June 19, 2019
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INTRODUCTION

This Biological Technical Report (BTR) presents the results of biological surveys conducted by the City of San Diego, Parks and Recreation Department for the proposed Ruffin Canyon Trail Realignment Project (proposed project) located in the communities of Serra Mesa and Mission Valley, City of San Diego, California. The surveys were conducted to assess existing biological conditions, potential impacts, and identify the need for mitigation measures associated with the proposed public trail realignment within the Ruffin Canyon Open Space area to create a complete trail system. The proposed project would create a new alignment in the southern section of the canyon where a current sewer access path does not serve as a safe and sustainable trail for public use. In addition, the report addresses the permitting of three existing trails within Ruffin Canyon Open Space. This report provides the public, City of San Diego (City), and resource agencies with information necessary to assess project impacts to biological resources for review under the California Environmental Quality Act (CEQA) permitting process under each agency's jurisdiction.

Project Location

The Ruffin Canyon Trail project area is within Township 16 South, Range 2 West on the San Bernardino Base and Meridian U.S. Geological Survey (USGS) 7.5-minute La Jolla quadrangle map (Figure 1). The Ruffin Canyon Trail project area is located within the Serra Mesa and Mission Valley communities of the City of San Diego. The project area is located west of Interstate (I)-15, east of I-805, and bounded roughly on the north by Gramercy Drive, and Friars Road to the south. It is within the City-owned Ruffin Canyon Open Space, which is managed by the City's Parks and Recreation Department, Open Space Division (Figure 2 – Trails Plan (Project)).

The project area occurs within the City's Multiple Species Conservation Program (MSCP) Subarea Plan (City 1997a). Ruffin Canyon is within the Multi-habitat Planning Area (MHPA; the City's MSCP Preserve). The study area is outside of the Coastal Overlay Zone.

This report addresses the impacts and mitigation of the new trail alignment construction and for the existing trail system proposed for permitting.

Environmental Setting

The project site is within an urban canyon which is surrounded primarily by single-family residential land uses. Taft Middle School is located to the northeast and San Diego Gas & Electric's (SDG&E) Mission Control facility is located to the southwest. The project site consists of approximately 163 acres of City owned open space, San Diego Unified School District, and privately owned HOA land.

The project consists of approximately 2,658 feet of new trail within Ruffin Canyon, heading south from the intersection of the existing Ruffin Canyon and Shawn Canyon trails. In addition to the new trail construction, the study area includes permitting of the existing trial

located in the upper section of Ruffin Canyon (Figure 2). An existing City utility path occurs within the central portion of Ruffin Canyon and Shawn Canyon and is used for access/maintenance of the sewer lines. Currently, this path is also being used as a hiking/biking trail (Figure 2).

The Ruffin Canyon supports relatively flat mesa tops to steep sloping canyon terrain with elevations ranging from approximately 140 feet in the southern portions of the property to approximately 400 feet above mean sea level (amsl) in the northern portions of the property. The three canyons, the main stem, Ruffin, Sandrock Canyon on the west, and Taft and Shawn Canyon finger canyons on the east, are characterized by low slopes along the bottoms (averaging 3-10 percent), surrounded by steep to very steep slopes (50 to 90 percent) along the canyon walls. One soil type is mapped for the project area: Olivenhain cobbly loam (30 to 50 percent slopes) (Bowman 1973).

The primary vegetation communities within Ruffin Canyon Open Space include southern mixed chaparral, grassland, coastal sage scrub, freshwater marsh, riparian woodland, southern willow scrub, non-native vegetation, and ornamental.

Project Description

This report addresses a proposed public trail realignment within the southern portion of Ruffin Canyon and the permitting of the existing trails in the northern portion of Ruffin Canyon Open Space. Guidance for the present and future use and maintenance of the final 11,465 feet of trails is presented in the draft Ruffin Canyon Open Space Trail Plan (City 2021), which provides a cohesive trail plan for the open space areas.

For the purposes of review under the California Environmental Quality Act (CEQA) and permitting, the trails to be included generally fall into two categories: Category 1: existing trail alignments); and Category 2: proposed new trail segment to improve the trail (involving realignment of an existing utility access path). A review of historical aerial photographs (1966 and 1972) (HistoricAerials.com) show that the City maintenance path and foot/bike trail existed in 1966. These trails were likely either created for accessing the utilities in the canyon (SDGE and sewer lines) and/or by users of the public accessing the open space.

The trail realignment would move the existing southern portion of Ruffin Canyon trail from the cobblestone-laden streambed, east along the lower portion of the canyon slope (Figure 2 & Appendix E, Photo 1). The proposed trail would improve the trail users experience and would allow trail use during the rainy season when the existing trail is flooded, while minimizing biological impacts and improving long term maintenance and sustainability of the trail. The current sewer access path does not currently serve as approved public access and additionally does not provide a safe transit corridor for use by the public. The unconsolidated cobble streambed is braided and incised and is currently very difficult to traverse on foot or bicycle. High velocity storm flows in the lower portion of the canyon have removed nearly all of the fine and medium sediment from the system. (Fine and medium sediment particles are still present for most of the alignment in North Ruffin). This results in hazardous walking conditions and the loss of the route for use by the public. By definition, the current trail alignment the streambed makes it unsustainable and unsuitable for routine maintenance. Establishment of the proposed trail alignment on the east side of the canyon is not, therefore, redundant, and is required to meet the project objective of a safe, sustainable trail for use by the public.

The new trail realignment (South Ruffin Canyon Trail) is approximately 2,626 feet in length and is considered a Category 2 trail (new trail segment). Biological impacts from the proposed new trail realignment are included in this report and associated mitigation requirements are specified. Approximately total 2,626 feet of new trail were studied, comprised of a single segment. The new trail would be constructed by hand clearing with power tools such as chainsaws and weed whips. Cuttings and brush will be removed from the canyon via the existing City access road and taken to an appropriate disposal facility. Final trail tread grades would be established with hand-held tools, including power tools such as jackhammers and hand-held compactors. For the new section, the final trail tread will be 2-4 feet wide, but a 5-foot average impact corridor is assumed for the trail construction to allow for cut and fill, and outsloping of the trail on the east side of the canyon to construct the bench for the trail. Actual impact width will vary from 3 to 6.4 feet based on the sideslope. The trail will consist of native soils and will be installed by hand crews.

The North Ruffin Canyon Trail (Figure 2) is located in the northern portion of Ruffin Canyon (Appendix E, Photo 2), and includes the Shawn Canyon Finger (Appendix E, Photo 3) and Taft Canyon Trail (Appendix E, Photo 4). The North Ruffin Canyon Trail is approximately 6,690 feet in length and is comprised of a City maintenance/access path and a foot/bike trail. Portions of the existing maintenance/assess path are being used as a foot/bike trail. A review of historical aerial photographs (1966 and 1972) (HistoricAerials.com) show that the City maintenance path existed prior to 1966. The Taft Canyon Trail is approximately 2,149 feet in length and based on historical aerial photographs appears around 2009. All of these are existing trails. No impact analysis or mitigation is required. Although existing, the trail in the North Ruffin Finger, north of where the Taft Finger enters the main stem of Ruffin Canyon and connecting to Gramercy Drive at the north end, is now proposed for closure as part of the plan. This approximately 2150 feet of trail is proposed to be closed in response to resource agency comments received on the draft Ruffin Trail Plan and in response to recent hydrologic changes in this section of the canyon that has washed out portions of the existing trail. No formal restoration is proposed at this location, a passive native vegetation restoration effort (Invasive species will be controlled as part of existing SD Canyonlands grant to remove non-native vegetation) is currently underway in the canyon. The potential for active vegetation and hydrologic restoration exists in this area, but cannot be implemented as part of this Project due to limited funding availability. Closure of this section will require signage, fencing, brushing in, and revegetation via passive and active means. Removal of existing wood structures (on the switchbacks down into the canyon and of puncheon bridges) will help deter continued use of this section. Planting of cuttings and continued invasive removal (that is ongoing as part of the River Conservancy-SD Canyonlands efforts) in the canyon bottom will be expanded to the trail tread itself and help restore the area. For the remainder of the trail north of the Shawn Canyon Finger, the pre-existing trail is proposed to remain as-is.

The entire project is exempt from being a Priority Development Project [PDP Exemption Category 1: PDP exemption for new or retrofit paved sidewalks, bicycle lanes, or trails (City 2018)]. Although exempted as a PDP, erosion control will be installed on any cut/fill slopes greater than 3 feet in height, including seeding or planting to encourage revegetation outside of the trail and prevent erosion. Following the opening of the realignment, public use of the existing streambed would be discouraged using a combination of signs, peeler log fencing, brushing and/or planting. Pedestrian access to manholes south of the realignment for inspection and maintenance by Public Utilities Department will still be required.

All trails other than those illustrated in this report, including new trails constructed in the future without proper authorization, can be closed, as they are not part of the currently proposed trail system.

METHODS

Prior to conducting biological field surveys, searches of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), U.S. Fish and Wildlife Service (USFWS) sensitive species database, California Native Plant Society (CNPS) online database for the La Jolla USGS topographic quadrangle, the San Diego River Tributary Canyons Project (ESA 2013), and the City's MSCP Subarea Plan for information regarding sensitive species known to occur within the vicinity of the project area were performed. A review of vegetation maps created by ESA (ESA 2013) was also performed and confirmed or updated during the 2018 and 2019 field surveys. Aerial photos dating from 1953 to the present were also consulted (HistoricAerials).

On January 25, 2018, a team from the City of San Diego Parks and Recreation Department personnel and San Diego Canyonlands Staff conducted a field review of the proposed trail realignment route. During that review, a general biological survey was conducted by City of San Diego Parks and Recreation Open Space Division Biologists Anna My-Tien Tran-Mabanta (Biologist III) and Doug Allen (Biologist III). The general survey area included the proposed trail route plus 15 to 20 feet on each side. Plant and animal species observed or otherwise detected during the survey were recorded (Appendices A and B). Animal identifications were made in the field by direct, visual observation, or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field. However, the lists of species identified are not necessarily comprehensive accounts of all species that occur on the site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed. No focused surveys were conducted during the January 2018 field visit. Focused surveys for sensitive plant or animal species were conducted by ESA in 2013 (ESA 2013).

On May 23, 2018, Doug Allen, Andrew Butterfield, and Kolby Stets (Management GIS Interns with the City) mapped the proposed new trail route and confirmed pre-existing vegetation mapping by ESA (ESA 2013). On July 5, 2018, Doug Allen, Andrew Butterfield and Kolby Stets GPSed the existing trails and potential creek crossings in North Ruffin Canyon, Taft Canyon and Shawn Canyon, confirmed existing vegetation communities/habitats as mapped by ESA (ESA 2013) along the existing trails, as well as a minimum of 15 to 20 feet to each side, and documented the locations of sensitive plant and animal species, if observed. The surveys were conducted on foot, and binoculars were used as necessary. No focused surveys or wetland delineations were conducted during the May and July 2018 field visits.

On September 19, 2018, Doug Allen, Andrew Butterfield, and Laura Ball (City of San Diego-Open Space Project Officer II) conducted a field visit to GPS the upper loop of Ruffin Canyon to confirm the current trail location, vegetation communities, and length.

On June 6, 2019, the City's Natural Resource Management team, Sara Allen (Biologist III), Diana Brand Ramirez (Management Intern), and Jessie Lane (Management Intern), conducted a focused species survey to confirm and further study impacts to sensitive species along the alignment and update the previous surveys conducted by ESA in 2013 and City in 2018; this survey site included the proposed new trail and a 60-foot buffer along the extent of the trail (Figure 4). Plant and animal identification were performed on-site and mapped using ArcGIS Collector with sub-meter accuracy with an external GPS device (Bad Elf GNSS Surveyor)

Several areas with dense and impassable vegetation were surveyed from the perimeter immediately adjacent to the impassible vegetation.

On April 21, 2021 Mark Berninger, Natural Resource Management Senior Planner and Doug Allen visited the site to verify the wetland delineations that had been conducted by ESA in 2013 (Appendix G). During the verification it was determined that the conditions represented in the 2013 report are still existing, no changes to the wetland delineation report are needed as they accurately represent the existing condition of the Ruffin Canyon wetland complex.

Site visits are summarized in the table below. A List of Preparers and Resumes are provided in Appendix F.

Survey Date	Conditions	Personnel
1/25/18	0830, 62F, 25% cloud cover, Wind 0-1 mph 1200, 68F, 0% cloud cover, Wind 2-3 mph	Anna My-Tien Tran-Mabanta, Bio III Doug Allen, Bio III
5/23/18	0900, 65F, 0% cloud cover, Wind 2-3 mph 1200, 68%F, 0% cloud cover, Wind 2-3 mph	Doug Allen Andrew Butterfield, GIS Intern Kolbe Stets, GIS Intern
7/5/18	0900, 72F, 20% cloud cover, Wind 3-4 mph 1200, 76F, 0% cloud cover, Wind 3-4 mph	Doug Allen Andrew Butterfield Kolbe Stets
9/19/18	0800, 67F, 25% cloud cover, Wind 1-2 mph 1230, 74F, 0% cloud cover, Wind 2-3 mph	Doug Allen Andrew Butterfield Laura Ball, Project Officer II
6/6/19	0600-1200, 61-64F, Overcast, Wind 7-8m mph	Sara Allen, Bio III Diana Brand Ramirez, Management Intern Jessie Lane, Management Intern
4/21/21	0800, 58F, 100% cloud cover, Wind 3-5 mph 1300, 65F, 0% cloud cover, Wind 5-6 mph	Doug Allen, Mark Berninger, MSCP Senior Planner

Nomenclature

Nomenclature used in this report follows the conventions used in the City's Biology Guidelines (City 2012) and the MSCP (City 1997a and b). Nomenclature also follows Baldwin et al. (2012) for plants; Holland (1986) and Oberbauer (2008) for vegetation communities; the American Ornithologists' Union (2014) for birds; Collins and Taggart (2006) for reptiles; and Baker et al. (2003) for mammals. Plant species status is taken from the CNPS (2017). Animal species status is from CDFW (2017a and b). Habitat sensitivity is based on the City's Biology Guidelines (City 2012).

RESULTS

Vegetation Communities/Habitats

The study area (the trail alinement and existing trail plus 15 to 20 feet on each side of the trail) supports 14 vegetation communities/habitats: freshwater marsh, alkali marsh, southern willow scrub, non-native riparian, mule fat scrub, Diegan coastal sage scrub (including disturbed), broom baccharis scrub, coastal sage-chaparral scrub, southern mixed chaparral, non-native grassland, ornamental vegetation, disturbed habitat, and developed land (Figure 3). There is also non-vegetated wash habitat occurring in the southern portion of the canyon. A brief description (Holland 1986) of each is listed below.

Freshwater Marsh
Coastal and valley freshwater marsh is dominated by perennial, emergent monocots, 5 to 13 ft tall, forming incomplete to completely closed canopies. These areas are semi- or permanently flooded yet lack a significant current. Dominant plants species associated with freshwaer marsh include cattail (*Typha* spp.), bulrush (*Schoenoplectus* spp. [Formerly *Scirpus*])).

Cismontane Alkali Marsh
Cismontane alkali marshes are typically disturbed riparian forest freshwater marshes that have changed in vegetation character because high evaporation and low input of fresh water render these marshes somewhat salty. Plant associated with alkali marsh include sedge (*Carex* spp,), salt grass (*Distichlis spicata*), rush (*Juncus* spp.) and marsh fleabane (*Pluchea purpurascens*), as well as non-native plant species.

Southern Willow Scrub
Southern willow scrub is a dense, broad-leaved, winter deciduous riparian thicket dominated by willows (*Salix* spp.), typically found within loose, sandy or fine gravelly alluvium along stream channels. Common species found within Ruffin Canyon include, but are not limited to, arroyo willow (*Salix lasiolepis*) and pampas grass (*Cortaderia* spp.).

Riparian Woodland
Riparian woodland commonly develops along stream terraces of canyon bottom. Common species found within Ruffin Canyon include, but are not limited to, blue (Mexican) elderberry (*Sambucus nigra* ssp. *caerulea*) with mulefat, and broom baccharis in the understory.

Non-native Riparian
Non-native Riparian habitats are areas where the native wetland and riparian plant species have been displaced by a number of aggressive non-native tree species, including Canary Island (*Phoenix canariensis*) and Mexican palms (*Washingtonia robusta*), Brazilian pepper tree (*Schinus terebinthifolius*), and many grass and sedge species including kikuyu grass (*Pennisetun clandestinum*) and African umbrella sedge (*Cyperus involucratus*).

Mule Fat Scrub
Mule fat scrub is a depauperate, shrubby, riparian scrub community dominated by mule fat (*Baccharis salicifolia*) and interspersed with shrubby willows. Mule fat is the dominant species present.

Diegan Coastal Sage Scrub
Diegan Coastal Sage Scrub (including Disturbed) is a community of low, soft-woody subshrubs that are most active in winter and early spring, with many species being drought-deciduous. Dominant species include coastal sagebrush (*Artemisia californica*), flat-topped buckwheat (*Erioganum fasciculatum*), California encelia (*Encelia californica*), and black sage (*Salvia mellifera*). Two sensitive plant species, San Diego viguiera (*Viguiera laciniata*), and San Diego barrel cactus (*Ferocactus viridescens*), were observed on-site but will not be impacted by the project as designed.

Broom Baccharis Scrub
Broom baccharis scrub is an early successional scrub community dominated by broom baccharis (*Baccharis sarothroides*) in the shrub layer. There is a roughly even split between areas that have no less than 80 percent broom baccharis in the shrub layer, and areas that have a mixed assemblage of shrub species with broom baccharis having only marginally more cover. Other shrub species frequently found with broom baccharis scrub include, but not limited to, coastal goldenbush (*Isocoma menziesii*), black sage (*Salvia mellifera*), coyote bush (*Baccharis pilularis*), California buckwheat (*Eriogonum fasciculatum*), and coastal sagebrush (*Artemisa californica*). The broom baccharis on site is mostly a monoculture of broom baccharis.

Coastal Sage-Chaparral Scrub
Coastal sage-chaparral scrub is a mixture of sclerophyllous chaparral shrubs and drought-deciduous sage scrub species regarded as an ecotone (transition) between sage scrub and chaparral vegetation communities. Characteristic species observed within this vegetation community include California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and black sage (*Salvia mellifera*), monkeyflower (*Mimulus aurantiacus*) and lemonadeberry (*Rhus integrifolia*).

Southern Mixed Chaparral
Southern mixed chaparral is composed of broad-leaved sclerophyllous shrubs that can reach 6 to 10 ft in height and form dense often nearly impenetrable stands with poorly developed understories. Characteristic species observed within this vegetation community include chamise, black sage, and bush monkey-flower, toyon (*Heteromeles arbutifolia*), ceanothus (*Ceanothus* spp.), and mission manzanita

Non-native Grassland
Non-native grassland is characterized by a sparse to dense cover of annual grasses and is often associated with numerous species of showy-flowered, native, annual forbs. Most of the introduced, annual species that comprise the majority of species and biomass within non-native grassland originate from the Mediterranean region, an area with a long history of agriculture and climate similar to California. Characteristic species observed within this vegetation community include oats (*Avena* spp.) and bromes (*Bromus* spp.).

Ornamental
Ornamental vegetation is characterized by non-native species introduced and established through human action. These species include cultivated plants that have become naturalized in native habitat areas or that are remnant of previous cultivated land uses. Characteristic species present in this community include hottentot-fig (*Carpobrotus edulis*), Peruvian pepper tree (*Schinus molle*), and Brazilian pepper tree (*Schinus terebinthifolius*).

Disturbed Habitat
Disturbed habitat is either unvegetated or is dominated by non-native, weedy species that are adapted to a regime of frequent disturbance (ruderal). Species occurring within this vegetation community in the study area include dwarf nettle (*Urtica urens*), black mustard (*Brassica nigra*), and Russian thistle (*Salsola tragus*).

Developed
Urban/Developed areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation.

Non-vegetated Channel
Non-vegetated Channel supports sandy, gravelly, or cobbly ephemeral streambeds or channels, which are generally unvegetated. Variable water flows inhibit the growth of vegetation, although some weedy species of grasses may grow on the outer edge of the washes.

Plants
A total of 99 plant species were observed within the study area during the general biological surveys (Appendix A). Ornamental species occurring within urban/developed land are not included in the species tally.

A total of 2 sensitive plant species were observed within the study area during the focused species survey conducted on June 6, 2019 (Figure 4). These included a single San Diego barrel cactus (*Ferocactus viridescens)* and 6 small populations of San Diego viguiera *(Bahiopsis laciniata).*

Animals
A total of 27 animal species, including 1 amphibian, 2 reptile, 21 bird, and 3 mammal species, were observed or detected within the entire Ruffin Canyon study area during the general biological survey of the trails conducted in 2018 (Appendix B).

A total of 2 sensitive animal species, including 1 reptile and 1 bird species, were observed or detected within the proposed new trail alignment during the focused species survey conducted on June 6, 2019 (Figure 4).

Sensitive Resources

Sensitive Vegetation Communities
Sensitive vegetation communities are considered either rare within the region or sensitive by CDFW; are listed as sensitive under the MSCP (City 1997a) or the City's Biology Guidelines (2012); or support sensitive plants or animals. They are considered sensitive because they have been depleted, are naturally uncommon, or support sensitive species.

Sensitive vegetation communities that occur within the study area include freshwater marsh, alkali marsh, riparian woodland, southern willow scrub, riparian scrub, mule fat scrub, broom baccharis scrub, Diegan coastal sage scrub (including disturbed), coastal sage-chaparral scrub, southern mixed chaparral, chamise chaparral, and non-native grassland. Mitigation in accordance with the MSCP regulations is required for impacts to sensitive vegetation communities.

Sensitive Plants
Sensitive plant species are considered uncommon or limited in that they (1) are only found in the San Diego region; (2) are a local representative of a species or association of species not otherwise found in the region; or (3) are severely depleted within their ranges or within the region. High-interest plants include those afforded designation by the CNPS (2018).

No federally or state listed plant species were observed within the study area Three sensitive plant species were observed adjacent to the study area: San Diego barrel cactus (*Ferocactus viridescens*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), and San Diego viguiera (*Bahiopsis laciniata*). Of these, only San Diego barrel cactus is an MSCP Covered Species. No federal, state or MSCP plant species will be impacted by the project as designed. An explanation of status codes can be found in Appendix D.

San Diego barrel cactus (*Ferocactus viridescens*)
Status: --/--; CRPR 2.1, MSCP Covered
Distribution: San Diego County and Baja California, Mexico
Habitat(s): Dry slopes in coastal sage scrub and chaparral
Status on site: San Diego barrel cactus occurs in small numbers scattered along the eastern portion of the Taft Canyon Trail and a single individual was documented near the new trail alignment in 2019.

Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)
Status: --/--; CRPR 4.2
Distribution: Los Angeles, San Bernardino, San Luis Obispo, Ventura, and San Diego counties; Baja California, Mexico
Habitat: Moist, saline, or alkaline soils in coastal salt marshes and riparian marshes
Status on site: Southwestern spiny rush occurs as scattered individuals in the marsh areas occurring in the northern portion of Ruffin Canyon.

San Diego viguiera (*Bahiopsis laciniata*)
Status: --/--; CRPR 4.2
Distribution: San Diego and Orange County; Baja California, Mexico
Habitat: Diegan coastal sage scrub. Generally, shrub cover is more open than at mesic, coastal locales supporting sage scrub. Occurs on a variety of soil types.
Status on site: San Diego viguiera occurs in small numbers scattered along the Taft Canyon Trail and were documented adjacent to (upslope) of the proposed new trail alignment in 2019.

No narrow endemic, federal or state listed plant species were observed within the proposed new trail alignment during the field visit or mapped by ESA (ESA 2013) and by City biologists in 2018 and 2019. Three sensitive plant species were observed during the biological assessment conducted by the City in 2018 within the trail study area. A focused survey conducted by the City in 2019 confirmed their presence near to but not within the proposed impact area of the new trail alignment (Appendix C).

Sensitive Animals
Coastal California gnatcatcher and orange throated whiptail were the only sensitive animal species detected within the study area during the biological surveys conducted by the City and is discussed briefly below.

Coastal California gnatcatcher (*Polioptila californica californica*)
Status: T/SSC; MSCP Covered
Distribution: Occurs year-round throughout San Diego County's coastal lowlands.
Habitat: Mostly Diegan coastal sage scrub. This species has also been documented using coastal sage-chaparral scrub and chamise chaparral for nesting. Gnatcatcher may also occur in other plant communities during the non-breeding season.
Status on site: No protocol surveys were conducted for this project because several pairs were previously documented within Ruffin Canyon and Sandrock Canyon during a protocol survey conducted in 2017 by the City Brush Management Biologist (City 2017) and 2019. No work will be conducted during the gnatcatcher breeding season (March 1 through August 15).

Orange throated whiptail (*Aspidoscelis hyperythra)*
Status: --/SSC; MSCP Covered
Distribution: Occurs year-round throughout San Diego County's coastal lowlands.
Habitat: Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.
Status on site: Commonly occurring within the Ruffin Canyon Open Space. These lizards are highly mobile and will move out of the way of the construction of the trail, therefore no impacts are anticipated from the project as designed.

No other focused surveys for animal species are warranted, as no other listed species has high potential to occur, and mitigation measures would be implemented to avoid impacts to nesting birds (Appendix C).

Jurisdictional Waters and Wetlands
A formal jurisdictional delineation was not conducted for the project. The small areas of wetland habitat occurring in Ruffin Canyon, including southern willow scrub, mule fat scrub, riparian scrub, freshwater marsh, and alkali marsh, would likely fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or City. However, no impacts to jurisdictional waters or wetlands are anticipated from the proposed trail realignment. The existing North Ruffin Canyon Trail crosses the streambed in several places. Most of the crossings are approximately 3 to 4 feet wide with large cobble stones used as stepping stones (Appendix E, Photo 5). No work or improvements to these crossings are proposed by the project. The is one wooden bridge crossing located in North Ruffin Canyon. Existing use of the trail is expected to remain at its current level, therefore no new impacts will occur to the crossings.

The new trail, South Ruffin Canyon Trail, will cross a small section of non-vegetated channel. This crossing will consist of cobble stones and/or puncheon bridge and will not require any modification or vegetation removal therefore no permits are required.

Wildlife Corridors and Movement
The City's MHPA provides varying levels of wildlife corridor and movement functions within the study area. Much of the project area is surrounded by highly dense urban development with some side canyons supporting native habitat. Wildlife movement occurs within and between these canyons, which also provide access to food, water, and shelter for a variety of invertebrates, amphibians, reptiles, birds, and mammals. There are no designated wildlife movement corridors identified in the City's MSCP Subarea Plan for this area.

Wildlife movement occurring within the study area, which provides a north-south wildlife corridor, is very constrained because of the surrounding dense urban development. Although the canyon is isolated from other undeveloped large canyons in the area, the existing trails and streambeds provide routes for wildlife to disperse within the canyon.

REGIONAL AND REGULATORY CONTEXT

The following federal, state, and/or local regulations or policies apply to biological resources in the study area.

Federal

Endangered Species Act
The United States Fish and Wildlife Service (USFWS) regulates impacts on listed species and their habitats through the Endangered Species Act (ESA). Projects that affect listed species or their habitats require mitigation of those effects in accordance with USFWS standards. The City has incidental take authorization from USFWS for species covered by the City's MSCP Subarea Plan.

The USFWS also identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. No critical habitat for any species occurs within the study area. However, coastal California gnatcatcher have been observed within Ruffin Canyon. No work will be allowed during the nesting season (March 1 through August 15) for coastal California gnatcatcher.

Migratory Bird Treaty Act
All migratory bird species native to the United States and its territories are protected under the Migratory Bird Treaty Act (MBTA), as amended. The MBTA mandates protection for eggs and chicks of all migratory bird species but does not stipulate specific protection measures. In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to August 31). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Clean Water Act
Federal wetland regulation applicable to the study area is guided by the Clean Water Act (CWA). The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all Waters of the U.S. (WUS). Permitting for projects filling WUS (including wetlands) is overseen by the USACE under Section 404 of the CWA. In addition, under Section 401 of the federal CWA, an applicant for a federal permit for an activity that may result in a discharge to a water body must obtain certification from the state that the proposed activity will comply with state water quality standards and water quality objectives. A Section 401 Certification must be obtained prior to issuance of a 404 Permit. The CWA Section 404 and 401 permits are not anticipated to be needed for the proposed project.

State of California

California Environmental Quality Act
Primary environmental legislation in California is found in the California Environmental Quality Act (CEQA) and its implementing guidelines (State CEQA Guidelines), requiring that projects with potential adverse effects or impacts to the environment undergo environmental review. Adverse impacts to the environment are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

California Endangered Species Act
The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes the CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes.

Native Plant Protection Act
The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed. The California ESA follows the NPPA and covers both plants and animals determined to be endangered or threatened with extinction. Plants listed as rare under the NPPA are also designated as rare under the California ESA.

California Fish and Game Code
Pursuant to California Fish and Game Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by California Fish and Game Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW.

California Fish and Game Code (Sections 1600 through 1603) requires a CDFW agreement for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement (SAA). The proposed project may require an SAA if wetland impacts cannot be avoided. The proposed trail realignment and the Category 3 trail do not impact any riparian or wetland habitat. There are small areas of jurisdictional habitat that is within trail Category 1 (pre-1991 existing trail). Trail users currently step on the banks or on stepping stones to cross the channel. However, the City may opt to construct a puncheon or similar structural feature in this area to facilitate crossing by trail users. Any such structure would be set into the slope above the ordinary high-water mark and not result in any direct impacts to the marsh vegetation or stream channel.

City of San Diego
Environmentally Sensitive Lands
Impacts to biological resources in the City must comply with the City's Environmentally Sensitive Lands (ESL) Regulations. The purpose of the regulations is to "protect, preserve, and, where damaged, restore the environmentally sensitive lands of San Diego and the viability of the species supported by those lands." Environmentally sensitive lands are defined to include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains.

The ESL regulations require that impacts to wetlands be avoided unless the activities meet specific exemption criteria established in the ordinance. Impacts to City-defined wetlands require approval of deviation findings as required by ESL regulations. Impacts to wetlands must be mitigated in accordance with Section III(B)(1)(a) of the Land Development Manual Biology Guidelines (City 2012).

In addition to restricting impacts to wetland habitats, the ESL regulations also restrict development within the MHPA, including impact avoidance areas around raptor nesting locations (specifically, Cooper's hawk [*Buteo lineatus*], northern harrier [*Circus cyaneus*], golden eagle [*Aquila chrysaetos*], and burrowing owl [*Athene cunicularia*]) and known locations of the southern pond turtle (*Clemmys marmorata pallida*). The ESL regulations also require seasonal restrictions on grading where development may impact the following bird species: western snowy plover (*Charadrius alexandrinus nivosus*), southwestern willow flycatcher (*Empidonax traillii extimus*), least tern (*Sternula antillarum browni*), San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), least Bell's vireo (*Vireo bellii pusillus*), tricolored blackbird (*Agelaius tricolor*), and coastal California gnatcatcher.

Multiple Species Conservation Program
In July 1997, the USFWS, CDFW, and City adopted the Implementing Agreement for the MSCP. This program allows the incidental take of threatened and endangered species as well as regionally sensitive species that are conserved by it (Covered Species). The MSCP designates regional preserves that are intended to be mostly void of development activities, while allowing development of other areas subject to the requirements of the program. Impacts to biological resources are regulated by the City's ESL regulations.

The City's MSCP Subarea Plan has been prepared to meet the requirements of the California Natural Communities Conservation Planning Act of 1992. The MSCP identifies an MHPA that is intended to link all core biological areas into a regional wildlife preserve. The City's MSCP Subarea Plan describes how the City's portion of the MSCP Preserve, the MHPA, will be implemented.

The study area is located within the central portion of the "Urban Areas" of the MHPA (Section 1.2.3 of the Subarea Plan). The "Urban Areas" portion of the MHPA includes areas not incorporated in the major planned areas of the MHPA, and consists primarily of canyons with native habitats in relative proximity to other MHPA areas providing habitat (City 1997). Urban habitat areas include open space in Tecolote Canyon, Marian Bear Memorial Park, Rose Canyon, San Diego River, Carroll Canyon, Florida Canyon, as well as numerous smaller canyon systems dispersed throughout the more urban areas of the City (City 1997). These areas are intended to provide habitat for native species remaining in urban areas of the City, stepping stones for migrating birds and those establishing new territories, and environmental education opportunities for urban dwellers (City 1997).

No specific MHPA guidelines from Section 1.2.3 of the Subarea Plan apply to the proposed project. The trails plan's consistency with MSCP Subarea Plan Section 1.5 "Framework Management Plan" is addressed in the Ruffin Canyon Open Space Trails Plan under the "General Management Directives" section.

<u>MHPA Adjacency Guidelines</u>
The City's MSCP Subarea Plan addresses the indirect impacts to preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines (City 1997). The Land Use Adjacency Guidelines provide requirements for land uses adjacent to the habitat preserve in

order to minimize indirect impacts to the sensitive resources contained therein. As stated previously, the study area is located within the MHPA, thus, MHPA adjacency guidelines are applicable to the proposed project.

CRITERIA FOR DETERMINING IMPACT SIGNIFICANCE

In accordance with the Significance Determination Guidelines (City 2011), a project would result in a significant or potentially significant biological resources impact if it would result in:

- A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies, or regulations or by the USFWS or CDFW;

- A substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, or regulations, or by USFWS or CDFW;

- A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through the direct removal, filling, hydrological interruption, or other means;

- Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors; including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites;

- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;

- Introducing land use within an area adjacent to the MHPA that would result in adverse edge effects;

- A conflict with any local policies or ordinances protecting biological resources; or

- An introduction of invasive plant species into a natural open space area.

IMPACTS

This section describes potential direct and indirect impacts associated with implementation of the proposed project. Direct impacts immediately alter the affected biological resources such that those resources are eliminated temporarily or permanently. Indirect impacts consist of secondary effects of a project, including drainage and toxins (water quality), lighting, noise, invasive plant species, and errant construction impacts.

This report addresses the impacts and mitigation of the new trail alignment (Category 2) (Figure 2).

Direct Impacts

Vegetation Communities
The project would result in direct impacts to the following sensitive vegetation communities: 0.15 acre of Diegan coastal sage scrub, and 0.22 acre of southern mixed chaparral. These impacts would be considered significant.

Impacts from the proposed project would also occur to ornamental (0.03 acre) and developed land (0.01 acre). Impacts to ornamental and developed land vegetation communities are determined to be not significant, these habitats are not considered sensitive.

North Ruffin Canyon trail, which includes portions of the City's Public Utilities Department access and maintenance road, passes through freshwater marsh, alkali marsh, southern willow scrub, non-native riparian, mulefat scrub, broom baccharis scrub, Diegan coastal sage scrub, Diegan coastal sage scrub/southern mixed chaparral, southern mixed chaparral, and non-native grassland. North Ruffin Canyon trail is a Category 1 Trail; therefore, no impact analysis or mitigation is required for permitting this trail.

South Ruffin Trail
South Ruffin Trail is a new trail alignment and is a Category 2 Trail. Southern Ruffin Trail starts at the intersection of North Ruffin Trail and Shawn Canyon Trail (Figure 2) and heads south to the Escala Development. Impacts to vegetation communities and habitat types for the new trail alignment are listed in Table 1.

Table 1
PROPOSED PROJECT IMPACTS TO VEGETATION COMMUNITIES/HABITATS IN SOUTH RUFFIN CANYON

VEGETATION COMMUNITY/HABITAT	MSCP Tier†	IMPACT ACREAGE*		
		Within MHPA	Outside MHPA	Total
Upland				
Diegan coastal sage scrub	II	0.15	--	**0.15**
Southern mixed chaparral	IIIA	0.22	--	**0.22**
TOTAL		**0.37**		**0.37**

†Tiers refer to City MSCP Subarea Plan habitat classification system.
*Impacts rounded to the nearest 0.01. Totals reflect rounding.

Sensitive Plant Species
Three sensitive plant species were observed in the study area during City's biological surveys in 2018 and 2019: San Diego barrel cactus, southwestern spiny rush, and San Diego County viguiera. No sensitive plant species will be impacted by the project as proposed.

The proposed South Ruffin Canyon trail impacts will be designed and constructed to avoid any impacts to the sensitive plant species. The single San Diego barrel cactus and populations of San Diego viguiera that were located during the 2019 surveys would be avoided in the field by flagging by project biologist prior to construction and routing of the alignment in the field downslope of the plants. No Southwestern spiny rush are located in the vicinity of the new trail alignment.

Sensitive Animal Species
Coastal California gnatcatcher was observed or detected during the general biological surveys. Most of the observations occurred on the western side of Ruffin Canyon during the 2017 protocol gnatcatcher surveys conducted by the City in 2017 (City 2017) and 2019.

Approximately 0.15 acre of Diegan coastal sage scrub will be impacted by the construction of South Ruffin Canyon trail and no further vegetation impacts will occur from the existing trails. Impacts to coastal California gnatcatcher would be considered significant. Mitigation would be required to offset the impacts to 0.15 acre of Diegan coastal sage scrub.

Orange throated whiptail was observed within the area of the new South Ruffin Canyon trail alignment during the 2019 sensitive species surveys. This species is highly mobile and it is anticipated that they will move out of the construction activity area, therefore no impacts are anticipated to this species as designed. No mitigation is required.

Jurisdictional Waters and Wetlands
The proposed new trail alignment for South Ruffin Trail would cross USACE non-wetland WUS and CDFW stream channel (Figure 2). The crossing is a small portion of unvegetated channel consisting of cobble stones. This crossing will be left in its natural state with no improvements. No impacts to jurisdictional wetlands will occur from the project as designed.

However, the existing trails crosses jurisdictional waters (stream channels) of North Ruffin Canyon Trail and Shawn Canyon Trail. One crossing has a small footbridge and the other crossings are only a few feet wide and use large cobble stones as stepping stones. These existing crossings occur on Category 1 trails; therefore, no mitigation is required. No improvements are proposed for these crossings but may require repair as part of regular trail maintenance. For trail between the Taft and the Shawn Canyon Finger, the Taft Finger, and Shawn Canyon, the pre-existing trail is proposed to remain as-is. Project features in the form of, as-needed closures, signage, and approved trail features (i.e. puncheon bridges) would be used to mitigate any potential impacts that would have any "significant impact on existing hydrology." Therefore, a 1600 agreement is not anticipated to be required.

Wildlife Corridors and Movement
Although the project would occur within the MHPA, project implementation would not result in substantial interference with wildlife movement through the MHPA or impede linkages or the use of wildlife nursery sites. The proposed trail and existing trails would continue to allow for wildlife movement through the canyon and would not impede linkages; thus, no significant impacts to wildlife corridors would occur.

Nesting Birds
Although no nests were observed during the field surveys, the study area contains trees and shrubs that could support nesting sites for bird species protected under the MBTA. Impacts to nesting birds could occur if vegetation clearing were to take place during the avian breeding season (generally January 15 to August 31), which includes raptor breeding season.
The following measure will be implemented to help ensure that nesting activities of birds covered by the MBTA will not be significantly impacted by clearing during the nesting season:

- No clearing of occupied coastal California gnatcatcher habitat within the City's MHPA may occur between March 1 and August 15. Vegetation clearing in unoccupied

gnatcatcher habitat or habitat outside the MHPA shall take place outside of the general avian breeding season (January 15-August 31), when feasible. If vegetation clearing must occur during the avian breeding season, a qualified biologist shall conduct a preconstruction survey for nesting birds no more than three days prior to vegetation clearing. Active nests would need to be avoided until the young have fledged or the nest is otherwise abandoned. If no active nests are found, clearing can proceed. The results of the preconstruction nesting bird survey shall be reported to the City in a brief memorandum.

Compliance with Regional Conservation Plans, Local Ordinances, and Policies
The proposed project would comply with the City's MSCP Subarea Plan and Land Development Manual Biology Guidelines; thus, no significant impacts are expected. Compliance includes the following:

MSCP General Management Directives

The project will be in compliance with MSCP Section 1.5.2 general management directives regarding public access, trails, and recreation, mitigation, and restoration for the following reasons:

- Trail heads would be identified by City Parks and Recreation signs;
- Trails would be unpaved and range primarily between two and three feet wide, with a maximum width of four feet;
- Alternative trail alignments were considered and the least impactful feasible alignments selected. Strict adherence to a 50' wetland buffer is infeasible due to the steep topography of the canyon's east side. Siting the trail further to the east outside of the wetland buffer and outside of ecotones would result in additional habitat impacts due to increased length of the trail and cut/fill that would be required to locate the trail higher on the slopes; Proposed trails avoid wetland habitats and minimize impacts to other sensitive habitats to the greatest extent practicable. The South Ruffin Trail realignment removes the trail from the channel, realigning it on the canyon slope;
- The vegetation impact for the construction of the 4-foot wide or less trail tread represents a minimal disturbance within the overall open space parcels (0.002%).
- Off-road motorized use would not be allowed on the proposed trails except where they are co-located with utility or maintenance access paths;
- Habitat mitigation will be performed in accordance with the ESL Ordinance and Biology Guidelines and will occur through one or more of the following: payment into the City's Habitat Acquisition Fund (HAF), purchase of habitat through an approved mitigation bank such as the Cornerstone Lands Mitigation Bank or other approved mitigation site, or debit of acres of habitat from mitigation credits owned by City Parks and Recreation; and
- Planting of disturbed areas with native species may occur voluntarily, separate from any required mitigation. This may include work by City Staff/Rangers, volunteers, non-profits, grant-funded restoration, San Diego River Conservancy, etc.

Specific Management Directives for the Urban Habitat Lands ("Urban Area")

The MSCP Subarea Plan does not include any specific management policies and directives that pertain to the project area. Urban habitat within the MHPA would continue to be managed according to the general management policies and directives and any special management needs would be resolved by the preserve managers.

MSCP Covered Species

San Diego barrel cactus is the only MSCP-covered plant species observed within the study area. Routing of the trail in the field will avoid direct and indirect impact to this species by flagging and routing of the trail downslope of the single individual. This species will not be impacted by the project as designed.

Coastal California gnatcatcher and orange throated whiptail were the only MSCP-covered animal species observed or detected in the study area.

The project will implement area-specific management directives for the coastal California gnatcatcher by restricting clearing of vegetation to outside of the nesting period (i.e., no clearing between March 1 and August 15) or conducting protocol surveys to establish species absence if work is proposed in the nesting period.

Orange throated whiptail is highly mobile and it is anticipated that they will move out of the construction activity area, therefore no impacts are anticipated to this species as designed. No mitigation is required.

Indirect Impacts/Compliance with MHPA Adjacency Guidelines

As stated previously, the study area is within the MHPA. Potential indirect impacts analyzed for this project include drainage/toxins, lighting, noise, invasive plant species, and errant construction impacts.

Drainage/Toxins

Project implementation would not result in an increase in paved areas draining to the MHPA, or otherwise cause additional runoff or toxins to drain to the MHPA. Existing drainage patterns would be preserved. The BMPs would be implemented during project construction to control runoff, erosion, and contaminants, as necessary. As such, the project would comply with MHPA Adjacency Guidelines regarding drainage/toxins, and no indirect impacts resulting from drainage or impaired water quality would occur.

Lighting

Project implementation would not require the installation of lighting, either temporary or permanent, as trail construction would occur during daylight hours. As such, the project would comply with MHPA Adjacency Guidelines regarding lighting and no significant indirect impacts resulting from lighting would occur.

Construction Noise

Construction noise could result in significant indirect impacts to nesting coastal California gnatcatchers if construction were to take place during the gnatcatcher breeding season (March 1 through August 15). Mitigation measures are provided below under "Mitigation."

Trail Use Use of the trails in the Plan is not anticipated to significantly alter noise levels in the canyon, which is in an urban environment, completely surrounded by development. Trail use is likely to be intermittent, and generally occurring at levels similar to the surrounding developed parcels. Additional significant indirect impacts are not anticipated.

Invasive Plant Species/Landscaping
Non-native plants can colonize sites disturbed by construction and potentially spread into adjacent native habitats. Construction of proposed trails would not result in indirect impacts from the introduction of non-native species into native habitats, as the project would only be clearing the minimum necessary to construct the trails and would not be installing any landscaping. Several non-native species already occur within the study area and additional species are not anticipated to be introduced from the proposed trail construction. Furthermore, any plants installed as erosion control in shoulders of trails will be native species appropriate to the surrounding vegetation communities. As this area is part of the MHPA Preserve, City Parks and Recreation staff would monitor the area for invasive species and target highly invasive species for removal/treatment, particularly any species that is not already documented in the area. As such, the project would comply with MHPA Adjacency Guidelines regarding invasive plant species and no significant indirect impacts from non-native plant species would occur.

Grading
Project grading would not include the creation of manufactured slopes within the MHPA. No indirect impacts from grading would occur.

Access/Barriers
Public access would be directed to the proposed trails and abandoned trails would be blocked and labeled as off-limits/closed. No indirect impacts from access would occur.

Errant Construction Impacts
Unauthorized construction impacts outside the approved limits of work could potentially impact adjacent sensitive habitat, where present. Errant construction impacts are unlikely to occur, as project construction would consist of hand clearing with power tools such as chainsaws and weed whips. A walk-behind chipper may be used within the impact footprint and existing disturbed areas and staging areas. Final trail tread grades would be established with hand-held tools, including power tools such as jackhammers and hand-held compactors. Since large machinery would not be used for construction, the potential for errant construction impacts is very low, and any impacts that do occur are unlikely to be significant. However, in order to avoid potential impacts from errant construction, mitigation measures have been developed and are provided below under "Mitigation."

South Ruffin Trail Alternative Analysis
To ensure that the proposed project avoids, minimizes and restores impacts to significant resources, an alternative analysis was conducted for use of the existing utility access path in South Ruffin, connecting it to the entrance at South Ruffin. Use of the existing route would require fill/stabilization within the current access path to allow for public use of this route. Impacts to significant habitat types are presented in Tables 2 & 3, using a 5-foot impact corridor, for trail width only, and a 9-foot wide impact corridor (to accommodate Public Utilities' canyon proficient vehicles with an 8-foot wide tread), a likely requirement for use of this alternative route as continued maintenance of the sewer infrastructure is required.

Table 2
UTILITY ACCESS PATH TRAIL ALIGNMENT ALTERNATIVE IMPACTS TO VEGETATION COMMUNITIES/HABITATS IN SOUTH RUFFIN CANYON using 5 foot impact width

VEGETATION COMMUNITY/HABITAT	MSCP Tier†	IMPACT ACREAGE*		
		Within MHPA	Outside MHPA	Total
Upland				
Diegan coastal sage scrub	II	0.06	--	**0.06**
Wetland				
Non-vegetated channel	N/A			**0.20**
Riparian scrub	N/A			**0.03**
TOTAL				**0.29**

†Tiers refer to City MSCP Subarea Plan habitat classification system.
*Impacts rounded to the nearest 0.01. Totals reflect rounding.

Table 3
UTILITY ACCESS PATH TRAIL ALIGNMENT ALTERNATIVE IMPACTS TO VEGETATION COMMUNITIES/HABITATS IN SOUTH RUFFIN CANYON using 9 foot impact width

VEGETATION COMMUNITY/HABITAT	MSCP Tier†	IMPACT ACREAGE*		
		Within MHPA	Outside MHPA	Total
Upland				
Diegan coastal sage scrub	II	0.11	--	**0.11**
Mixed chaparral scrub	IIIB	0.01		**0.01**
Wetland				
Non-vegetated channel	N/A			**0.36**
Riparian scrub	N/A			**0.04**
TOTAL				**0.52**

†Tiers refer to City MSCP Subarea Plan habitat classification system.
*Impacts rounded to the nearest 0.01. Totals reflect rounding.

The project, as proposed, avoids impacts to wetland habitat types. For pre-existing trails that are to remain, project features in the form of, as-needed closures, signage, and approved trail features (i.e. puncheon bridges) would be used to mitigate any potential impacts that would have any "significant impact on existing hydrology." Therefore, a 1600 agreement is not anticipated to be required. The creation of a stable/sustainable trail surface within the existing unvegetated channel is highly problematic, and would require continual maintenance including the placement of additional fill following significant rain events. Strict adherence to a 50' buffer of the riparian corridor is not advised because of steep topography immediately adjacent to the stream channel.

For these reasons, the proposed project is considered the biologically preferred alternative, avoiding wetland impacts, and minimizing habitat impacts to other alternatives to the maximum extent practicable.

North Ruffin Trail Alternative Analysis
The northern portion of the canyon still retains medium and fine soils, therefore realignment of those portions of the trail are not currently proposed to meet the project intent to establish a safe, sustainable trail connecting the communities of Serra Mesa and Mission Valley. An alternative northern realignment was considered and studied in 2013 by the San Diego River Conservancy (ESA 2013). That project was not carried forward and is not currently under consideration due to the additional biological impacts that would result and due to community input during the previous process. The existing trail from Gramercy Drive to the Taft Finger is proposed to be closed as part of the Project. The current proposal minimizes biological impacts by addressing the portion of trail in the southern end of the canyon that is in the worst condition and by closing the northwestern segment.

MITIGATION

The project would result in significant direct impacts to sensitive vegetation communities, and has the potential to result in significant direct impacts to nesting birds and significant indirect impacts from construction noise and errant construction impacts. The following measures are proposed to mitigate for these direct and indirect impacts.

Direct Impacts
The following mitigation measures have been formulated to satisfy the requirements of the City's MSCP (City 1997) and Biology Guidelines (City 2012). The mitigation ratios used in this report follow the City's ESL categorized five-tier system for impacts to sensitive vegetation/habitat communities within the MSCP (City 2012). MSCP Tiers are only listed for upland habitats and not wetland habitats.

- **Tier I**: Southern foredunes, Torrey pine forest, coastal bluff scrub, maritime succulent scrub, maritime chaparral, scrub oak chaparral, native grasslands, and oak woodlands (mitigation ratios range from 1:1 to 3:1)
- **Tier II**: Coastal sage scrub and coastal sage scrub/chaparral ecotone (1:1 to 2:1)
- **Tier IIIA**: Mixed chaparral and chamise chaparral (0.5:1 to 1.5:1)
- **Tier IIIB**: Non-native grasslands (0.5:1 to 1.5:1)
- **Tier IV**: Disturbed, agricultural, and eucalyptus (0:1)

Direct impacts to Tier II and Tier IIIA vegetation communities, comprised of 0.15 acre of Diegan coastal sage scrub 0.22 acre of southern mixed chaparral, would be mitigated at a 1:1 ratio through payment into the City's Habitat Acquisition Fund (HAF), purchase of habitat through an approved mitigation bank such as the Cornerstone Lands Mitigation Bank. Use of the HAF or the Cornerstone Lands is appropriate in this case due to the small size of the impacts (less than 0.5 acre), and due to the relatively isolated nature of the site.

It is acknowledged that Ruffin Canyon Open Space is not isolated as it is mostly within the MHPA. The City of San Diego's intent to use the HAF or Cornerstone Lands Mitigation Bank is based on the small mitigation need from the project (0.37 acre). Onsite mitigation would require many years of onsite maintenance, monitoring, and reporting, so even if the project could be designed and installed with non-profit and volunteer support, onsite mitigation is infeasible. Preparation of this plan and CEQA clearance has been provided by developer contribution funds and use of those funds are not available for the construction and mitigation of the project.

In addition, although onsite mitigation is not proposed as part of the project, Ruffin Canyon is the site of a number of past and ongoing restoration projects, including extensive grant funding by the San Diego River Conservancy for work by San Diego Canyonlands under a Right of Entry Permit from City to remove invasives and restore habitat within Ruffin and Sandrock. Information on this effort was provided to the USFWS (3/25/21, email from Daniel Monroe).

Use of HAF funding is essential to the City's ability to acquire lands to acquire crucial components to complete the MHPA preserve areas and the goals of the MSCP. For example, the process is currently underway to acquire two high priority in the East Elliott areas of Mission Trails Regional Park parcels using all of the currently available HAF funds for long term conservation. Similarly, use of the Cornerstone Lands Mitigation Bank contributes to the ongoing implementation of the MSCP and is allowable.

All mitigation is anticipated to occur within the MHPA. Impacts to other vegetation communities would not be significant and therefore would not require mitigation.

Table 4
MITIGATION FOR IMPACTS TO VEGETATION COMMUNITIES[1]

VEGETATION COMMUNITY	TIER	IMPACTS		MITIGATION	
		MHPA	Non-MHPA	Ratio[2]	Required
Uplands					
Diegan coastal sage scrub	II	0.15	--	1:1	**0.15**
Southern mixed chaparral	IIIA	0.22	--	1:1	**0.22**
Total					**0.37**

[1]Habitats are rounded to the nearest 0.01; thus, totals reflect rounding.
[2]Ratios assume all mitigation occurs inside the MHPA.

Sensitive Plants
San Diego barrel cactus and San Diego viguiera will be avoided during construction and trail placement. No mitigation is required.

Edge effects on San Diego barrel cactus and San Diego viguiera would be addressed over the long-term by standard measures implemented by Parks and Recreation staff, including monitoring trails for degradation and off-trail use and providing necessary repairs and maintenance, as well as posting signs at closed trails. Strategic revegetation and stabilization structures would be implemented as needed to protect against trail erosion.

Sensitive Animals
Impacts to habitat potentially occupied by coastal California gnatcatcher would be mitigated through habitat-based mitigation identified in Table 3. Furthermore, no clearing of occupied coastal California gnatcatcher habitat within the City's MHPA would occur between March 1 and August 15 unless protocol surveys are conducted to establish that no coastal California gnatcatchers are present. No clearing of occupied habitat during the breeding season would be allowed.

Orange throated whiptail is highly mobile and it is anticipated that they will move out of the construction activity area, therefore no impacts are anticipated to this species as designed. No mitigation is required.

Jurisdictional Waters and Wetlands
No impacts to jurisdictional waters or wetlands would occur from this project as designed; therefore, no mitigation measures are proposed.

Wildlife Corridors and Movement
No impacts to wildlife corridors and movement would occur and no mitigation measures are proposed.

Indirect Impacts/Compliance with MHPA Adjacency Guidelines

Construction Noise
Implementation of the following condition addresses potential construction noise impacts to coastal California gnatcatcher:

- Construction noise shall be avoided, if possible, during the coastal California gnatcatcher breeding season (March 1 through August 15). If construction cannot be avoided during the gnatcatcher breeding season, USFWS protocol surveys will be required to determine species presence/absence. If present, measures to minimize noise impacts will be required. If protocol surveys are not conducted and construction is proposed during the gnatcatcher breeding season, presence would be assumed and noise attenuation measures would be required if noise levels from construction activities would exceed 60 dBA hourly L_{EQ} at the edge of the occupied MHPA, or the ambient noise level if noise levels already exceed 60 dBA hourly L_{EQ}.

Errant Construction Impacts
Biological Monitoring Program

A biological monitoring program would be implemented to help ensure that impacts to sensitive resources do not occur beyond those identified in this report. This program consists of the following components:

- A preconstruction meeting shall be held to ensure that construction crews are informed of the presence of sensitive habitat in and adjacent to the project site. Prior to commencement of clearing or trail construction activities, the location of the proposed trails shall be identified in the field.
- Prior to initiating any construction-related activities, including clearing, chipping, or compacting, a qualified biological monitor shall be retained and shall check that the limits of work have been clearly marked and will flag any San Diego barrel cactus, San Diego viguiera or other sensitive plants near the proposed alignment. The biological monitor will be on site during initial vegetation clearing activities, and will then conduct periodic monitoring for the remaining duration of vegetation clearing. The biological monitor shall attend all preconstruction meetings and provide periodic monitoring of the impact area including, but not limited to, trail alignments, stockpiles, and staging areas. Following completion of construction, the biological monitor will confirm that the approved limits of disturbance were not exceeded.

- A qualified biologist shall monitor construction within and adjacent to the MHPA to ensure consistency with the MSCP.

MHPA LAND USE ADJACENCY REQUIREMENTS:

Prior to issuance of Notice to Proceed, the owner/permittee shall depict the following requirements within the contract specifications and depict on construction documents (as necessary) for the Project Site. Note: These are included on the Site Plans for the Project.

- Grading/Land Development/MHPA Boundaries -Within or adjacent to the MHPA, all manufactured slopes associated with site development shall be included within the development footprint.

- Drainage - All staging and developed/paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials prior to release by incorporating the use of filtration devices, planted swales and/or planted detention/desiltation basins, or other approved temporary and permanent methods that are designed to minimize negative impacts, such as excessive water and toxins into the ecosystems of the MHPA.

- Toxics/Project Staging Areas/Equipment Storage - Projects that use chemicals or generate by-products such as pesticides, herbicides, and animal waste, and other substances that are potentially toxic or impactive to native habitats/flora/fauna (including water) shall incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. No trash, oil, parking, or other construction/development-related material/activities shall be allowed outside any approved construction limits. Provide a note in/on the CD's that states: "All construction related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owners Representative or Resident Engineer to ensure there is no impact to the MHPA."

- Lighting -All lighting within or adjacent to the MHPA is directed away/shielded from the MHPA, or limited to the immediate area and is in compliance with City Outdoor Lighting Regulations per LDC Section 142.0740.

- Barriers –Existing fences/walls; and/or signage along the MHPA boundaries shall remain and or be added to direct public access to appropriate locations, reduce domestic animal predation, protect wildlife in the preserve, and provide adequate noise reduction where needed.

- Invasives - No invasive, non-native plant species shall be introduced into areas within or adjacent to the MHPA.

- Brush Management -Brush management zones will not be greater in size that is currently required by the City's regulations (this includes use of approved alternative compliance). Within Zone 2 the amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush

management in the Zone 2 area will be the responsibility of a home-owner's association or other private party.

- Noise - Construction noise that exceeds the maximum levels allowed (60 dB or greater at the beginning edge of the habitat) shall be avoided during the breeding seasons for the following: CA gnatcatcher (3/1-8/15). If construction is proposed during the breeding season for the species the following measures are required:,

COASTAL CALIFORNIA GNATCATCHER (Federally Threatened)

Prior to issuance of Notice to Proceed, the owner/permittee shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MARCH 1 AND AUGUST 15, THE BREEDING SEASON OF THE COASTAL CALIFORNIA GNATCATCHER, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

A. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE HABITAT AREAS WITHIN THE MHPA THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE COASTAL CALIFORNIA GNATCATCHER. SURVEYS FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. IF GNATCATCHERS ARE PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MARCH 1 AND AUGUST 15, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED GNATCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

II. BETWEEN MARCH 1 AND AUGUST 15, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB (A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED GNATCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION ACTIVITIES WOULD NOT EXCEED 60 dB (A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR

III. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS

RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE COASTAL CALIFORNIA GNATCATCHER. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB (A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (AUGUST 16).

* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

B. IF COASTAL CALIFORNIA GNATCATCHERS ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 1 AND AUGUST 15 AS FOLLOWS:

I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR COASTAL CALIFORNIA GNATCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.

II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

CONCLUSION

The proposed project would result in impacts to biological resources that would be mitigated in accordance with the MSCP Subarea Plan and City Biology Guidelines. Implementation of mitigation measures listed above would reduce all impacts to below a level of significance.

Please do not hesitate to contact Laura Ball at lball@sandiego.gov or me at dwallen@sandiego.gov if you have any questions regarding this report.

Sincerely,

Doug Allen
Biologist III

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Map
Figure 3	Vegetation and Sensitive Plants
Figure 4	Sensitive Species Survey Map 06/2019
Appendix A	Plant Species Observed
Appendix B	Wildlife Species Observed or Detected
Appendix C	Sensitive Species Potential to Occur Table
Appendix D	Explanation of Status Codes for Plant and Animal Species
Appendix E	Representative Photos
Appendix F	List of Preparers and Resumes
Appendix G	San Diego River Tributary Canyons Project Jurisdictional Delineation Photo Log and Datasheets

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