Resp.	Conservation Type	Mit. Bank Credits Used	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
12-192486	Prior Grading	4340 Altamirano Way Mission Hills	Mark Prior	442-692-0300	1/19/2012	Gain	Private	Covenant	0.00	0.49	0.00	0.49
12-001	Rancho Encantada		McMillin/Brookfield /Sycamore Estates LLC		11/28/2012	Gain	Local	Dedication	0.00	4.83	1,072.91	1,077.74
12-146610	Safdie / Rabines Residence	4178 Falcon Street	Ricardo Rabines, Taal Safdie	444-421-0300	5/24/2012	Gain	Private	Covenant	0.00	0.00	0.09	0.09
12-238297	San Diego River Creation Site	2 parcels E and W of Cam Del Rio N	City of SD Public Utilities Dept	433-250-0500 433-250-1600	12/19/2012	Gain	Local	Restoration/Rev egetation	0.00	14.44	1.61	16.06
12-237892	Tierrasanta Copperleaf	11445 Tierrasanta Blvd	Project Design Consultants	455-210-0700	4/24/2012	Gain	Private	Covenant	0.00	0.04	2.52	2.56
Total for Agency: City of San Diego									1.77	44.34	1,235.07	1,279.41

Summary of Project Losses

MSCP South San Diego County

From 1/1/2012 To 12/31/2012

City of San Diego

Project Tracking #	Project Name	Location	Applicant	APN	Date of Loss	Status	CEQA Doc.	Activity Type	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
12-190957	47th Street Warehouse	1740 47th Street	Peter Aardema	541-190-1700	12/12/2012	Loss	194050	Commercial	3.04	0.05	3.09
12-214901	Benson Residence	5950 & 5960 Camino de la Costa	Eric Benson c/o Cooper Engineering Associates	357-220-0300 357-220-0400	3/13/2012	Loss	144560	Single-Family Residential	0.61	0.00	0.61
12-184946	Crescent Heights	Mira Mesa	Pardee Homes	308-040-1500 311-020-4400 311-020-4500 311-021-0800 311-021-1000 311-031-2300 311-031-2400 311-031-2500	1/1/2012	Loss	990639	Single-Family Residential	31.19	16.10	47.29
12-192334	First Unitarian Church	4190 Front Street	First Unitarian Universalist Church	444-363-2000 444-460-1000 444-481-1200	1/1/2012	Loss	192334	Institutional	3.21	0.00	3.21
12-181507	Hamidy Residence	11490 Alamazon Street	Thomas Fitzmaurice MND /Indigo Surveying CE	313-180-0100	1/8/2012	Loss	6107	Single-Family Residential	0.25	0.00	0.25
12-255329	Hampton Inn – Mission Valley	2157 Hotel Circle South	T-2 Development	443-040-2500	7/23/2012	Loss	255329	Commercial	2.64	0.17	2.81
12-194092	Pace Residence	1405 Inspiration Drive	John Oleinik, Architect	357-132-0800	8/3/2012	Loss	194092	Single-Family Residential	1.02	0.00	1.02
12-194050	Poliak Residence	4704 Yerba Santa Dr	Eric Poliak	461-410-1900	2/10/2012	Loss	194050	Single-Family Residential	0.72	0.00	0.72
12-192486	Prior Grading	4340 Altamirano Way Mission Hills	Mark Prior	442-692-0300	1/1/2012	Loss	188609	Single-Family Residential	0.43	0.00	0.43
12-146610	Safdie / Rabines Residence	4178 Falcon Street	Ricardo Rabines, Taal Safdie	444-421-0300	5/24/2012	Loss	146610	Single-Family Residential	0.14	0.00	0.14
12-238297	San Diego River Creation Site	2 parcels E and W of Cam Del Rio North	City of SD Public Utilities Dept	433-250-0500 433-250-1600	12/19/2012	Loss	238297	Other	0.41	8.34	8.75
12-237892	Tierrasanta Copperleaf	11445 Tierrasanta Blvd	Project Design Consultants	455-210-0700	1/1/2012	Loss	61500	Multi-Family Residential	3.95	0.23	4.17
Total for Agency: City of San Diego									47.61	24.88	72.49

Summary of Mitigation Bank Debits

MSCP South San Diego County

From 1/1/2012 To 12/31/2012

City of San Diego

Mitigation Bank Name	Project Tracking #	Project Name	Applicant	Date Conserved	Project Status	Credits
Marron Valley						
	12-002	Alvarado, PS77, Stevenson Cyn	City of SD Public Utilities	2/28/2012	Gain	1.02
	12-003	Juniper St	City of SD Public Works	6/12/2012	Gain	0.22
	12-004	Balboa Trunk Sewer	City of SD Public Utilities	8/17/2012	Gain	0.35
	12-005	Lakside Water Repair	City of SD Public Utilities	11/29/2012	Gain	0.12
	12-006	Otay Valley Trunk Sewer	City of SD Public Utilities	11/29/2012	Gain	0.06
					Total Debits This Period:	1.77
					Credits Available:	1,000.00
					Remaining Credits:	998.23



MSCP Management Actions Report



January 1, 2012—December 31, 2012

*City of San Diego
Park and Recreation Department, Public Utilities
Department, Environmental Services Department*





Introduction

MSCP Management

The Multiple Species Conservation Program can only be successful through informed management of conserved lands. City of San Diego staff who participate in open space management include rangers, biologists, natural resource planners, reservoir managers, a code compliance investigator and pesticide applicator.

Summary

This report will provide a summary of the management projects undertaken in 2012 including mitigation, enhancement and restoration, invasive species removal, access control, trash and debris removal, enforcement, abatement of homeless encampments, and volunteer training. Environmental education is a vital part of our natural resource stewardship. Thousands of people visit our two nature centers each year, and hundreds of children participate in environmental education through partnerships with local schools, nature programs, guided walks, and interpretive signs and kiosks.

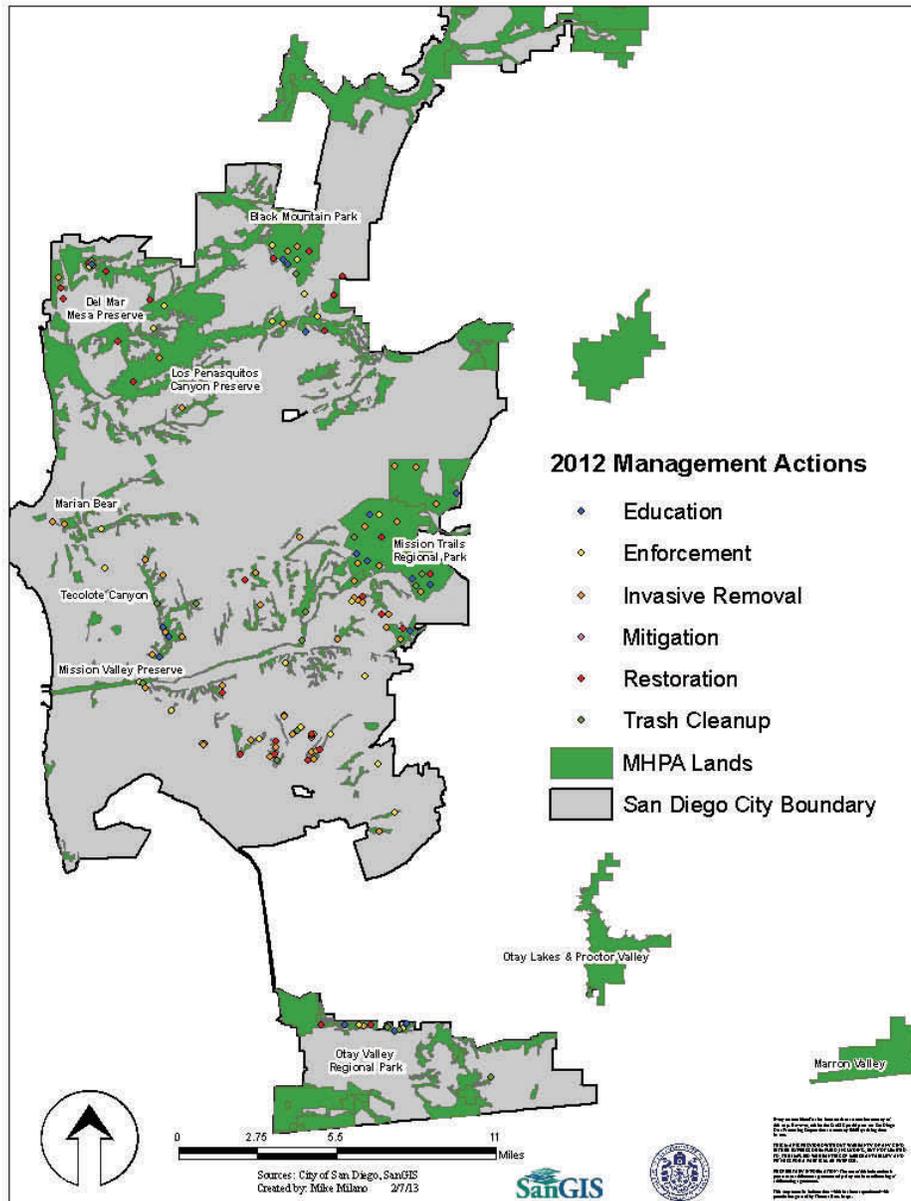


Visitor Center at
Mission Trails Regional Park

This report contains projects by City of San Diego's Park and Recreation Department, Public Utilities Department, and Environmental Services Department.

Many of our projects were completed in partnership with other public agencies, schools, environmental consultants, and non-profit groups. Please take time to review our incredible list of partners on the last page.

We thank you for your interest in San Diego's conserved lands, and invite you to take a look at the projects that we worked on in 2012.



Regional Location Map



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Black Mountain Park

Black Mountain Park is west of I-15 and harbors habitat for California Gnatcatcher as well as other species. Black Mountain also provides a natural experience for nearby residents.

Stewardship Management Actions

- Park-wide trail monitoring and maintenance—Monthly
- Trail brushing to close Old Camino Real trail connector at Gonzales Canyon—January
- Hosted volunteer clean-up event at Gonzales Canyon—January
- Installed a rest station at Black Mountain—January
- Gave two formal interpretive talks—April
- Removed pieces of concrete from trail and installed a puncheon bridge—May
- Installed several sections of peeler log fencing to delineate approved trails, close illegal trails, and conserve habitat—May
- Installed retainer steps to eroded portions of trail—May
- Provided interpretive services including talks and presenting materials at Discovery Table—May, June, July, August
- Installed signage at Lusardi Trail—May
- Removed illegal dump—August
- Installed ‘Habitat/Wildlife’ signage through the Park—September
- Removed invasive plants at various sites within the Park—September, October, November

Management Actions Related to MSCP-Covered Species

- Completed 25+ California gnatcatcher surveys—February
 - Site preparation and dethatching for Cactus Wren grant activities—August
-



Los Penasquitos Canyon Preserve

Los Penasquitos Canyon Preserve is an urban resource-based park that functions as an east-west corridor through the heart of San Diego. This area is visited frequently by recreationalists and makes nature accessible to local residents. Citizen interest in the preserve led to the development of the well-known Friends of Los Penasquitos Preserve and the San Diego Tracking Team.

Stewardship Management Actions

- Park-wide trail monitoring and maintenance—Monthly
- Park-wide weeding efforts—Monthly
- Public Utilities Department continues maintenance of the Canyon View Uplands Mitigation Site—Monthly
- Assisted with training for San Diego Tracking Team –February
- Updated and installed new trail map in kiosks in the Park—February, April, May
- Removed tree house in Lopez Canyon—April
- Worked with three Eagle Scouts on projects in the Park—May, July, August



Public Utilities Canyon View Uplands Mitigation Site



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Del Mar Mesa and Carmel Mountain

Del Mar Mesa and Carmel Mountain are core biological areas north of Los Penasquitos Preserve. Known for their vernal pool habitat, the areas also supports migratory birds and large mammals such a mule deer.

Del Mar Mesa Stewardship Management Actions

- Park-wide trail monitoring and maintenance—Monthly
- Posted and cleaned illegal encampment with SDPD and Environmental Services Code Compliance—November
- Intensive sign and patrol effort to keep visitors off closed trails — April, May, July, August, September, October

Carmel Mountain Stewardship Management Actions

- Hosted Qualcomm Cares volunteer event with 19 participants—May

Management Actions Related to MSCP-Covered Species

- Led interpretive hike to class at Ocean Air Elementary, and spoke at community's Vernal Pool Presentation event—May
- Coordinated with SDG&E and Chaparral Lands Conservancy for volunteer event to fence vernal pools in Carmel Mountain—November
- Coordinated with Chaparral Lands Conservancy on grant-funded restoration project for vernal pools at Carmel Mountain; Pre-Construction Site Visit October, Construction November - December



Boundaries of Vernal Pool delineated for enhancement at Carmel Mountain





Mission Trails Regional Park

Mission Trails Regional Park is the largest and most well-known open space park in San Diego. The park provides ample space for wildlife, including large mammals, and also harbors a diverse cultural history.

2012 News

In November, Mission Trails Regional Park expanded by 3,800 acres (66%) with addition of East Elliott and West Sycamore parcels.

Stewardship Management Actions

- Park-wide enforcement—Daily
 - Park-wide trail monitoring and maintenance—Weekly
 - Protective fencing installation as necessary based on trail monitoring—Monthly
 - Park-wide signage plan and installation—Monthly
 - 22 invasive species removal events covering 20 species—Yearlong
 - Monitoring of 100 nest boxes, documenting first ever Wood Duck nest in the 12 years of Next Box Project History—Spring
 - Ranger staff work with a volunteer to restore Cowles Mtn Barker Way Trail, and assisted in repairing a footbridge along the Golfcrest Drive Cowles Mtn Trail—February
 - Erosion control and prevention measures installed on two trails—February
 - New trails constructed in future MTRP West Sycamore Area—April
 - Hosted the annual Explore Mission Trails Day with over 1,000 people in attendance—May
 - Ranger staff updated handouts and revised materials for four Discovery Tables—July, August
-



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Mission Trails Regional Park

Management Actions, Continued

- Led volunteer cleanup event around Kumeyaay Lake—October
- Revegetated disturbed areas in West Sycamore Canyon—October
- Prepared and published a children’s Nature Club newsletter titled “Hidden Treasures of Mission Trails”—October
- Installed one doggie bag dispenser and two trash cans—November
- Release of 6 rescued raccoon by Project Wildlife—December
- Celebration of national Arbor Day included planting of 10 native trees as well as other native plants—December
- Completed 2nd draft of natural resource management plan/area specific management directives for Mission Trails Regional Park — December

Management Actions Related to MSCP-Covered Species

- Hand-weeding, herbicide and fencing of San Diego Thornmint and San Diego Ambrosia—Winter and Spring
- Center for Natural Lands Management conducted a study of San Diego Thornmint—June
- Coordinated volunteer maintenance of the San Diego Ambrosia site—October
- Management of vernal pools—Yearlong



Ranger Gutknecht talking to students at Mission Trails Visitor Center



Mission Trails Regional Park

Mission Trails By the Numbers

Visitor Center Attendance = 79,804

Volunteer Hours = 11,436

Nature Adventure Program Attendance = 168 adults and 320 children

Trail Guide Walk Attendance = 3,213 adults and 3,781 children

K-2nd Grade Program Attendance = 711

3rd Grade Program Attendance = 1,834

4th Grade Program Attendance = 353

5th-6th Grade Program Attendance = 56

Kidz Watch Program Attendance = 129 adults and 296 children



Ranger Shimada-Cicirelli works on installation of fencing



Tri-Canyon Parks and Mission Valley

The Tri-Canyon area includes Tecolote Canyon Natural Park, Marian Bear Open Space Park and Rose Canyon Open Space Park. All are large, urban canyons that function as wildlife movement corridors as well as habitat. The Mission Valley Preserve is within the San Diego River and provides habitat for the endangered Least Bell's Vireo.

The Tecolote Nature Center received 15,330 visitors , and approximately 3,500 students from pre-school to college participating in education programs in 2012.

Tecolote Canyon Natural Park Stewardship Management Actions

- Park-wide patrols and trash collection—Weekly
- Public Utilities Department continued maintenance of two wetland mitigation sites within Tecolote Canyon: Central Tecolote Canyon , and Tecolote Canyon (at Balboa and Groves) —Monthly
- Led Tecolote Canyon Nature Walk—August, September, October, November, December
- Hosted San Diego Audubon bird walks—September
- Removed over 200 pounds of Castor Bean seeds—September
- Removed several large Brazilian Pepper Trees—September
- Removed palms, *Arundo*, *Eucalyptus*, and Castor Bean— November
- Worked with high school students to remove invasive weeds— November
- Cleaned up brush from illegal dump— November
- Hosted 2 biology classes from Mesa College and three AP Environmental Science Classes from Francis Parker High School at the Tecolote Nature Center— December



Ranger Quinn leading group of children near Tecolote Nature Center



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Tri-Canyon Parks

Marian Bear and Rose Canyon Stewardship Management Actions

- Public Utilities continued maintenance for the San Clemente Canyon Wetland and Uplands Mitigation Site, and the Rose Canyon Wetland and Upland Mitigation Site—Monthly
- Installed Gold Spotted Oak Borer beet traps—January
- The Wastewater Collection Division of the Public Utilities Department installed rock barriers and pipe gates in Lower Rose Canyon to prevent dumping, unwanted vehicle entry, and damage to native habitat—October
- Installed security camera at Regents Road Underpass to document illegal dumping—June
- Documented habitat destruction caused by creation of an illegal BMX and mountain bike training course. Overseeing the restoration of the area by those responsible for the damage.—July
- Worked with The Key Club to maintain the Native Plant Garden—September
- Removal of 30 palms from Rose Creek—November

Mission Valley Preserve Stewardship Management Actions

- Surveyed for new and returned homeless encampments with SDPD—Weekly
 - Removed homeless encampment—January
 - Removed 8 homeless encampments—June
 - Assisted in Coastal Clean-Up Day which included 100 volunteers and successful removal of 4 homeless encampments—September
 - Coordinated with San Diego River Foundation on volunteer event which included 40 volunteers—September
 - Public Utilities Department continued maintenance of the San Diego River Wetland Creation Site (Mitigation)—Monthly
 - Public Utilities removed homeless encampment—September
-



Urban Canyons

The urban canyons of the MHPA are scattered throughout the City of San Diego. Although small and subject to intense pressures, many continue to support native plants and wildlife. In fact, many of the large canyons are habitat for the sensitive California Gnatcatcher and Cactus Wren. Management actions can counteract the effects of isolation and edge effects to maintain the habitat provided by these canyons.

Stewardship Management Actions

- Patrols of canyons and trails—Monthly
 - Installed regulatory signage at Radio Canyon and La Jolla Open Space—January
 - Invasive species treatments at restoration sites citywide—January, February
 - Coordinated tire removal and disposal from multiple canyons through CalRecycle Program—February
 - Coordinated with San Diego Canyonlands on acacia tree removal and chipping—February
 - Mapping and Biological Assessment completed for new trail connections in Chocolate, Juniper, and Switzer Canyons—February, October, November
 - Coordinated with San Diego Police Department for transient camp removal in Manzanita Canyon and Swan Canyon—June
 - Hosted volunteer clean-up event in Swan Canyon—July
 - Removed homeless encampments at Cervantes Canyon and Encanto Expressway Open Space—August
 - Open Space planners, biologists and rangers finalized the Canyon Project Assessment form for non-profit canyon enhancement project review/approval—August
 - Assisted City Heights Canyon Alliance in development of a four-canyon restoration prioritization plan—August
-



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Urban Canyons

Management Actions, Continued

- Contracted/supervised non-native tree removal by Alpha Project in Manzanita Canyon—September
 - Coordinated homeless encampment clean-up and illegal dump removal with Environmental Services Department in Swan and Eugene Place Open Space Canyons —September
 - Worked with San Diego Canyonlands in invasive plant removal in Swan and Manzanita Canyons—September
 - Assisted with Coastal Clean-Up Day at various canyon sites—September
 - Supervised 20 volunteers in invasive plant removal in 32nd Street Canyon—September, November
 - Removed homeless encampments at Paradise Canyon and Chollas Radio Canyon—September
 - Rangers assisted City Heights Canyon Alliance with stakeholder planning meetings for Manzanita Canyon and Swan Canyon—September
 - Coordinated with Ocean Discovery Institute on grant applications—June, NovemberThe Wastewater Collection Division of the Public Utilities Department installed rock barriers and pipe gates at 60th St/ Baja, Swan Canyon, Loma Pass Canyon, and Jamacha Canyon to prevent dumping, unwanted vehicle entry, and damage to native habitat—October, November, December
 - Assisted with San Diego Audubon Society’s “Habitat Helpers” program in planting native plants in Swan Canyon—November
 - Coordinated homeless encampment clean-up and illegal dump removal with City Environmental Services Department in Maple Canyon —November
 - Participated in regional Cactus Wren restoration planning process —December
-



Urban Canyons

Management Actions, Continued

- Assisted Friends of Switzer Canyon in planting native plants in Switzer Canyon—December
- Supervised Alpha Project at Pottery Canyon in implementing erosion control measures—December
- Ranger-led interpretive hike for Ocean Discovery Institute staff in Manzanita Canyon—December
- Assisted Groundworks Chollas in development of canyon enhancement plan and ROE requirements—December
- Hosted volunteer clean-up at Gonzalez Canyon—December



Ranger Allen works with volunteer on restoration project



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Urban Canyons

Management Actions, Continued

- Monthly coordination on invasive removal and native plant restoration projects with:
- Friends of Ruffin Canyon
- Friends of University Heights Open Space
- Friends of Gonzalez Canyon
- Friends of Navajo Canyon
- Friends of Chollas Creek
- Friends of Juniper Canyon
- Friends of 47th St Canyon
- Friends of Switzer Canyon





Otay Valley Regional Park

Otay Valley Regional Park is an east-west corridor surrounding the Otay River in southern San Diego. The park supports Least Bell's Vireo and rare native plants, such as *Dicranostegia orcuttianus*.

Management Actions

- Park-wide enforcement—Daily
 - Park-wide trail monitoring and maintenance—Weekly
 - Ranger-led interpretive hikes—Monthly
 - Supervised Donovan Prison work crews in removal of trash, invasive species (especially *Chrysanthemum*) and homeless encampments—Monthly
 - Removed illegal encampments and coordinated with SDPD's Homeless Outreach Team to offer services to disadvantaged individuals—Monthly
 - Hosted interpretive walks and volunteer work youth groups including Boy Scouts, Girl Scouts, Outdoor Youth Education Adventures, YMCA, and Imperial Beach Boys and Girls Club —Monthly
 - Partnered with San Diego Coast Keeper, WildCoast, I Love A Clean San Diego, San Diego Port Authority, and many others for the 2012 Walk the Watershed Event, hosting 350 visitors—March
 - Re-armored various trails that had been washed out—March
 - Worked with over 35 instructors and students from San Diego Job Corps to remove over 20 cubic yards of ice-plant —April
 - Hosted over 45 volunteers for the I Love A Clean San Diego Creek to Bay clean-up event —April
 - Hosted over 180 visitors to the second annual OVRP Day event—June
 - Presented a natural and cultural interpretive talk at Willow Elementary School, followed by an interpretive walk at OVRP—June
-



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Otay Valley Regional Park

Management Actions, Continued

- Hosted over 70 volunteers for Annual I Love A Clean San Diego Coastal Clean-up Day in which over 700 pounds of trash and debris were removed from the park—September
- Provided a tour of OVRP to High Tech High teachers and students—September
- Partnered with the City of Chula Vista and I Love A Clean San Diego for the Annual Beautify Chula Vista Day event in which over 100 volunteers assisted in removing over 1000 pounds of trash and debris from the park—October
- Park Rangers received a donation of 270 native plants from the U.S. Fish and Wildlife Service and River Partners (as part of their South Bay Refuge Restoration)—October
- Park Rangers received a donation of 3 tons of river cobbles from the USFWS and River Partners to be placed throughout the park in culverts—November



Dicranostegia orcuttianus



Other Open Space Areas

Crest Canyon

- Partnered with Kelly & Associates on removal of invasive species—February
- Service Road maintenance to access native plant garden—September
- Coordinated with San Dieguito River Park to host Crest Canyon Clean-up which removed invasive ice plant—September
- Hosted two volunteer clean-up and work events—November
- Coordinated with San Dieguito River Valley Conservancy on grant-funded restoration project in Crest Canyon—December

Otay Mesa

- Interdepartmental collaboration for the Dillon's Trail Task Force resulted in removal of 271 tons of debris removed—November

Rancho Mission Canyon

Public Utilities continued maintenance of Rancho Mission Canyon Wetlands Mitigation Site—Monthly

MSCP Cornerstone Lands

- The Public Utilities Department's Division of Long-Range Planning and Water Resources has completed various projects at MSCP Cornerstone Lands including routine patrols, trash removal, signs and general enforcement, weed management, vernal pool monitoring, protection, and enhancement.—Monthly

Other

- Public Utilities continued maintenance of Mitigation sites in Soledad Valley (Restoration) and Watson Creek (Wetland Enhancement) —Monthly
-



Citywide Projects

City-wide Projects

- Public Utilities Department managed 39 small habitat restoration and Erosion Control Sites in 2012—Monthly
- Completed MSCP Compliance Monitoring for 18 rare plants at 88 sites—March—July
- Short films developed on topics such as wildlife corridors, vernal pools, native vegetation communities, and Gold Spotted Oak Borers played on CityTV—Yearlong
- Completed 2012 *Brachypodium distachyon* field samples for regional management study at 61 sites—March—July
- Open Space-funded Code Compliance Investigator workload included 90 cases identified and 35 cases closed — Yearlong
- Open Space Pesticide Applicator conducted invasive plant control in 32nd St Canyon, 46th Street Canyon, Albatross Canyon, Bluebird Canyon, Carmel Valley Open Space, Carroll Canyon, Chollas Parkway Open Space, Chollas Radio Canyon, Encanto Expressway Open Space, Gonzalez Canyon, Guymon Arms Canyon, Kensington Area Open Space, Maple Canyon, Mission Hills Open Space, Mission Trails Regional Park, Mount Soledad Open Space, Navajo Canyon, Otay Valley Regional Park, Pasatiempo Open Space, Rancho Mission Canyon, Serra Mesa Open Space, Tecolote Canyon Natural Park—Yearlong



Open Space Pesticide Applicator



Thanks to our Partners

- Alpha Project
- Boy Scouts/Girl Scouts of America
- California Department of Fish and Wildlife
- California Native Plant Society
- Center for Natural Lands Management
- Chaparral Lands Conservancy
- City of Chula Vista
- City Tree Christian School
- Donovan Crew
- Groundworks Chollas
- Francis Parker Schools
- Friends of 32nd Street Canyon
- Friends of 47th Street Canyon
- Friends of Chollas Creek
- Friends of Gonzalez Canyon
- Friends of Juniper Canyon
- Friends of Los Penasquitos Canyon
- Friends of Mission Valley Preserve
- Friends of Navajo Canyon
- Friends of Rose Canyon
- Friends of Ruffin Canyon
- Friends of Switzer Canyon
- Friends of Tierrasanta Canyons
- Friends of University Heights Open Space
- High Tech High
- Homeless Partners
- I Love a Clean San Diego
- Institute for Effective Education
- La Jolla Learning Lab
- La Mesa Police Kidzwatch
- Mike Kelly and Associates
- Mesa College
- Ocean Air Elementary School
- Ocean Discovery Institute
- Outdoor Youth Education Adventures
- Project Wildlife
- San Diego Audubon
- San Diego Canyonlands
- San Diego Gas & Electric
- San Diego Job Corps
- San Diego Mountain Bike Association
- San Diego Natural History Museum
- San Diego River Foundation
- San Dieguito River Valley Conservancy
- San Diego Police Division
- San Diego State University
- Sierra Club
- The Key Club
- Tri-Canyon Interpretive Group
- U.S. Fish and Wildlife Service
- University of San Diego
- Urban Corps
- Vista Grande Elementary
- WildCoast
- YMCA



Friends of Los Penasquitos, Monitoring *Monardella*



Thank you for your support
of natural open space within the City of San Diego!

For questions or to volunteer, please contact:

Kim Roeland
MSCP Biologist
(619) 685-1308
kroeland@sandiego.gov





City of San Diego
Public Utilities Department

Impact Totals by Project 2012

Buchanan MH 13 Raising

Maintenance

Code	Habitat Type	Position	Tier	In MHPA?	Acre (sum)
DCSS	Diegan Coastal Sage Scrub	upland	2	no	0.003
SMC	Southern Mixed Chaparral	upland	3a	no	0.016
EUCW	Eucalyptus Woodland	upland	4	no	0.006

Cardinal Drive Sewer Emergency

Emergency Repair

Code	Habitat Type	Position	Tier	In MHPA?	Acre (sum)
DCSS	Diegan Coastal Sage Scrub	upland	2	yes	0.0016

Lakeside Water Repair Emergency

Emergency Repair

Code	Habitat Type	Position	Tier	In MHPA?	Acre (sum)
DHAB				no	0.08
DCSS	Diegan Coastal Sage Scrub	upland	2	no	0.12

Manzanita Drive Water Emergency

Emergency Repair

Code	Habitat Type	Position	Tier	In MHPA?	Acre (sum)
DHAB				no	0.04
SMC	Southern Mixed Chaparral	upland	3a	no	0.03
NNG	Non-Native Grassland	upland	3b	no	0.01

Stevenson Canyon MH 257 Emergency

Emergency Repair

Code	Habitat Type	Position	Tier	In MHPA?	Acre (sum)
DHAB				yes	0.08
DCSS	Diegan Coastal Sage Scrub	upland	2	yes	0.0048



Impact Totals by Tier 2012

Tier W (wetland)

<u>Acre</u>	<u>MHPA</u>
-------------	-------------

Tier 4 (upland)

<u>Acre</u>	<u>MHPA</u>
0.0060	no

Tier 3b (upland)

<u>Acre</u>	<u>MHPA</u>
0.0100	no

Tier 3a (upland)

<u>Acre</u>	<u>MHPA</u>
0.0460	no

Tier 2 (upland)

<u>Acre</u>	<u>MHPA</u>
0.1230	no
0.0064	yes

Tier 1 (upland)

<u>Acre</u>	<u>MHPA</u>
-------------	-------------

Tier (upland)

<u>Acre</u>	<u>MHPA</u>
-------------	-------------



City of San Diego
Public Utilities Department
Impact Totals 2012

Code	Habitat Type	Position	Tier	In MHPA?	Acre (sum)
DHAB				yes	0.08
DHAB				no	0.12
DCSS	Diegan Coastal Sage Scrub	upland	2	yes	0.0064
DCSS	Diegan Coastal Sage Scrub	upland	2	no	0.123
SMC	Southern Mixed Chaparral	upland	3a	no	0.046
NNG	Non-Native Grassland	upland	3b	no	0.01
EUCW	Eucalyptus Woodland	upland	4	no	0.006



Mitigation Site Usage Report

Tuesday, February 05, 2013

3:43:10 PM

Mitigation Site Name	Mitigation Type	Site Size (Acres)	Acres Used	Balance (Acres)
Camino del Rio North - San Diego River Creation	Wetland Creation	3.43	2.0773	1.3527
Canyon View (Penasquitos Upland)	Upland Restoration	7.67	1.445	6.225
Central Tecolote Enhancement/Mitigation	Upland Restoration	3.17	1.174	1.996
Central Tecolote Enhancement/Mitigation	Wetland Enhancement	3.47	2.6356	0.8344
El Cuervo Norte	Wetland Creation	0.72	0.637	0.083
El Cuervo Norte	Wetland Enhancement	0.68	0.669	0.011
El Rancho (Penasquitos Enhancement)	Wetland Enhancement	5.53	3.7548	1.7752
Lake Murray	Wetland Enhancement	2.5	1.521	0.979
Lake Murray	Upland Restoration	5.2	5.0336	0.1664
Los Penasquitos North	Upland Restoration	1.03	1.03	0
Los Penasquitos North	Wetland Creation	3.8	3.597	0.203
Marron Valley Cornerstone Lands Conservation Ba	Upland Bank	7.545	6.58	0.965
Otay Mesa Mitigation Bank	Upland Bank	13.24	1.745	11.495
Penasquitos Eucalyptus Removal	Wetland Enhancement	0.31	0.31	0
Rancho Mission Enhancement	Wetland Enhancement	7.59	2.1121	5.4779
Rose Canyon Wetland and Upland	Wetland Enhancement	0.35	0.35	0
Rose Canyon Wetland and Upland	Upland Restoration	5.14	3.148	1.992
Rose Canyon Wetland and Upland	Wetland Creation	5.31	3.4018	1.9082
San Clemente Wetland and Upland	Upland Restoration	3.31	1.648	1.662
San Clemente Wetland and Upland	Wetland Creation	2.18	2.054	0.126
Tecolote - Tree of Heaven removal	Wetland Enhancement	0.25	0.25	0
Tecolote Canyon Wetland and Upland	Wetland Creation	1.56	1.464	0.096
Tecolote Canyon Wetland and Upland	Upland Restoration	3.94	2.9258	1.0142
TOTALS		87.925	49.563	38.362

Summary of Marron Valley Cornerstone Mitigation Bank Debits: 1997-2012
Land Manager: City of San Diego Public Utilities Department
As of 12/31/2012

Purchaser -- Project Name(s)		Transaction Date	Credits	
			Amount Debited	Balance
	Bank Established & Starting Balance	7/16/1997	---	1,000
1	Southeast Economic Development Corporation -- Imperial Market Place	3/21/2000	15.87	984.13
2	Water Department -- Miramar Water Distribution Systems Improvements	4/30/2001	0.12	984.01
3	Water Department -- Miramar Water Distribution	6/25/2001	0.45	983.56
4	Water Department -- Otay Water Treatment Plant	12/5/2001	5.63	977.93
5	Water Department -- Rancho Bernardo Pipeline No. 2 & Black Mountain Ranch Reclaimed Waterline	3/26/2002	0.13	977.80
6	Water Department -- Miramar Water Treatment Plant Upgrade	10/21/2002	2.78	975.02
7	Water Department -- North City Water Reclamation Plant	2/13/2003	0.54	974.48
8	Santaluz -- Segment 4A and Pressure Reducing Station	7/18/2003	1.0	973.48
9	Engineering & Capital Projects -- Serra Mesa and Kearny Mesa Libraries	9/30/2003	0.06	973.42
10	Metropolitan Wastewater Department (MWWD) -- Various future projects ¹	3/15/2004	1.56 ¹	971.86
11	MWWD -- Seven projects: 45 th and Boston, Buchanan, Hwy 163, Shepherd Canyon, Shepherd Canyon Long Term Access, Stevenson, Stevenson Long Term	5/30/2006	(1.211) ¹	971.86
12	MWWD -- Two projects: 54 th & Maisel and Trinidad & Euclid	8/22/2006	(0.17) ¹	971.86
13	TRC / Kinder Morgan Energy Partners -- Marine Corps Air Station Miramar Energy Fuel Tank	8/13/2007	3.0	968.86
14	All Right Storage -- Otay Mesa Storage Facility	12/06/2007	1.0	967.86
15	MWWD -- Dakota Canyon Sewer ²	1/30/2008	(0.18) ¹ 0.39 ²	967.47

16	MWWD -- Four projects: I-805, Norfolk Canyon, Rancho Bernardo Canyon, and 60 th Street Emergency Repairs	3/25/2008	1.595	965.875
17	MWWD -- Highway 163 North Canyon	5/29/2008	4.0 ³ (0.19) ³	961.875
18	Public Utilities Department, Wastewater (formerly MWWD) -- Lexington/Manzanita Long Term Access	11/26/2008	(1.31) ³	961.875
19	Sun Edison: Photovoltaic System -- Otay Water Treatment Facility	10/20/2009	2.25	959.625
20	Insurance Auto Auction -- Britannia 40 Otay	11/16/2009	19.6	940.025
21	Public Utilities Department, Wastewater -- Lexington/Manzanita Long Term Access correction	10/12/2010	(0.101) ³	940.025
22	San Ysidro School District -- Vista Del Mar Elementary School Project	3/1/2011	2.1	937.925
23	Park and Recreation Department -- Old El Camino Real to Gonzalez Canyon Trail Connection	9/09/2011	0.29	937.635
24	Public Utilities Department, Water (formerly Water Department) -- Los Penasquitos Recycled Water Pipeline	9/30/2011	0.74	936.895
25	Public Utilities Department, Wastewater -- Four Projects: Alvarado, Mission Center, Pump Station 77, Stevenson Canyon	2/28/2012	(1.024)³	936.895
26	Public Works Department -- Juniper Street Sidewalk	6/12/2012	0.22	936.675
27	Public Utilities Department, Wastewater -- Balboa Trunk Sewer Replacement	08/17/2012	(0.354)³	936.675
28	Public Utilities Department, Water -- Lakeside Water Repair	11/29/2012	0.12	936.555
29	Public Utilities Department, Wastewater -- Otay Valley Trunk Sewer	11/29/2012	(0.055)³	936.555
TOTAL TO DATE			63.445	936.555

Marron Valley Cornerstone Mitigation Bank Fund Balance 12/31/2012 Total includes Endowment and Land Value monies	\$1,121,283.13
--	-----------------------

¹ MWWD purchased 1.56 credits to be apply towards future transactions.

² MWWD purchased 0.39 credits, combined with a remaining 0.18 credits, to satisfy mitigation that required 0.57 credits.

³ MWWD purchased 4.0 credits to be apply towards future transactions, with 0.965 credits available as of 12/31/2012.



Impact totals by project 2012

Balboa Terrace Trunk Sewer

Code	Habitat Type	Position	Tier	Acreage		PTS/MND No.	Permit Type	Location	NTP date	Type of project	Mitigation	Mitigation	Mitigation	Mitigation location or cost
				in MHPA	out of MHPA						Ratio	Acreage	Type	
DCSS	Coastal Sage Scrub	Upland	II	0.354	0.000	235917	SDP	Balboa Terrace	8/1/2012 (u)	Sewer Main	1 to 1	0.708		Marron Valley Cornerstone
NVC	Open Channel	Wetland	N/A	0.014	0.000						2 to 1	0.028		El Rancho & San Clemented Canyon
DWET	Wetlands	Wetland	N/A	0.107	0.000						2 to 1	0.214		El Rancho & San Clemented Canyon
MFS	Mule Fat Scrub	Wetland	N/A	0.022	0.000						2 to 1	0.044		El Rancho & San Clemented Canyon
SCLORF	Oak Riparian Woodland	Wetland	N/A	0.030	0.000						3 to 1	0.090		El Rancho & San Clemented Canyon
FM	Freshwater Marsh	Wetland	N/A	0.040	0.000						2 to 1	0.080		El Rancho & San Clemented Canyon
SWS	Southern Willow Scrub	Wetland	N/A	0.064	0.000						2 to 1	0.128		El Rancho & San Clemented Canyon
	Ornamental landscape	Upland	IV	0.346	0.000						0 to 1	0.000		N/A
	Disturbed Habitat	Upland	IV	0.256	0.000						0 to 1	0.000		N/A

Alvarado Trunk Sewer Phase III

Code	Habitat Type	Position	Tier	Acreage		PTS/MND No.	Permit Type	Location	NTP date	Type of project	Mitigation	Mitigation	Mitigation	Mitigation location or cost
				in MHPA	out of MHPA						Ratio	Acreage	Type	
	Riparian Woodland		?	0.022	0.000	209815	SDP	Alvarado T/S		Trunk Sewer	2 to 1	0.044		Rancho Mission & SD River Wetland Creation
	Diegan Coastal Sage Scrub		II	0.005	0.000						1 to 1	0.005		City of SD HAF
	Coastal Sage-chapparral Scrub		II	0.022	0.000						1 to 1	0.022		City of SD HAF
	Baccharis scrub		II	0.045	0.000						1 to 1	0.045		City of SD HAF
NNG	Non-native grassland		IIIB	0.230	0.000						0.5 to 1	0.115		City of SD HAF

46th St. Slope Restoration

Code	Habitat Type	Position	Tier	Acreage		PTS/MND No.	Permit Type	Location	NTP date	Type of project	Mitigation	Mitigation	Mitigation	Mitigation location or cost
				in MHPA	out of MHPA						Ratio	Acreage	Type	
	Scrub Oak Chaparral		I	0.000	0.030	124325	SDP	46th & Maple	3/19/2012	Restoration		0.140	HAF (0.14 ac)	
	Chaparral		I	0.000	0.010									
	Diegan CSS/Chaparral		IIIA	0.000	0.070									
	So. Mixed Chaparral		IIIA	0.000	0.010									
NNG	Non-Native Grassland		IIIB	0.000	0.050									

Via Esprillo Emergency Storm Drain Repair

Code	Habitat Type	Position	Tier	Acreage		PTS/MND No.	Permit Type	Location	NTP date	Type of project	Mitigation	Mitigation	Mitigation	Mitigation location or cost
				in MHPA	out of MHPA						Ratio	Acreage	Type	
	Coastal Sage Scrub		II	0.142	0.000	PTS#230855 (NOE)		16450 Via Esprillo		Emergency	1.5 to 1	0.210	Rest. & Revege	On-site
	Mixed Chaparral		IIIA	0.027	0.000						2 to 1	0.070		
	Mulefat Scrub		Wetland	0.010	0.000						2 to 1	0.020		

Totals

**Transportation & Storm Water Department
2012 Storm Water Division Habitat Impacts and Mitigation**

Habitat Type	Position	Tier	Acres Impacted in		Location/Project	Mitigation
			MHPA	out of MHPA		
Freshwater Marsh	Wetland	N/A	0.059	0.026	Sorrento Creek Channel Maintenance	El Cuervo Wetland Mitigation Site and Famosa Slough
Southern Willow Scrub	Wetland	N/A	0.669	0.039	Sorrento Creek Channel Maintenance	
Disturbed Wetland	Wetland	N/A	0.036	0	Sorrento Creek Channel Maintenance	
Developed lands	Upland	IV	0.01	0.016	Sorrento Creek Channel Maintenance	
Disturbed habitat/ruderal	Upland	IV	0	0.003	Sorrento Creek Channel Maintenance	
Open Water	Wetland	N/A	0.955	0.032	Sorrento Creek Channel Maintenance	
concrete lined non-wetland waters of the US		N/A		2.5	Chateau Channel Maintenance	none required

Note: All impacts were due to maintenance of existing flood control channels.



**Park and Recreation Department
2012 Open Space Division Impacts and Mitigation**

Habitat Type	Position	Tier	Acres Impacted in MHPA	Acres Impacted out of MHPA	Location/Project	Mitigation
Maritime Succulent Scrub	Upland	I	0.035	0	Gonzalez Canyon Old El Camino Real Trail Connection	Cornerstone Lands Mitigation Bank (Purchased Fall 2011)
Diegan Coastal Sage Scrub	Upland	II	0.166	0	Gonzalez Canyon Old El Camino Real Trail Connection	
Diegan Coastal Sage Scrub/Chaparral	Upland	II	0.005	0	Gonzalez Canyon Old El Camino Real Trail Connection	
Disturbed/Ruderal/Developed	Upland	IV	0.007	0.053	Gonzalez Canyon Old El Camino Real Trail Connection	



Canyon Sewer Cleaning Program and Long Term Sewer Maintenance Program Progress Report

City of San Diego
Public Utilities Department



September 2012

Cover: Left top: Flat-top buckwheat (*Eriogonum fasciculatum*), Right top: coast barrel cactus (*Ferocactus viridescens*), Left bottom: toyon (*Heteromeles arbutifolia*), Right bottom: mountain mahogany (*Cercocarpus minutiflorus*)

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EXECUTIVE SUMMARY

In response to an Administrative Order from the U.S. Environmental Protection Agency, in an effort to reduce sewer spills and beach closures, and under the direction of Council Policies 400-13 and 40-14, the City of San Diego's Public Utilities Department (Public Utilities), has adopted the Canyon Sewer Cleaning Program and the Long-term Canyon Sewer Maintenance Program (Program) to access, clean, and repair miles of sewer infrastructure located in canyons and other environmentally sensitive areas.

A Programmatic Environmental Impact Report (PEIR) was prepared to study the Program and in July 2004, the City of San Diego approved Coastal Development Permit No. 13506 and Site Development Permit No. 13507 for the Program.

The objectives of the Canyon Sewer Cleaning Program and the Long-Term Canyon Sewer Maintenance Program are:

- To complete the inspection and cleaning of City of San Diego sewer infrastructure located in canyons and other environmentally sensitive lands.
- To identify and implement efficient, effective, and environmentally sensitive means to accomplish the necessary canyon sewer cleaning activities.
- To provide for long-term maintenance of canyon sewer infrastructure, recognizing that availability of access to the infrastructure is essential for an effective long-term program, in accordance with Council Policy 400-13.
- To evaluate and pursue options to redirect sewage flows out of canyons and into street sewer lines or other accessible areas, where feasible and appropriate pursuant to Council Policy 400-14.

This annual report, as required by the site development permit condition 27, provides a Progress Report to the Open Space Canyons Advisory Committee (OSCAC) on the Program for the year from July 2011 through June 2012. The report provides the status of all Program mitigation sites and a summary on planning and implementation of projects within the reporting year, including redirection of flow (ROF) studies, long term access planning and implementation, construction and emergency projects, and 25 month revegetation and restoration projects.

LONG TERM ACCESS PROJECTS

Long Term Access Projects are to provide access paths for routine maintenance and emergency repairs. One of the first steps in determining whether an access path is needed is to prepare a redirection of flow (ROF) study. A ROF study evaluates the economic feasibility of removing all or part of the sewer from the canyon versus providing access to the sewer if it remains in the canyon.

When redirection of flow is found to be infeasible from all or portions of environmentally sensitive lands/canyons, City staff will develop a Long Term Maintenance and Emergency Access Plan in accordance with Policy 400-13. Staff then prepare and submit Process 2 (Substantial Conformance Review- SCR) applications to the Development Services Department (DSD) for a determination whether the proposed mitigation, restoration, and access planning for individual canyon areas or project is in conformance with the Programmatic Environmental Impact Report (PEIR) and Program master permits. Separate permits or clearances are obtained from the regulatory agencies prior to implementation of long term access projects.

Public Utilities previously identified 15 canyons as priority canyons for long term access implementation. The following canyons are in various stages of long term access planning and implementation:

- 32nd Street— Sewer access paths located in upland areas have had wood chips installed and are currently being used by the Wastewater Collection (WWC) Division. Public Utilities staff is starting on the permits and developing contract documents for constructing improvements to streambed crossing areas.
- 45th & Boston—Implementation of long term access for this canyon has been completed. The paths have been surveyed and marked, vegetation has been cleared, and wood chips have been installed on the path. Public Utilities has acquired all access rights with the signing of the last easement in July 2012.
- Alvarado—The design for this project is complete. Public Utilities staff is starting on the permits, property acquisition, and developing contract documents.
- Black Mountain—Staff have completed all of the field work for this canyon. The access paths have been surveyed and the legal descriptions and plat maps have been completed. An easement with the County of San Diego has been recorded on the property. Staff is in the process of finalizing a Memorandum of Understanding (MOU) with the Park and Recreation Department.
- Carroll Canyon—The biological report has been submitted and is under review for Long Term Access improvements in Carroll Canyon.

- Park Mesa—Construction of the long term access path was completed in summer of 2011. All easements have been acquired with the exception of the United States Navy which is currently under review.
- Rancho Mission – On the east side of Margerum Avenue, access path improvements by City forces were completed in November 2011. The design for an improved streambed crossing on the west side of Margerum Avenue has been completed. Public Utilities staff is starting on the permits, property acquisition, final design review, and developing construction contract documents.
- Tecolote – Final design for East Tecolote Canyon was completed in June 2012. Public Utilities staff is starting on the permits and developing contract documents for constructing access path improvements.



Park Mesa – Long Term Access Path

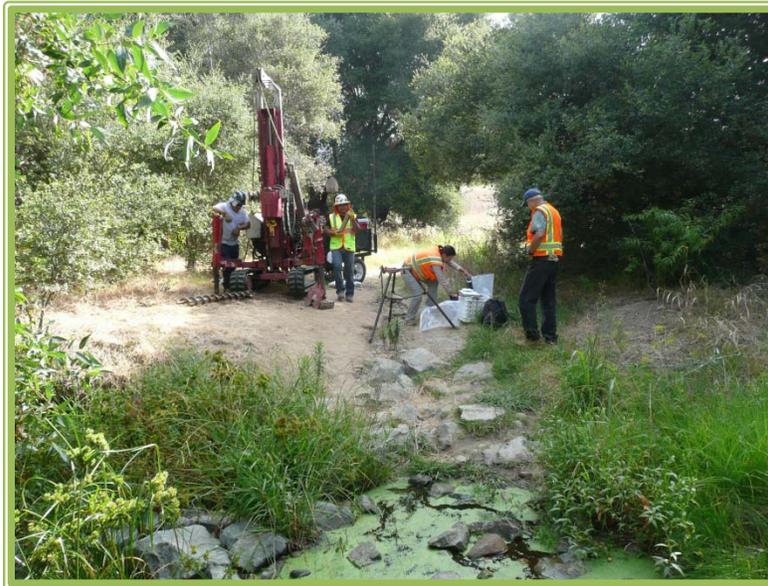
This past year, Public Utilities staff started working on the design and partial implementation on four new Long Term Access (LTA) projects:

- South Chollas —Public Utilities has prepared a LTA Plan and will continue with obtaining technical studies to support the SCR submittal.
- North Tecolote Canyon – This canyon has an approved conceptual long term access plan. Consultants are working on the design of access paths and streambed crossing improvements. The design work also includes a Geotechnical Report and a Technical Memorandum with design recommendations.

- VanNuys Canyon – Public Utilities received and approved a proposal for a new Redirection of Flow Study and Access Recommendation for the canyon.
- Mt. Elbrus Bridge – In November, 2011, WWC installed a prefabricated fiberglass bridge in Mt. Elbrus Canyon.



Mt. Elbrus Canyon- New Access Bridge



North Tecolote Canyon – Geotechnical Sampling Near Crossing

In addition to the above programs, the Department has increased its efforts to inventory and map existing access to sewers in canyons. This inventory provides information on existing access conditions, identifies access needs and areas of concern (i.e. erosion), and facilitates ongoing maintenance. To date, 152.4 miles of pedestrian and vehicular paths have been mapped with the GPS data for 133 canyon areas.



Access Path Inventory Map for Buchanan Canyon

CONSTRUCTION AND EMERGENCY PROJECTS

During this reporting period two Capital Improvement Program (CIP) projects were completed or are still in construction: USIU-Miramar Trunk Sewer Replacement and Balboa Terrace Trunk Sewer. Planning and permitting is complete or in process for a number of additional projects that are anticipated once contracting is complete or funding is available. These include Buchanan B, Water Group 616, Group Job 691, Group Job 703a, Group Job 799, Alvarado Trunk Sewer Phase 3, and Skylark Canyon Trunk Sewer. These jobs are managed by the Engineering and Capital Projects Department.

Since July 2011, emergency projects and/or pipeline repair projects occurred in the following canyons or environmentally sensitive areas:

Emergencies

- San Diego Mission Road Manhole 111 (manhole raising and cleaning)
- Pump Station 64 (spill and clean-up)
- Euclid and Menlo (pipe repair)
- 10th Ave (pipe repair)
- Middle Rose Manhole 160 (access creation and cleaning)
- Mimulus Way (pipe repair)
- Hotel Circle South (pipe repair)

Other construction projects

- Manhole 190 (manhole raising)
- Otay River Sewer (path maintenance)
- Mt. Elbrus (spot repair)
- Admiral Baker (manhole raising)
- Mission Valley (spot repair)
- Lookout Drive (spot repairs)
- Keighly Street (spot repair)
- Washington Creek (spot repair)
- Yerba Santa (spot repair)
- Laurel Street (spot repair)
- Middle Rose Manhole 9 (cleaning)

Public Utilities staff manage emergency and non-CIP construction projects. Environmental review, monitoring, and reporting are done in adherence with the Program. Biological assessments have been prepared for these emergency and construction projects. Following construction, revegetation and/or restoration has been implemented in accordance with the Program.



San Diego Mission Road MH 111 Emergency Raising & Cleaning



Hotel Circle South Emergency Pipe Pillar Replacement

25 MONTH REVEGETATION AND RESTORATION PROJECTS

Conditions of the Master permit require effective erosion control of access paths and restoration of impact areas outside of path areas following construction. Each impact area is monitored and maintained for a period of no less than 25 months.

Revegetation sites include all areas required for permanent access to utilities including the access paths, turn-arounds, and work areas around manholes. When new access paths and permanent access areas are created, revegetation is required. The goal of revegetation is successful erosion control. Maintenance and monitoring of revegetation areas may include hydroseeding or hand-seeding, weeding, mulching or installing wood chips on the path, installation of temporary Best Management Practices (BMPs), site monitoring or a combination of the above treatments.

Restoration sites are areas impacted outside of permanent access areas. Restoration areas are typically staging areas, emergency access or work areas, unauthorized impact areas, or areas disturbed as a result of temporary widening of pathways. The goal of habitat restoration is re-establishment of native habitat. Restoration areas shall obtain native plant coverage equal to the native species present in the adjacent area or 30% coverage, whichever is greater. Restoration areas shall support no more than 1% perennial weeds and no more than 10% annual weeds during the 25 month maintenance period. Maintenance and monitoring of restoration areas may include hydroseeding or hand-seeding, installation of container plants, weeding, installation of temporary Best Management Practices (BMPs), site monitoring or a combination of the above treatments.

Seed and plant material used for revegetation and restoration efforts is from sites within 25 miles of the coastline in San Diego County. Maintenance and monitoring of all sites continue for 25 months or until successful erosion control is achieved on the paths and/or restoration goals are met outside of the paths.

During this reporting year, eight projects were completed. In addition to eighteen ongoing projects, six additional sites were installed and maintenance and monitoring of these sites was initiated.

Updates of the status of the revegetation and restoration projects are a regular agenda item at OSCAC's meetings. See Page 37-38 for the August 2012 Revegetation and Restoration Projects Status update table.



Mission Center Canyon Restoration Project

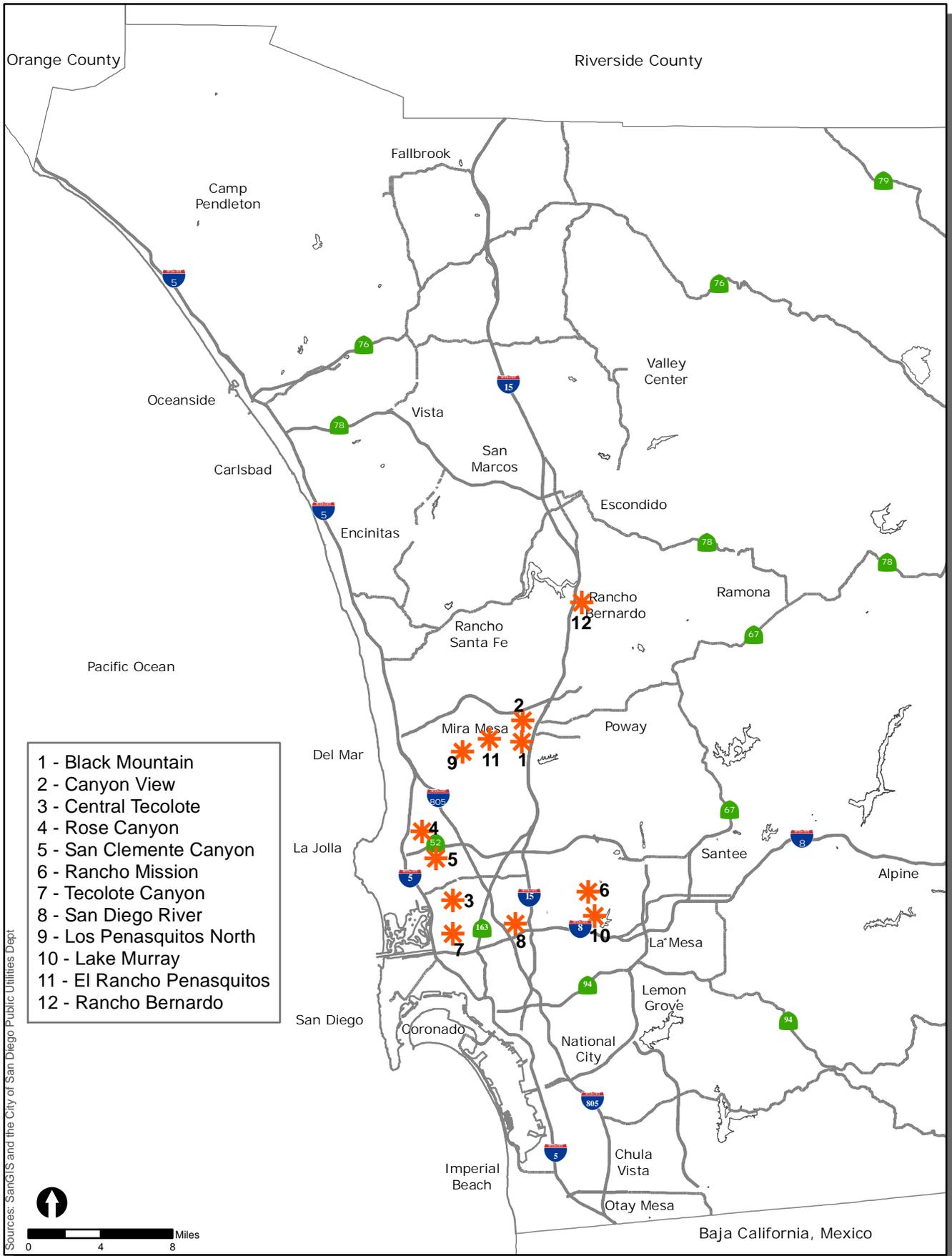


Rose Canyon Sinkhole Restoration Project

MITIGATION PROJECTS

In accordance with applicable local, state, and federal regulations, restoration, revegetation, or mitigation is required for significant biological impacts resulting from the Program, such as the creation of access paths through environmentally sensitive areas, emergency repairs, and pipeline repair projects. In order to mitigate these impacts, Public Utilities staff has identified and implemented a number of mitigation projects located within various watersheds where past, current, or future impacts have or may occur. These mitigation sites are designed and built to accommodate numerous Public Utilities projects. Allocation of mitigation is completed as each project is being planned. Project impacts and mitigation assignments are tracked internally within the Canyon Database.

The location of these projects is shown in Figure A. The status of each habitat mitigation project is summarized below.



**Mitigation Sites
 Overview Map**

**FIGURE
 A**

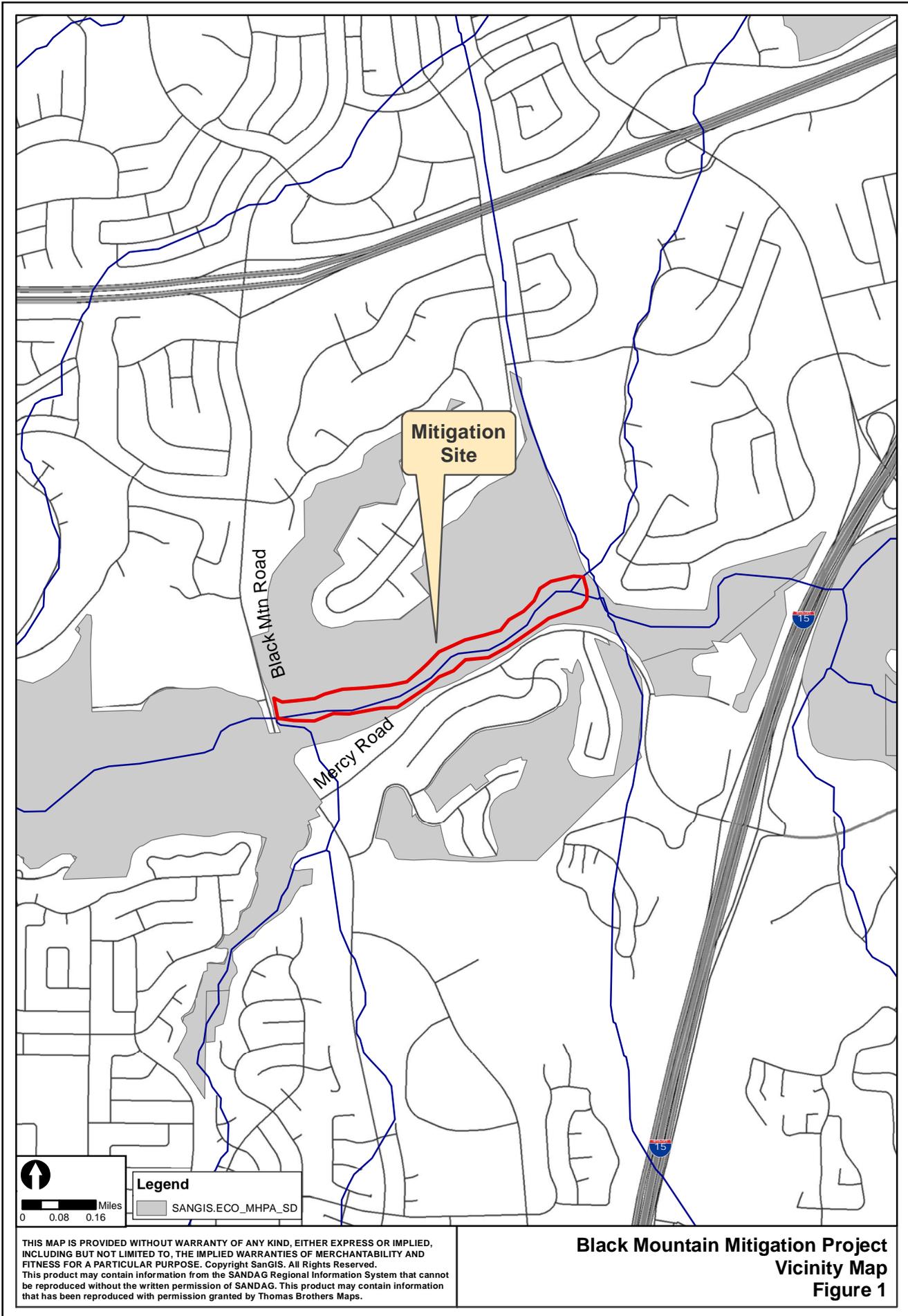
Black Mountain Wetland Mitigation Project

A conceptual plan is being prepared for this project, to be located west of I-15, east of Black Mountain Road, and north of Mercy Road in Los Penasquitos Canyon (Figure 1). The project area currently supports a large area of invasive non-native plant species that have little value for wildlife. The site currently supports eucalyptus (*Eucalyptus* spp.), Canary Island date palm (*Phoenix canariensis*), Mexican fan palm (*Washingtonia robusta*), Brazilian pepper tree (*Schinus terebinthifolius*), pampas grass (*Cortaderia selloana*), and tamarisk (*Tamarix parviflora*). The goal of the project will be to eradicate all non-native plant species and create native wetland habitat in areas of disturbed uplands. Project components will include eradication of exotic plant species, grading, installation of a temporary irrigation system, planting, seeding, and a 5 year maintenance and monitoring period.

Project implementation is planned for 2013.



Black Mountain Mitigation Project Site



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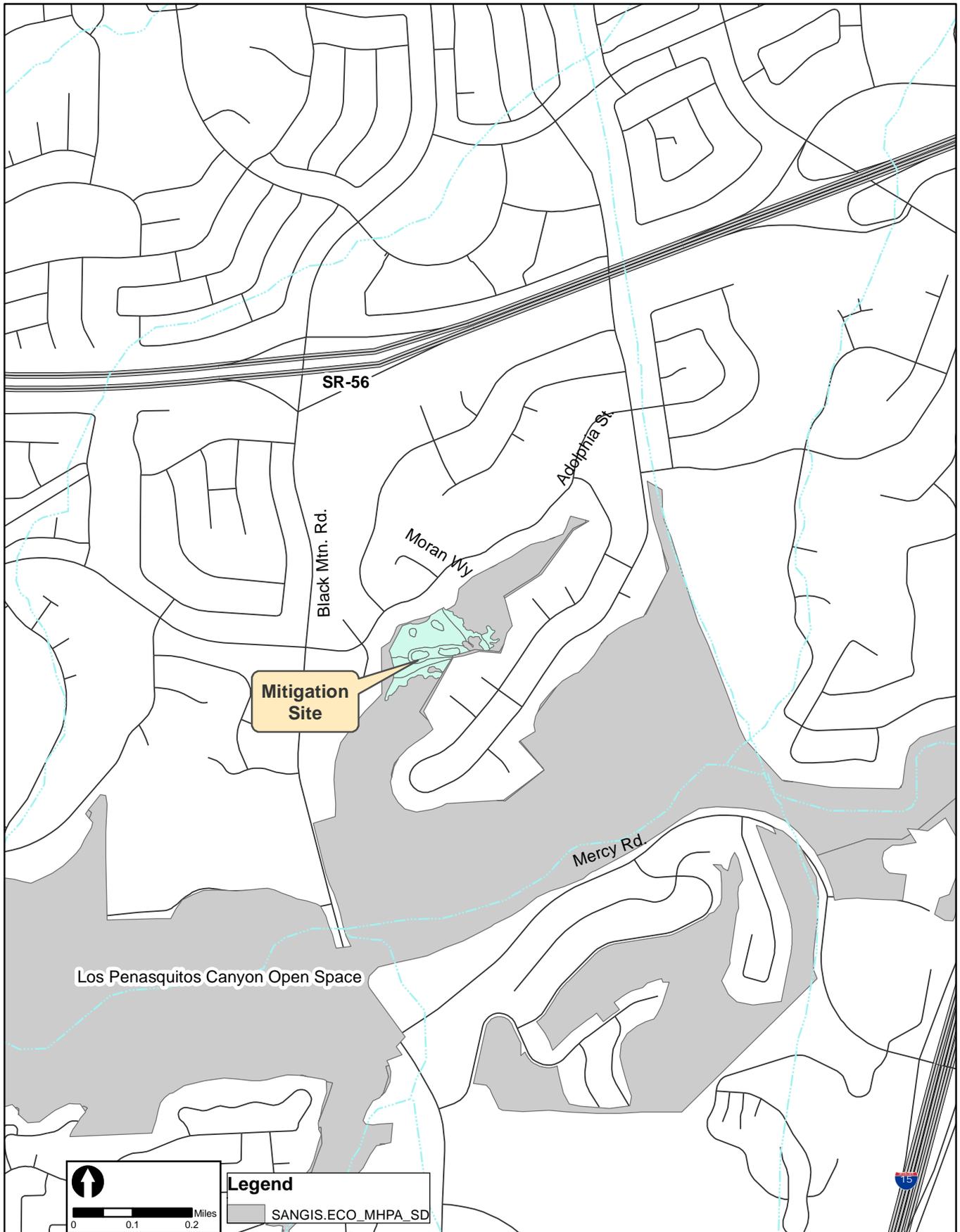
**Black Mountain Mitigation Project
 Vicinity Map
 Figure 1**

Canyon View Upland Restoration Mitigation Project

Construction began in September 2011 for this project, located east of Black Mountain Road and south of Adolphia Street in Los Penasquitos Canyon (Figure 2). The project involves the restoration of approximately 0.9 acres of native grassland and 6.79 acres of coastal sage scrub habitat, located on City of San Diego owned parcels within Los Penasquitos Canyon. The project serves to mitigate impacts associated with Public Utilities projects located in Los Penasquitos Canyon Preserve. Exotic species removed from the site include: mustard (*Brassica* sp.), artichoke thistle (*Cynara cardunculus*), tocalote (*Centaurea melitensis*), and many non-native grass species. The project is using recycled water for temporary irrigation during the plant establishment phase and through a portion of the 5 year maintenance and monitoring period. The 120 day Plant Establishment Period (PEP) began in June 2012. The site will be maintained and monitored for the 120-day PEP period and an additional 5-year period until agency sign off. The goal of the project is to restore low quality non-native uplands into high quality native habitats.



Canyon View Upland Restoration Mitigation Project site



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**Canyon View Upland Restoration Mitigation Project
Vicinity Map
Figure 2**

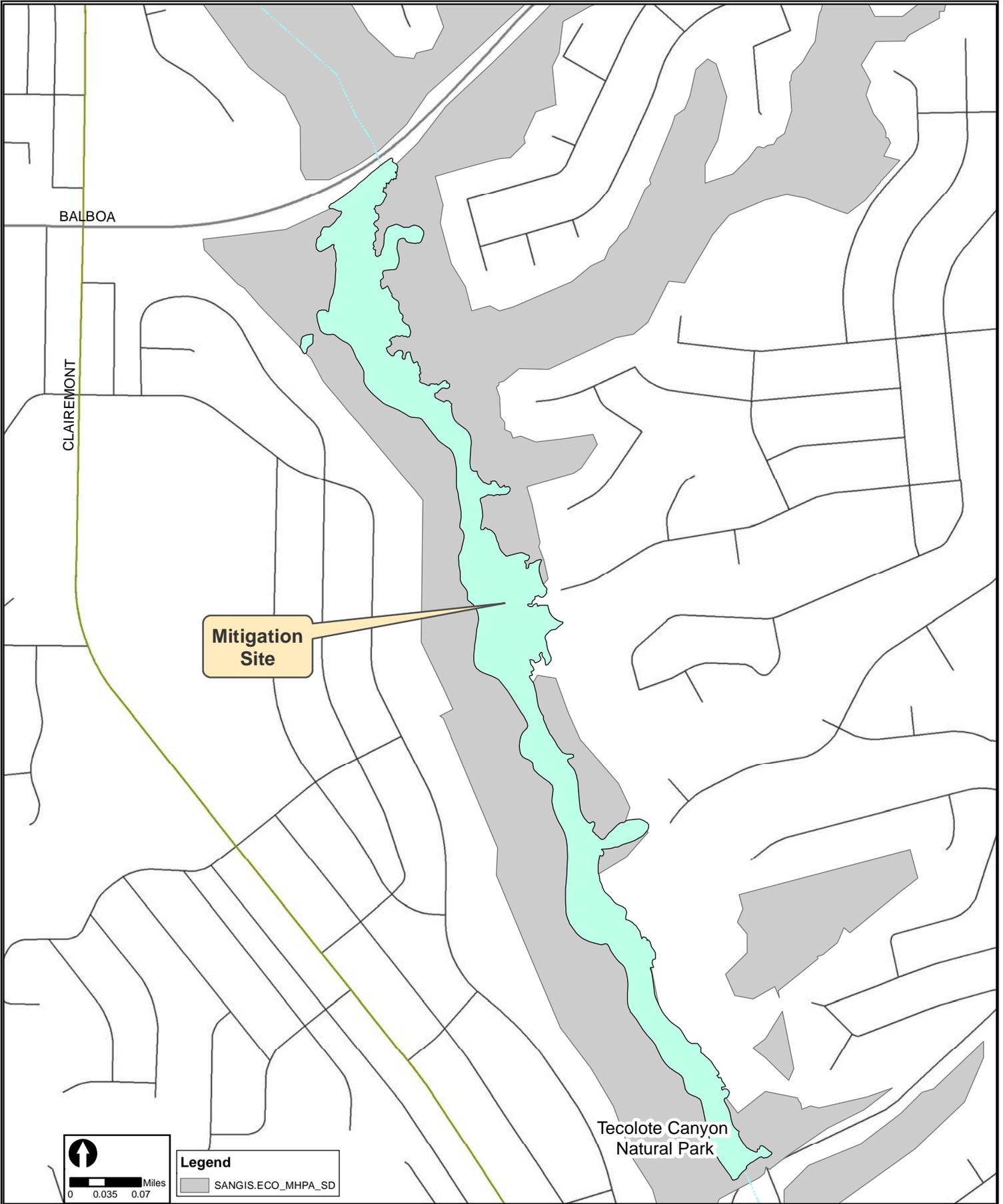
Central Tecolote Enhancement Mitigation Project

Construction began in February 2011 for this project, located south of Balboa Avenue and north of Mt. Acadia Boulevard in Tecolote Canyon (Figure 3). The project consists of approximately 3.5 acres of riparian enhancement and approximately 3.2 acres of native grassland/coastal sage scrub restoration in addition to a 20+ acre weed management area that encompasses Tecolote Creek.

Exotic species removed from the site include: Brazilian pepper (*Schinus terebinthifolius*), pampas grass (*Cortaderia selloana*), Mexican fan palm (*Washingtonia robusta*), Canary Island date palm (*Phoenix canariensis*), eucalyptus (*Eucalyptus* spp.), fennel (*Foeniculum vulgare*), mustard (*Brassica* sp.), and yellow sweetclover (*Melilotus indicus*). A temporary above ground irrigation system was installed to support the native plant and seed material was installed onsite. The 120 day Plant Establishment Period (PEP) began in July 2011, and ended November 2011, thereby initiating year-1 of the 5 year maintenance and monitoring period. The site will be maintained and monitored for a 5-year period to ensure successful establishment of native species and until agency sign off.



Central Tecolote Enhancement Mitigation Project



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**Central Tecolote Mitigation
Vicinity Map
Figure 3**

Rose Canyon Mitigation Project

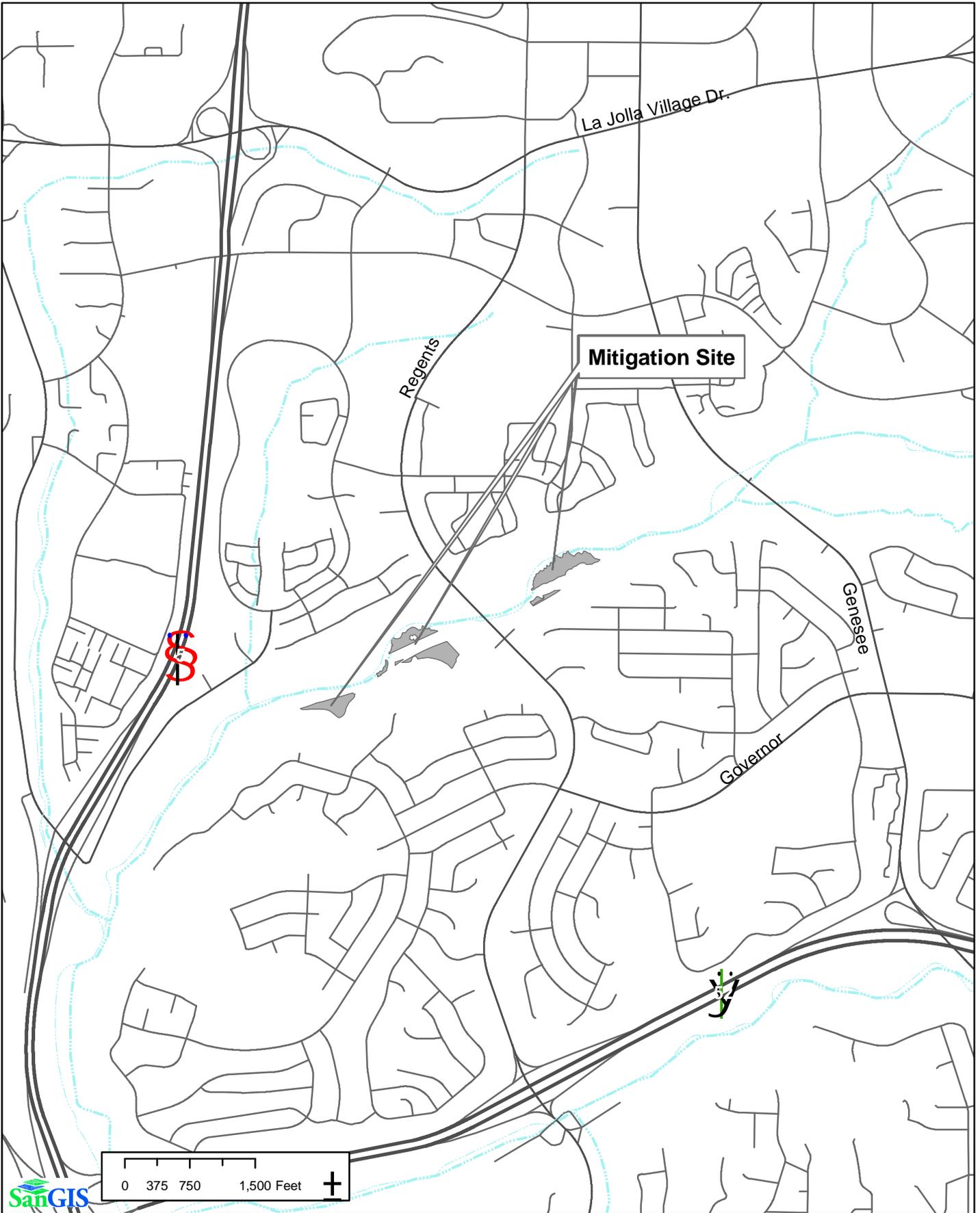
The Rose Canyon Mitigation Project is located in the Rose Canyon Open Space Park, starting approximately one half mile west of Genesee Avenue and continuing another one half mile further west into the park (Figure 4).

The project scope involved grading areas of non-native grassland adjacent to Rose Creek to allow for the establishment of suitable wetland habitat as well as filling areas to restore upland habitat. Approximately 4.36 acres of oak riparian forest, southern cottonwood-willow riparian forest, and mule fat scrub were created adjacent to Rose Creek. Approximately 3.67 acres of Diegan coastal sage scrub habitat was planted on the upland areas.

Construction was initiated in September 2007 and included clearing of non-native vegetation, grading, installation of a temporary irrigation system, planting, hydroseeding, fencing, and sign installation. The initial revegetation installation was accepted in March 2008, when the site entered the 120-day plant establishment period (PEP). The 120-day PEP was accepted and the project entered long-term maintenance on July 15, 2008. The project is currently in its fourth year of maintenance. Irrigation was turned off in the Fall of 2011. The site has met and exceeded year 5 success standards with over 90% vegetative cover in the wetlands and over 80% in the uplands. The site will continue to be monitored and maintained through the completion of the 5 year long-term maintenance period.



Rose Canyon Mitigation Project site



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Rose Canyon Mitigation Site
Vicinity Map

Figure 4

San Clemente Canyon Mitigation Project

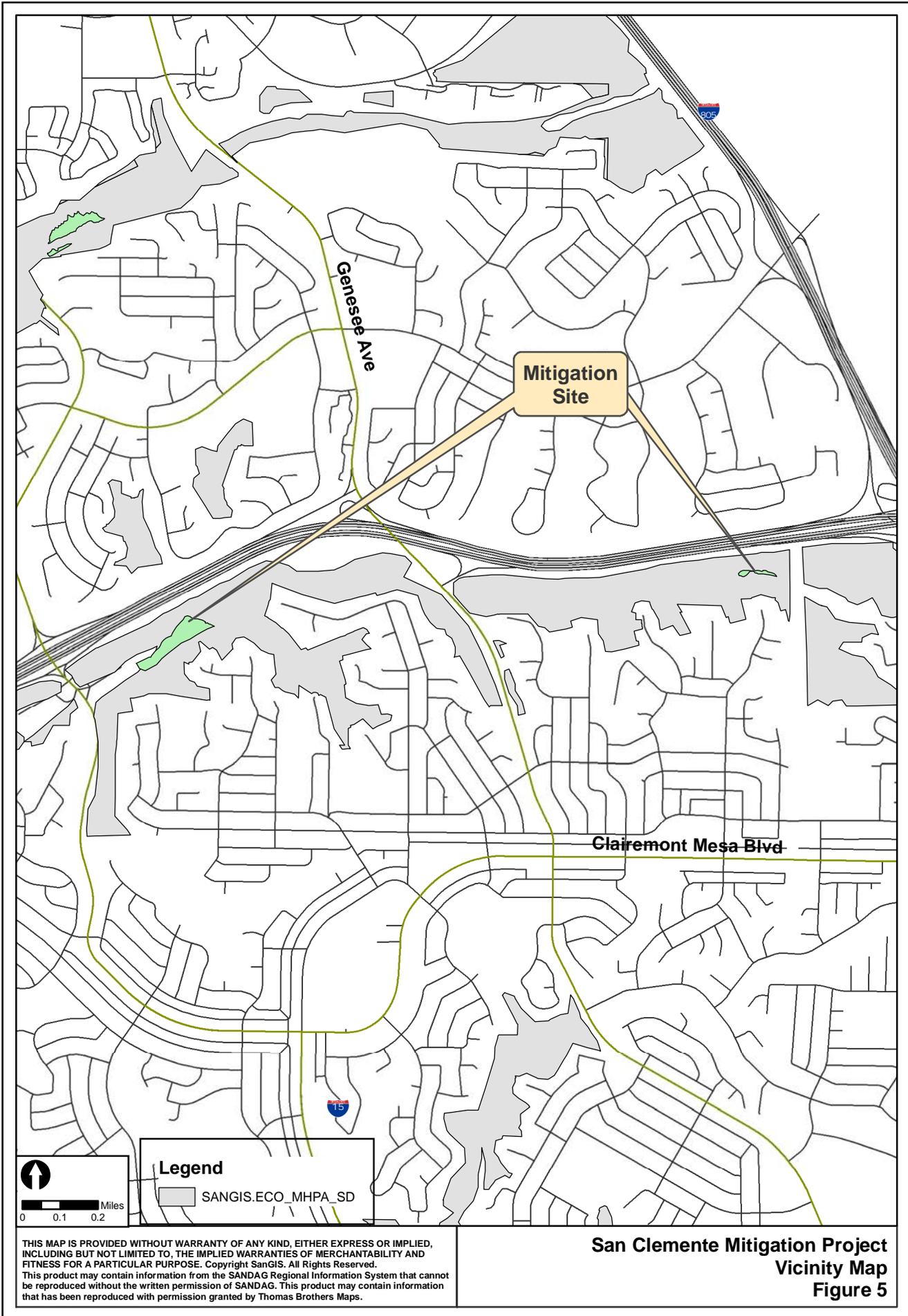
The San Clemente Canyon Mitigation Project provides mitigation for impacts associated with Public Utilities projects (San Clemente Canyon Maintenance and Access Plan, emergency repairs, etc) within San Clemente Canyon/Marian Bear Memorial Park and surrounding watershed. The project is located at two sites within the park, one just east of the Regents East parking area and the other approximately three-fourths of a mile east of the Genesee parking area (Figure 5).

The project includes the creation of 2.2 acres of wetland habitat (southern willow riparian forest and oak riparian forest) and 3.3 acres upland habitat (Diegan coastal sage scrub and native grassland).

Construction was initiated in October 2007. The plant establishment period for the site was met in September 30, 2008. The upland and wetland planting areas for the project have shown steady establishment of target species. The majority of the upland planting areas are dominated by established Diegan coastal sage scrub and California native grassland species. One upland area at the Regents site has naturally trended to a transitional wetland habitat, and additional container plants were installed in 2011 to enhance diversity within this area. Additional sycamore trees were planted in the winter of 2011/2012 following a request from the community. The project will start its 5th year of maintenance and monitoring in September 2012.



San Clemente Canyon Mitigation Project site



Miles
0 0.1 0.2

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**San Clemente Mitigation Project
Vicinity Map
Figure 5**

Rancho Mission Canyon Wetland Enhancement Project

The Rancho Mission Canyon Wetland Enhancement Project is located in the City's Rancho Mission Canyon Open Space Park, south of Mission Gorge Road, north of Navajo Road, and on either side of Margerum Way in the Allied Gardens Community of the Navajo Community Planning Area (Figure 6).

The Rancho Mission Mitigation Project includes the enhancement of 7.59-acres of wetlands and restoration of 1.53 acres of wetland transitional habitats. Non-native vegetation was removed from the canyon, followed by revegetation with native southern willow scrub and wetland transitional species. An additional 4.5 acres is being maintained weed free, but is not planted. The total area of habitat enhancement runs the entire canyon bottom and encompasses more than 13.5 acres. Exotic species targeted for eradication include: salt cedar (*Tamarix* sp.), myoporum (*Myoporum laetum*), Brazilian pepper (*Schinus terebinthifolius*), pampas grass (*Cortaderia selloana*), Mexican fan palm (*Washingtonia robusta*), and eucalyptus (*Eucalyptus* spp.).

The site is currently in year 5 of the long-term maintenance and monitoring period. Year 4 annual quantitative monitoring documented high species diversity and native vegetative cover percentages of 98.6%. The enhancement site has exceeded year 4 and 5 success criteria for native cover. Irrigation has been shut off to allow the wetland transitional and wetland areas to naturalize and establish. The site will be monitored and maintained for the remainder of the fifth year of maintenance; agency approval and sign off is expected in the spring of 2013.



Rancho Mission Canyon Wetland Enhancement Project



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**Rancho Mission Mitigation
 Vicinity Map
 Figure 6**

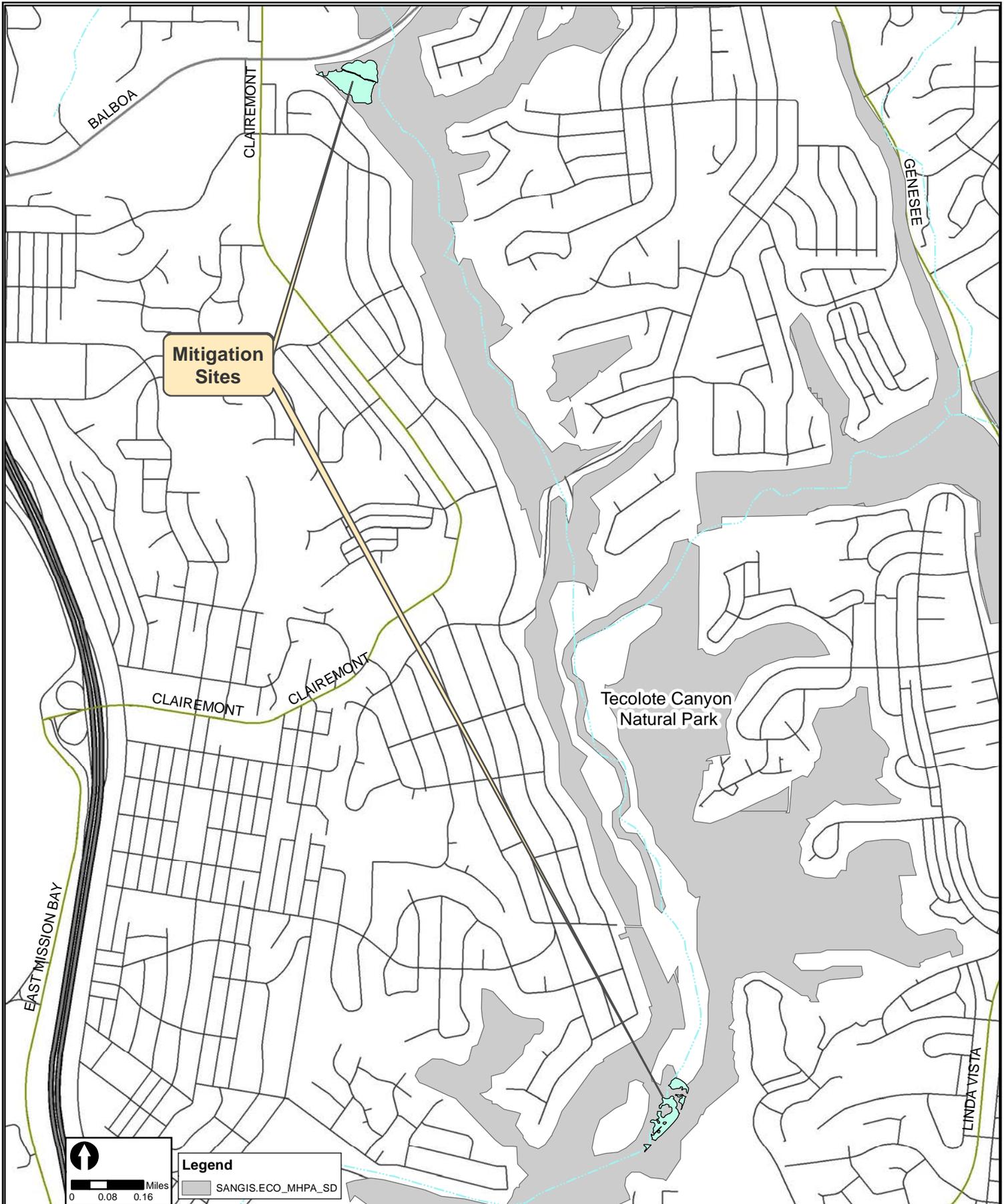
Tecolote Canyon Mitigation Project

The Tecolote Canyon Mitigation Project provides mitigation for upland and wetland impacts associated with implementation of past emergency and long term access path impacts within Tecolote, Mt. Elbrus, East Clairemont, and Manning Canyons. The Balboa site is located south of Balboa Avenue, and the Grove site is located south of the Tecolote Golf Course and north of the University of San Diego (Figure 7).

The project includes the creation of 1.6 acres of wetland habitat (southern willow scrub and oak riparian forest) and restoration of 2.91 acres upland habitat (Diegan coastal sage scrub). Construction was initiated in February 2007 and continued until July 31, 2007. Final acceptance of the 120-day plant establishment period occurred in January 2008, which marked the beginning of the five-year maintenance and monitoring period. The four year success criteria of 75% coverage of wetland vegetation transects and 60% coverage of upland vegetation transects have been exceeded by all plant communities. The site is currently in the fifth year of maintenance and monitoring.



Tecolote Canyon Mitigation Project site



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**Tecolote Canyon Mitigation
Vicinity Map
Figure 7**

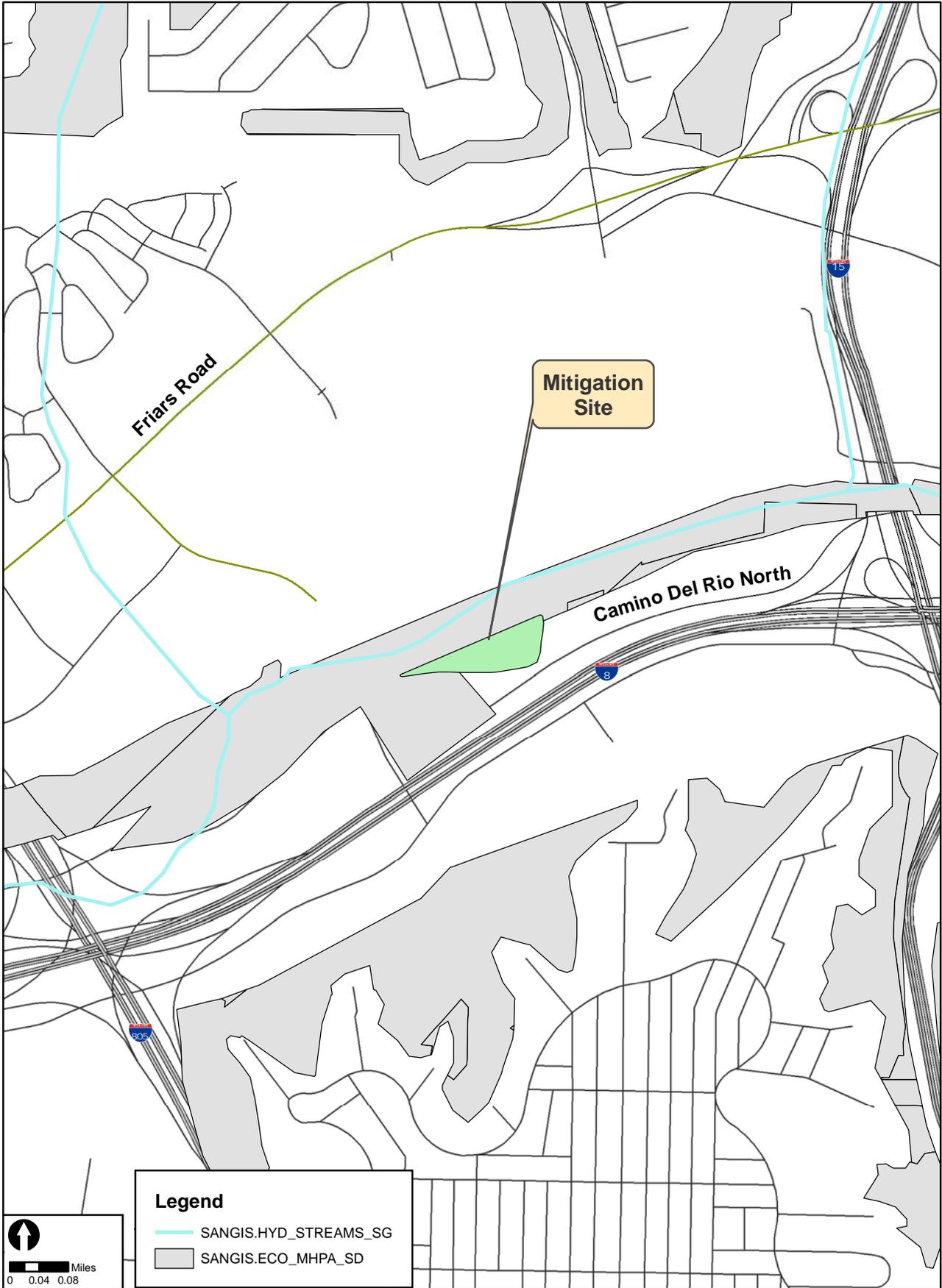
San Diego River Wetland Creation Project

The San Diego River Wetland Creation Project is located on a Public Utilities owned parcel located immediately adjacent to the southerly bank of the San Diego River, north of Camino Del Rio North, west of Interstate 15, and east of Mission Center Parkway in the Mission Valley Community of the City of San Diego (Figure 8).

The site includes the creation of approximately 3.43 acres of native riparian habitat and approximately 2 acres of Diegan coastal sage scrub habitat. The project site was graded in the fall of 2005 to create a basin along the southern bank of the San Diego River. The basin was planted and hydroseeded with native species in the winter of 2005/2006 followed by a 120-Day Plant Establishment Period. The long-term maintenance, monitoring, and reporting program started June 14, 2006 and the site successfully completed 5 years of maintenance and monitoring in June of 2011. Native vegetation has established well with wetland trees exceeding 14 feet in height. The wetland basin receives flows from the San Diego River during high water events (rainfall) which contributes nutrients and provides the necessary hydrology. Wildlife is using the site with numerous songbird nests observed in the wetland area. A MHPA boundary line adjustment was approved by the Wildlife Agencies and is being finalized by the City to add the mitigation site into the MHPA.



San Diego River Wetland Creation Project site



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**San Diego River Mitigation Project
 Vicinity Map
 Figure 8**

Los Peñasquitos North Wetland Creation Project

The Los Peñasquitos North Wetland Creation Project is located in the City of San Diego's Los Peñasquitos Canyon Preserve in the community of Peñasquitos, just north of the Los Peñasquitos Creek (Figure 9).

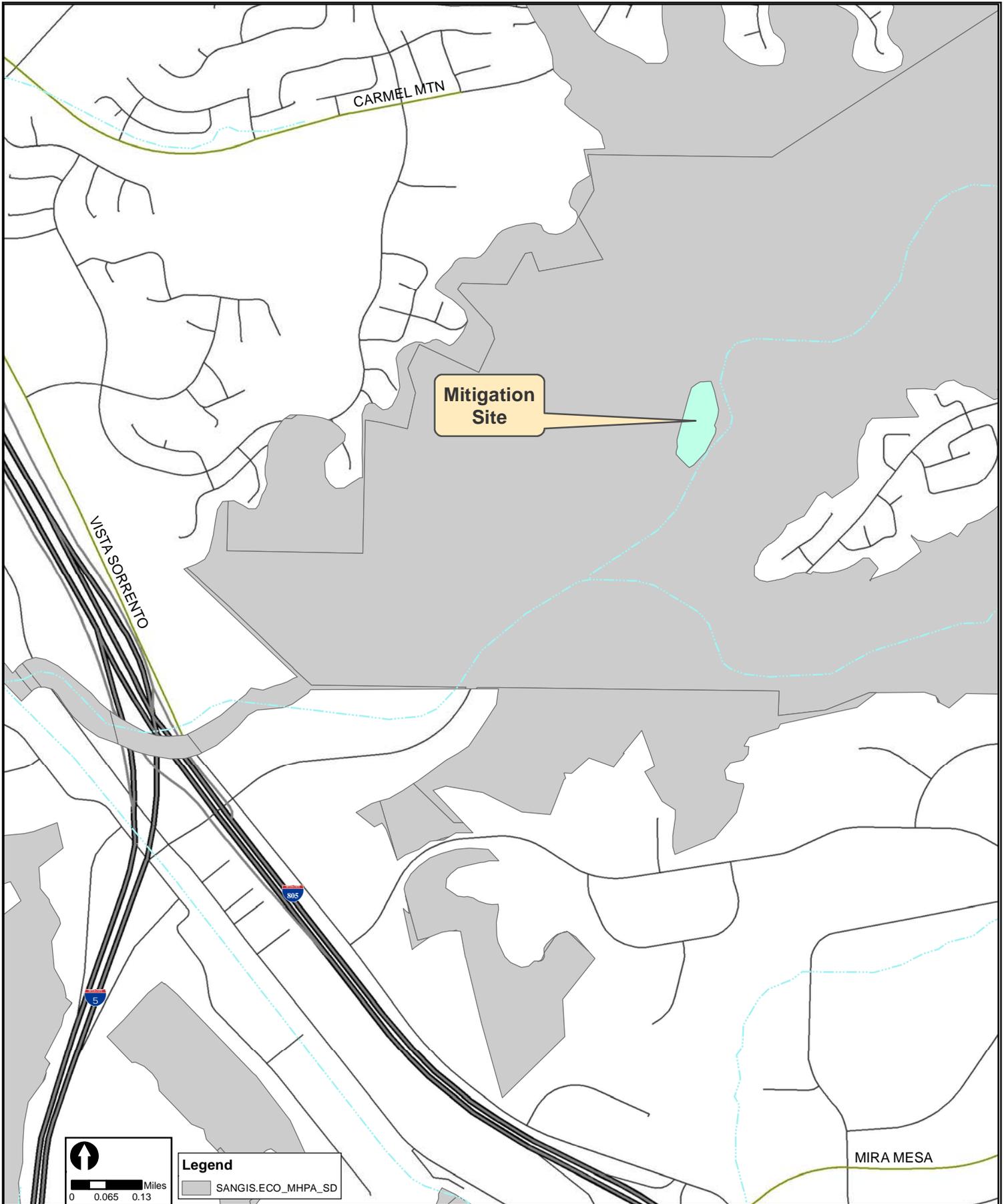
The project includes the creation of 3.8 acres of wetland habitat, including 3.15 acres of southern willow scrub, 0.43 acres of cottonwood/sycamore woodland, and 0.22 acres of freshwater marsh. The site also includes one acre of coastal sage scrub habitat to serve as a buffer on the north edge of the site.

The project site is characterized by a diverse mosaic of native vegetative cover including trees, shrubs, and a herbaceous layer. The site provides high quality habitat for a number of wildlife species which have been observed foraging onsite.

Regulatory sign-off and approval for the project was received in the spring of 2012.



Los Peñasquitos North Wetland Creation Project site



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**Los Penasquitos North Wetland Creation Project
 Vicinity Map
 Figure 9**

Lake Murray Mitigation Project

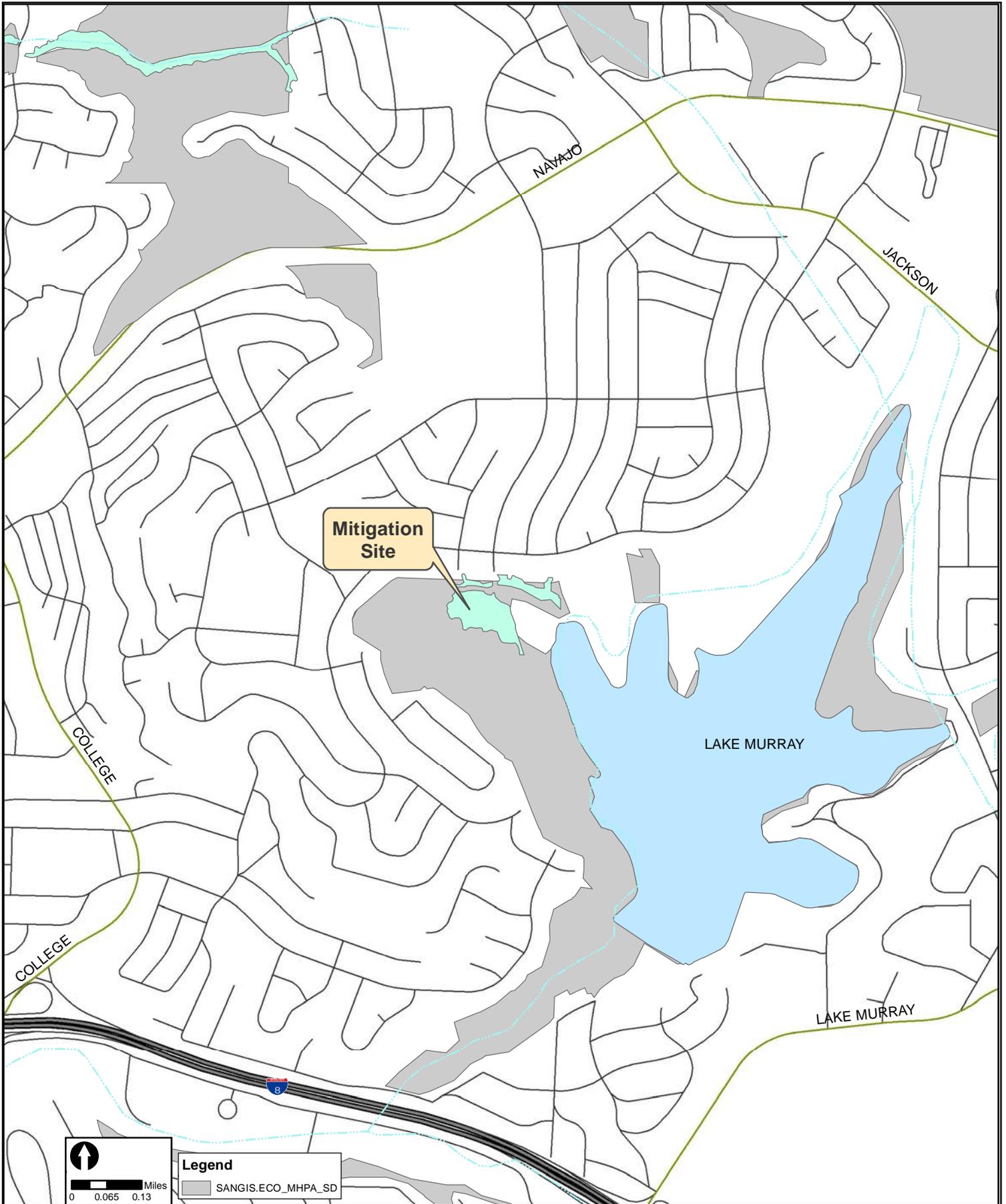
The Lake Murray Mitigation Project is in the City of San Diego's Mission Trails Regional Park. It is located in the area just west of Lake Murray in the Del Cerro neighborhood of the Navajo Community (Figure 10).

The mitigation site includes 2.5 acres of wetland enhancement (southern willow scrub habitat) and just over 5.2 acres of upland restoration area (Diegan coastal sage scrub). Gnatcatcher and quail have regularly been spotted foraging within the upland area.

The site was installed September 2005 through June 2006. Official sign-off was received from California Department of Fish and Game (CDFG) in March 2010 and from Army Corp of Engineers (ACOE) on December 7, 2011.



Lake Murray Mitigation Site



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**Lake Murray Mitigation Project
Vicinity Map
Figure10**

El Rancho Peñasquitos Wetland Enhancement Project

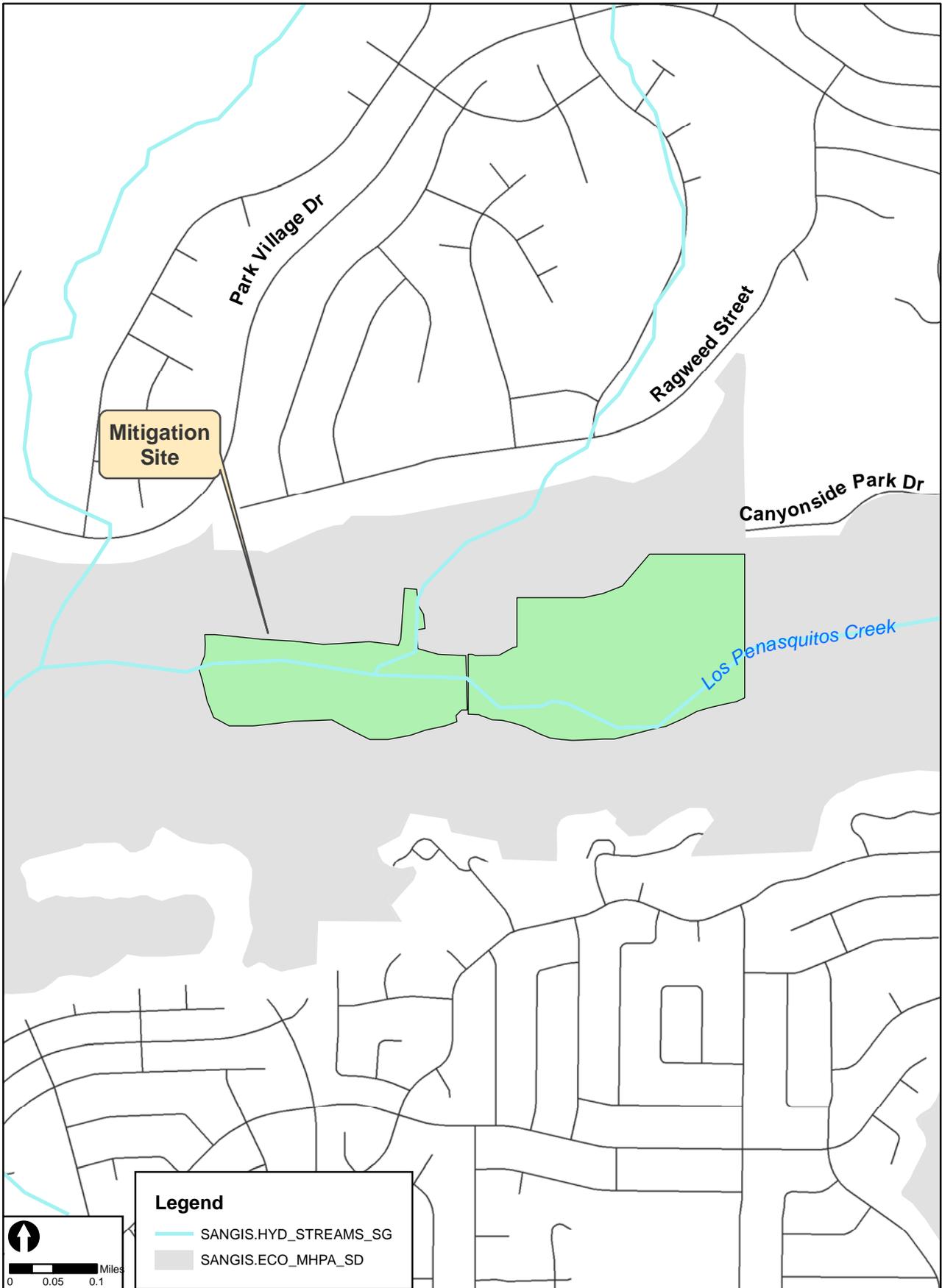
The mitigation site is located along Los Peñasquitos Canyon approximately 0.5 mile west of Black Mountain Road in the vicinity of the historically designated Johnson Taylor Adobe of Rancho de los Peñasquitos (City of San Diego HRB Site #75). The site is within the MHPA on County and City of San Diego Open Space Land (Figure 11).

The El Rancho Peñasquitos Wetland Enhancement Mitigation Project includes enhancement of 5.53 acres of southern cottonwood willow riparian forest. Non-native plant species eradicated during the enhancement effort include Canary Island date palm (*Phoenix canariensis*), Mexican fan palm (*Washingtonia robusta*), Peruvian pepper tree (*Schinus molle*), Brazilian pepper tree (*Shinus terebinthifolius*), eucalyptus (*Eucalyptus* spp.), edible fig (*Ficus carica*), and artichoke thistle (*Cynara cardunculus*).

Results from the Final Monitoring Report outline a 100% eradication of target plant species from the entire project area within Los Peñasquitos Creek. Treated plants have started to deteriorate and decompose, allowing for the establishment of native species in their direct vicinity. The El Rancho Peñasquitos Wetland Enhancement Project has met the success criteria outlined in the Conceptual Mitigation Plan and received regulatory sign-off in early 2010.



El Rancho Peñasquitos Wetland Enhancement Project site



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**El Rancho Penasquitos Mitigation
 Vicinity Map
 Figure 11**

Rancho Bernardo Mitigation Project

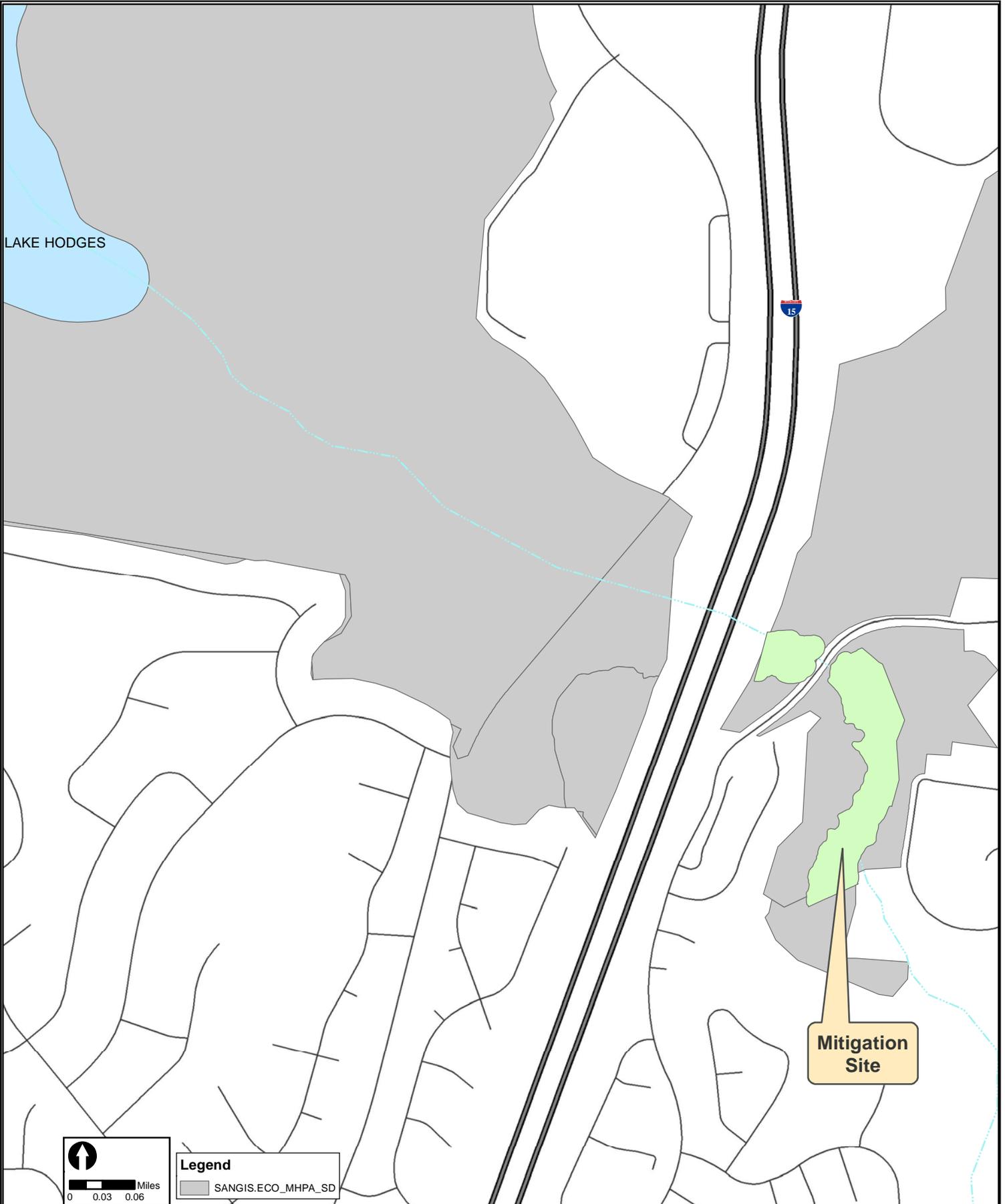
A conceptual mitigation plan has been prepared and approved by the Army Corps of Engineers and California Department of Fish and Game. The project would be located east of I-15, west of Cotorro Road and south of Escala Drive in Rancho Bernardo Canyon (Figure 12).

The project area currently supports a large area of invasive non-native plant species that have little value for wildlife. The site currently supports California fan palms (*Washingtonia filifera*), pampas grass (*Cortaderia jubata*), castor bean (*Ricinus communis L.*), and tree tobacco (*Nicotiana glauca*). The goal of the mitigation project will be to eradicate all non-native plant species and establish native wetland habitat.

Public Utilities has postponed implementation of this project and will reassess mitigation needs for this watershed on an annual basis.



Rancho Bernardo Mitigation Project Site



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**Rancho Bernardo Mitigation
 Vicinity Map
 Figure 12**



**25 Month Revegetation and Restoration Projects Status Table (2008-2012)
August 2012**



Active Projects

Canyon/ Project	Reveg or Restoration*	Size (Acre)	Start of 25 Months	Seeding Date	Planting Date	End of 25 Months	PM	Status
Rose (MH 476)	Reveg/Rest	<0.01	11/2008	11/2008	1/4/2012	Ongoing	White	Not enough vegetative cover. Will continue maintenance until meet coverage requirements.
Rancho Mission Slope Repair	Restoration	0.05	6/10/2010	6/10/2010	10/ 2010	7/2012	Balo	On Target. Erosion control replaced 12/2011
Lake Hodges	Restoration	0.03	7/1/2010	7/1/2010	N/A	8/1/2012	Domasco	25 months Monitoring
Menlo and Redwood	Restoration	0.2	11/17/2010	6/2010	11/17/2010	12/17/2012	Smith	On target
East Tecolote	Reveg/Rest	0.05	11/24/2010	11/24/2010	N/A	12/24/2012	White	On target
Lexington Water Emergency (Water)	Restoration	0.03	1/2011	9/2010	1/2011	2/2013	Domasco	On target
Lake Murray (Water)	Restoration	0.02	1/2011	1/2011	1/2011	2/2013	Balo	On target
San Clemente Emergency	Revegetation	<0.01	1/2011	N/A	N/A	2/2013	Balo	25 months Monitoring
San Clemente MH 4 Access	Revegetation	<0.01	2/2011	2/2011	N/A	3/2013	Balo	On target, monitoring only
Plaza Ridge (Water)	Revegetation	0.18	1/19/2011	1/19/2011	N/A	2/19/2013	Smith	On target
Waring Road	Restoration	0.5	4/2009	4/2009	N/A	4/2013	VanEvery	Ongoing maintenance.
33 rd and Maple	Revegetation	<0.01	3/16/2011	3/16/2011	N/A	4/16/2013	Smith	On target
Mission Center Canyon	Restoration	0.22	4/29/2011	10/1/2011	N/A	5/29/2013	White	On target. 25 months
Rose Sinkhole	Reveg/Rest	0.03	5/23/2011	5/3/ 2011	5/23/2011	6/23/2013	White	On target
Carmel Valley Rd (Water)	Revegetation	<0.01	5/20/ 2011	12/1/2011	N/A	6/20/2013	Balo	On target.
Upas Street	Revegetation	0.04	9/29/2011	9/29/2011	N/A	10/29/2013	Smith	On target.
Central Tecolote MH 159	Revegetation	<0.01	5/9/2011	5/9/2011	N/A	6/6/2013	Balo	25 months Monitoring
Dwane and Elaine	Restoration	0.02	6/29/2011	6/29/2011	N/A	7/29/2013	Smith	On target
Admiral Baker	Revegetation	<0.01	7/21/2011	7/21/2011	N/A	8/21/2013	Balo	25 months Monitoring
Hotel Circle South Emergency	Restoration	0.10	11/9/2011	7/26/2011	11/15/2011	12/9/2013	Smith	In 25 month maintenance period
Euclid and Menlo Restoration	Restoration	0.2	11/16/2011	9/10/2011	11/17/2011	12/16/2013	Smith	In 25 Month Maintenance
Chollas/YMCA (Water)	Revegetation	0.01	1/18/2012	9/20/2011	1/18/2012	2/18/2014	Domasco	In 25 Month Maintenance
Mission Center B Crossings	Revegetation	0.17	9/15/2011	N/A	N/A	10/15/2013	Balo	In 25 Month Maintenance
Lakeside Ave Emergency (Water)	Revegetation	0.3	4/15/2012	4/9/2012	06/14/2012	07/14/2014	White	In 25 Month Maintenance
East Tecolote Area C	Revegetation	<0.01	12/19/2011	12/19/2011	N/A	01/19/2014	Balo	In 25 Month Maintenance

Completed Projects				
Canyon/ Project	Revegetation or Restoration	Project Initiation	Project Completion	PM
PS 30	Restoration	4/2010	7/2012	Van Every
Oklahoma Street	Restoration	5/2010	6/2012	Domasco
Lopez MH 102	Restoration	5/2010	6/2012	Domasco
Valetta Street	Revegetation	5/2/2010	6/2012	Santos
South Juniper	Reveg/Rest	11/2009	2/9/2012	Domasco
Tecolote MH 346	Restoration	9/2009	11/2011	Domasco
San Pasqual Pipe Repair	Erosion Control	4/5/2007	9/18/2011	Balo
7 th and Brookes	Reveg/Rest	11/2008	9/18/2011	Domasco
Washington Creek	Erosion Control	2/1/2008	4/30/2011	Balo
Switzer	Reveg/Rest	11/2008	4/30/2011	Domasco
Mt Ashmun	Reveg/Restoration	10/2009	4/30/2011	Domasco
Lexington (Jaimes Way)	Reveg/Restoration	1/2009	4/30/2011	Balo
Dakota	Reveg/Rest	9/2008	11/26/2010	Domasco
Miramar TS	Reveg/Rest	10/28/2007	9/26/2010	White
Buchanan/Maryland St	Restoration	1/15/2008	4/22/2010	White
Fairmount and Home	Reveg/Rest	5/31/05	4/22/2010	White
Norfolk	Reveg/Rest	10/19/07	4/22/2010	Balo
Juniper and 28 th	Reveg	2/15/2008	4/22/2010	Balo
Spruce	Reveg	11/2007	5/2009	Balo
Mission Valley	Reveg/Rest	5/20/2005	1/2009	Ball
Mt Elbrus	Reveg/Rest	9/21/2004	5/2009	Ball
Manning	Reveg	10/22/04	1/2009	Domasco
54 th Street	Reveg/Rest	6/27/2006	5/2009	Balo
Alvarado	Reveg/Rest	11/7/2006	5/2009	Balo
Caminito Fuente	Reveg	8/8/06	1/2009	Balo
South Juniper	Reveg/Rest	1/24/2006	5/2009	Domasco
Delevan	Reveg/Rest	3/3/2006	5/2009	Domasco
Felton and Ivy	Restoration	3/21/2007	8/2009	Balo
Escala Drive	Erosion Control	1/2/2008	8/2009	Balo
Polvera Drive	Erosion Control	1/3/2008	8/2009	Balo
Willow St	Reveg	5/2005	8/2009	Smith
Spruce	Erosion Control	11/2007	8/2009	Balo
Buchanan	Reveg	1/18/2005	1/19/08	White
Park Mesa	Reveg/Rest	10/22/04	7/19/2008	Domasco
Tecolote	Reveg	10/22/04	7/19/2008	Domasco

**Under the Public Utilities Department (PUD) Programmatic Environmental Impact Report (PEIR) and Master Site Development Permit for the Canyon Sewer Cleaning and Long-Term Maintenance Access Program (Program), restoration refers to on-site vegetative remediation for impacted areas which are outside of the long-term maintenance access path. Revegetation refers to implementation of erosion control of long-term maintenance access paths. Restoration and erosion control are required by the PEIR and Master Site Development Permit. Although revegetation is one method of erosion control, other treatments such as an application of decomposed granite or wood fiber mulch may be implemented if preferred by the respective community. Alternative treatments may also be required by the Parks and Recreation Department for access paths and recreational trails which occur within City open space.*