

**DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT**

**Regional General Permit (RGP)
Number 86**

Permittee: City of Vista

Project Name: City of Vista Storm Water Channel Maintenance

Permit Number: SPL-2014-00733-MBS

Issuing Office: U.S. Army Corps of Engineers, Los Angeles District, San Diego and Imperial Counties Section

Note: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

After you receive written approval that your project complies with the terms and conditions of this Regional General Permit (RGP) from this office, you are authorized to perform work in accordance with the General Conditions and any project specific conditions specified below.

Project Location: This Regional General Permit (RGP) applies to section 404 waters (wetland waters and non-wetland waters) of the United States identified within 42 flood control channel maintenance sites as shown in Table 1 titled "City of Vista Channel Maintenance Program- Maintenance Locations and Planned Activities", located within the City of Vista, San Diego County, California. Section 10 waters of the United States are not covered.

Project Description: This RGP authorizes the discharge of dredged and fill material into waters of the United States in order to maintain existing flood control channels throughout the City of Vista as shown in Table 1 titled, "City of Vista Channel Maintenance Program- Maintenance Locations and Planned Activities. This RGP would cover activities that result in discharges of dredged and fill material associated with the mechanical removal of accumulated sediment, natural and artificial debris, and vegetation within 42 existing concrete and earthen flood control channels and the

temporary installation of water diversion and dewatering structures (e.g. sand and gravel bags, turbidity curtain, silt barriers). No loss of waters or permanent structures would be authorized.

Definitions:

1. **Loss:** Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for verification under this RGP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the acres or linear feet of stream bed that are filled or excavated as a result of the regulated activity. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States. (Federal Register, Vol. 72, No. 47, p. 11196). Compensatory mitigation is required for loss greater than 0.10 acre; mitigation is at the discretion the Corps for projects with losses of less than 0.10 acre.
2. **Temporary Impact:** Temporary impacts are discharges of fill material that would allow affected jurisdictional areas to return to their pre-project conditions and contours through natural stream processes or through active restoration.

Permit Conditions:

1. **Time Period Covered:** This RGP shall expire August 6, 2026.
2. **The Permittee shall comply with the terms and conditions of the Clean Water Act Section 401 Water Quality Certification (WQC) WQC No R9-2021-00408 dated July 27, 2021**
3. **Annual Post-Construction Reporting Requirement:** The permittee shall submit an annual post-construction monitoring reports for all maintenance activities authorized under the RGP during the previous maintenance year to the Corps by December 31st. The monitoring report should include the following information:
 - i. A table listing the location where construction under this RGP was performed.
 - ii. Commencement and completion dates for each project location.
 - iii. A description of the overall activities for each location including:

1. The surface area in acres and linear feet of wetland or non-wetland waters of the U.S. in which discharges of dredged or fill material occurred.
 2. Types and amounts of materials discharged.
 3. Methods and equipment used to discharge material.
 - iv. Color photographs (including map of photo points) taken at the project sites before and after construction for those aspects directly associated with impacts to waters of the U.S.
 - v. Vicinity Map(s) depicting the location of where construction occurred in accordance with the South Pacific Division (SPD) Map and Drawing Standard (See <https://www.spd.usace.army.mil/Portals/13/docs/regulatory/standards/MapStand020816.pdf>)
4. Coastal Zone Management: Federal agencies shall review their proposed Federal agency activities which affect any coastal use or resource in order to develop consistency determinations which indicate whether such activities will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of approved management programs (15 CFR 930.36).
 5. Endangered Species: This Corps permit does not authorize you to take any threatened or endangered species, or adversely modify its designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply).
 6. Historic Properties: No activity is authorized under this RGP which may affect historic properties listed, proposed for listing, or potentially eligible for listing in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. If an activity is proposed to be authorized under this RGP that may have the potential to effect historic properties, separate consultation must be undertaken and completed prior to the permittee commencing work and/or discharges of fill material covered by this RGP.
 7. Pursuant to 36 C.F.R. section 800.13, in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Archeology Staff within 24 hours (Daniel Grijalva at 760-602-4838). The Permittee shall immediately suspend all work in any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. section 800.13.

8. **Wild and Scenic Rivers:** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while that river is in an official study status unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
9. **Disposal of Excavated Debris and Sediment:** Excavated sediment and debris shall be disposed at upland disposal sites. This RGP does not authorize disposal of excavated debris and sediment in any waters of the United States. In the case where storm flows, debris flows, or other discrete events expand the geographical limits of waters of the United States such that it encompasses an existing sediment placement site in the adjacent uplands, the permittee shall not discharge excavated sediment at the sediment placement site without first restoring the adjacent uplands to pre-damage contours and boundaries pursuant to the terms and conditions of Nationwide Permit 45. In certain circumstances, the permittee may be able to reclaim lost uplands without a Section 404 permit.
10. **Tribal Rights:** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
11. **Regional and Case-by-Case Conditions:** The activity must comply with Regional Conditions for the Los Angeles District (see Attachment B).
12. **Equipment:** When feasible, and if personnel would not be put into any additional potential hazard, heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance, such as use of wide-treaded equipment or floatation devices.
13. **Aquatic Life Movements:** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
14. **Spawning Areas:** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
15. **Migratory Bird Breeding Areas:** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable. Vegetation shall not be removed from 1 February to 31 August to avoid impacts to nesting birds unless the results of a pre-project bird survey by a qualified

biologist indicates no nesting birds are present in the project area. Pre-project surveys shall be conducted within five days of the proposed vegetation removal. If nesting birds are present, no work shall occur until the young have fledged and would no longer be impacted by the project.

16. **Suitable Material:** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
17. **Adverse Effects from Impoundments:** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
18. **Proper Maintenance:** Any structure or fill authorized by this RGP shall be maintained, including maintenance to ensure public safety, unless it is later determined that the structure is further contributing to other adverse conditions to private or public property. In such situations, corrective measures will be taken to rectify these adverse conditions, including removal and/or redesign of the original corrective action, or appropriate mitigation as determined through coordination with the permittee and the appropriate Federal and State agencies.
19. **Vernal Pools:** This RGP does not authorize discharges of fill material into vernal pools or activities that may impact vernal pools.
20. **Avoidance and Minimization:** The Permittee shall clearly mark the limits of the workspace with flagging or similar means to ensure mechanized equipment does not enter waters of the U.S. outside of authorized work area. Adverse impacts to waters of the U.S. beyond the Corps-approved construction footprint are not authorized. Such impacts could result in permit suspension and revocation, administrative, civil or criminal penalties, and/or substantial, additional, compensatory mitigation requirements.

Further Information:

1. **Congressional Authorities.** You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicants Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.



Kyle Dahl
Chief
San Diego and Imperial Counties Section

8/19/21

DATE

Table 1 - City of Vista Channel Maintenance Program - Maintenance Locations and Planned Activities

Site ID	Location	Longitude	Latitude	Tributary Name	Facility Type	Earthen, Concrete or Mixed	Water Present	Annual Activity	Periodic or One-Time Activity	Periodic Activity Frequency	Equipment Use Within Channel	Equipment Use Outside Channel	In-water BMPs (as needed)	CY Sediment Removal	CY Vegetation Removal	Channel Width	Channel Depth	Work Limits (ft ²)	Work Limits (acres)
4	926 W. Taylor Street	-117.22894	33.22845	Unnamed Tributary to Guajome Wetlands	Inlet	Earthen	yes	Remove trash and dead plants from inlet	Remove sediment, as needed (not typically a problem here)	Within 2 years	Hand work only	No Work from Top of Bank	Silt barriers	3	1	10	20	70	0.0016
5	1411 Foothill Drive	-117.21893	33.21584	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	yes	Remove trash and dead plants from inlet	Remove sediment, as needed (not typically a problem here)	Within 2 years	Hand work only Weed whip, as needed.	None anticipated.	Silt barriers	3	2	10	20	227	0.0052
11	939 to 942 Beverly Drive	-117.21262	33.21120	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	no	Remove trash and dead plants	N/A	Within 2 years	Hand work only	N/A	Silt barriers	0	1	10	20	30	0.0007
27	1125 Monte Vista Dr (near Chelsea Ct)	-117.22293	33.19024	Unnamed Tributary to Buena Vista Creek	Outlet	Concrete	no	Weed abatement.	N/A	Within 2 years	Hand work only Weed whip, as needed.	Weed whip, as needed.	Turbidity curtain	0	1	10	20	48	0.0011
32a	Buena Vista Channel at La Tortuga Drive	-117.25890	33.19357	Buena Vista Creek	Bridge	Earthen	yes	Remove trash and dead plants	N/A	Within 2 years	Hand work only	N/A	Silt barriers	0	3	10	20	3,494	0.0802
33	E. Vista Way & Escondido Ave (Div. Ct at Willow Park)	-117.22681	33.20501	Unnamed Tributary to Buena Vista Creek	Bridge	Earthen	yes	Remove trash.	N/A	Within 2 years	Hand work only	N/A	Silt barriers	0	5	10	20	527	0.0121
36	Northern Terminus of Watson Way	-117.22228	33.16461	Unnamed Tributary to Agua Hedionda Creek	Inlet	Earthen	yes	Weed abatement. Sediment removal by hand.	N/A	Within 2 years	Hand work only Weed whip, as needed.	N/A	Silt barriers	2	3	10	20	409	0.0094
38	Foothill Drive, North of Vets Terrace Drive	-117.20820	33.20710	Unnamed Tributary to Buena Vista Creek	Outlet	Earthen	no	Weed abatement. Remove trash and debris.	N/A	Within 2 years	Hand work only Weed whip, as needed.	N/A	Silt barriers	0	1	10	20	96	0.0022
41	Breeze Hill Drive at Hacienda Drive	-117.28067	33.19362	Buena Vista Creek	Bridge	Earthen	yes	Remove trash and dead plants	Remove sediment, as needed.	Within 2 years	Hand work (e.g., weed-whip, edger, loppers).	N/A	Silt barriers	10	5	10	20	17,481	0.4013
52	Hacienda (Meirase west to La Tortuga)	-117.25634	33.19380	Buena Vista Creek	Bridges	Earthen	yes	Remove trash and dead plants	Trim trees (no removal), as needed.	>3 years	Hand work only	N/A	Silt barriers	0	25	20	10	236,540	5.4302
53	Hacienda and Vista Village Dr.	-117.25244	33.19423	Buena Vista Creek	Bridges	Earthen	yes	Remove trash and dead plants	Trim trees (no removal), as needed.	>3 years	Hand work only	N/A	Silt barriers	0	25	20	10	155,065	3.5598
54	Via Christina and Foothill	-117.22110	33.21438	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlets/Outlets	Earthen	no	Remove trash and dead plants	Trim trees (no removal), as needed.	>3 years	Hand work only	N/A	Silt barriers	0	25	20	10	104,927	2.4088
7	1240 to 1165 Oak Drive	-117.22221	33.21415	Unnamed Tributary to Brengle Terrace Park Detention Basin	Roadside/Channel	Earthen	yes	Trim vegetation; remove trash, dead plants between K-rail and fence line	Trim trees (no removal), as needed.	Within 2 years	N/A (all maintenance is along the edge)	Hand work only. Weed whip, as needed.	Not applicable	0	1	10	20	2,483	0.057
1	2133 N. Santa Fe Avenue	-117.24860	33.23304	Unnamed Tributary to Guajome Wetlands	Inlet	Earthen	yes	Remove trash and dead plants	Adjacent owner cut trees; remove pieces from channel	Within 2 years	Hand work only	Excavation from Top of Bank	Silt barriers	5	1	10	20	148	0.0034
2	2140 to 2109 Goodwin Drive	-117.24412	33.23396	Unnamed Tributary to Guajome Wetlands	Inlet/Outlet	Earthen	yes	Remove debris (e.g., tires, mattress).	Remove sediment and trim trees (no removal), as needed.	Within 2 years	Hand work only	Vector (periodic cleanout; which limited heavy debris removal)	Silt barriers	16	1	10	20	205	0.0047
3	803 W. Taylor Street	-117.23277	33.22858	Unnamed Tributary to Guajome Wetlands	Inlet	Earthen	no	Remove trash and dead plants	Remove sediment, as needed (not typically a problem here)	Within 2 years	Hand work only	Vector (periodic) for cleanout.	Silt barriers	24	1	10	20	52	0.0012
6	1757 Warmlands Avenue	-117.21517	33.22567	Unnamed Tributary to Buena Vista Creek	Inlet	Earthen	no	Remove trash and dead plants from inlet	Remove sediment, as needed (not typically a problem here)	Within 2 years	Hand work only Weed whip, as needed.	Vector (periodic) for cleanout. Channel banks steep at this site.	Silt barriers	44	1	10	20	26	0.0006
10	940 to 955 Warmlands Avenue	-117.21047	33.21090	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet	Earthen	no	Remove debris (e.g., adjacent pepper tree) and weed abatement.	Remove sediment, as needed.	Within 2 years	Hand work only Weed whip, as needed.	Vector (infrequent) for site cleanout.	Silt barriers	0	1	10	20	44	0.001
13	1619 Foothill Drive	-117.21729	33.21311	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet	Earthen	no	Remove debris.	N/A	Within 2 years	Hand work only	Backhoe	Silt barriers	3	1	10	20	52	0.0012
14	1455 to 1532 Foothill Drive	-117.21756	33.21534	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	no	Remove debris from outlet (west side) only.	N/A	Within 2 years	Hand work only	Vector (infrequent) for site cleanout.	Silt barriers	12	1	10	20	48	0.0011
16	1520 Elm Drive	-117.21644	33.21545	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	no	Remove silt/debris (north side)	Remove sediment, as needed.	Within 2 years	Hand work only	Vector (periodic) for site cleanout.	Silt barriers	4	1	10	20	48	0.0011
17	1308 to 1319 Independence Way	-117.21507	33.21727	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	no	Remove debris and weed abatement.	Remove sediment, as needed.	Within 2 years	Hand work only Weed whip, as needed.	Vector (infrequent) for site cleanout.	Silt barriers	6	1	10	20	74	0.0017
18	1957 to 1970 E. Vista Way	-117.22600	33.22999	Unnamed Tributary to Guajome Wetlands	Inlet	Concrete	no	Remove debris.	Remove sediment, as needed.	Within 2 years	Hand work only	Vector (infrequent) for site cleanout.	Turbidity curtain	6	1	10	20	57	0.0013
19	2211 E. Vista Way	-117.22610	33.23459	Unnamed Tributary to Guajome Wetlands	Inlet/Outlet	Earthen	no	Remove debris.	N/A	Within 2 years	Hand work only	Vector (infrequent) for site cleanout.	Silt barriers	0	1	10	20	26	0.0006

Site ID	Location	Longitude	Latitude	Tributary Name	Facility Type	Earthen, Concrete or Mixed	Water Present	Annual Activity	Periods or One-Time Activity	Periodic Activity Frequency	Equipment Use Within Channel	Equipment Use Outside Channel	In-water BMPs (as needed)*	CY Sediment Removal	CY Vegetation Removal	Channel Width	Channel Depth	Work Limits (ft²)	Work Limits (acres)
22	1070 Vale Terrace Drive	-117.22958	33.20876	Unnamed Tributary to Buena Vista Creek	Outlet	Earthen	yes	Remove trash and dead plants	N/A	Within 2 years	Hand work only	Vector (periodic) for site cleanup.	Silt barriers	2	2	10	20	48	0.0011
25	Valley and Fireside Lane	-117.21959	33.19179	Unnamed Tributary to Buena Vista Creek	Outlet	Earthen	no	Remove vegetation west side only	Remove sediment, as needed.	Within 2 years	Hand work (e.g., weed-whip, edger, loppers).	Vector (periodic) for site cleanup.	Silt barriers	0	2	10	20	48	0.0011
26	Cypress & Monte Vista Drive	-117.22199	33.19039	Unnamed Tributary to Buena Vista Creek	Inlet/Outlet	Earthen	no	Weed abatement.	Remove sediment, as needed.	Within 2 years	Hand work only. Weed whp, as needed.	Vector (infrequent) for site cleanup.	Silt barriers	2	2	10	20	1,237	0.0284
31	Buena Vista Channel at Melrose Drive	-117.25398	33.19393	Buena Vista Creek	Bridge	Earthen	yes	Maintain to wingwall only.	Remove sediment, as needed.	Within 2 years	Hand work only.	Vector (periodic) for site cleanup. Excavator	Silt barriers	10	10	10	20	523	0.0120
328	Buena Vista Channel, north of Hacienda Drive West	-117.26885	33.19338	Buena Vista Creek	Outlet	Earthen	yes	Remove sediment from wingwall.	Trim trees (wilows and pines), as needed.	Within 2 years	Hand work only.	Vector (periodic) for site cleanup.	Silt barriers	5	3	8	20	3,494	0.0802
42	Buena Vista Park Duck Pond Inlet/Outlet	-117.24644	33.15849	Roman Creek	Pond/ Stormwater Basin	Earthen	yes	Remove trash and dead plants at the pond inlet and outlet.	Remove sediment, as needed.	Within 2 years	Hand work only.	Vector (periodic) for site cleanup. Excavator	Silt barriers	40	10	40	40	8,468	0.1944
43	Shadowidge Drive at Sycamore Avenue	-117.21728	33.16462	Buena Creek	Outlet	Mixed	yes	Private property owners typically maintain this site.	Remove sediment, as needed.	Within 2 years	Hand work only.	Vector (infrequent) for site cleanup. Excavator	Silt barrier or turbidity curtain	40	10	20	10	2,522	0.0579
47	Upper Roman Creek - Buena Vista Park	-117.24716	33.15687	Roman Creek	Pond/ Stormwater Basin	Mixed	yes	Remove trash and dead plants	Remove sediment as needed	Within 2 years	Hand Work only	Excavator, backhoe, Vector.	Silt barrier or turbidity curtain	10	5	20	20	4,012	0.0921
Equip. in Concrete Channel																			
30	Buena Vista Channel at North County Ford	-117.24946	33.19628	Buena Vista Creek	Channel	Concrete	yes	Remove sediment and vegetation	Remove sediment as needed.	Within 2 years	Backhoe (excavator) for silt removal and vegetation; bobcats.	Excavator	Turbidity curtain	1,000	5	10	20	11,665	0.2678
48	Buena Vista Channel at Vista Village Creekwalk	-117.24620	33.19845	Buena Vista Creek	Channel, Bridges	Concrete	yes	Remove trash and dead plants	Remove sediment, as needed.	Within 2 years	Hand work and Backhoe (excavator) for silt removal	Vector (periodic) for site cleanup.	Turbidity curtain	350	5	15	10	22,664	0.5203
49	Citrus to Creekwalk	-117.24954	33.19922	Buena Vista Creek	Channel	Concrete	yes	Remove trash and dead plants	Remove excessive vegetative growth, as needed.	Within 2 years	Bobcat for silt and debris removal.	N/A	Turbidity curtain	50	5	5	10	17,764	0.4078
50	Buena Vista Creek, north of The Wave Waterpark	-117.24673	33.19942	Buena Vista Creek	Channel	Concrete	yes	Remove trash and dead plants	Remove excessive vegetative growth, as needed.	Within 2 years	Hand work (weed-whip, edger, loppers). Bobcat for silt/debris removal.	Excavator	Turbidity curtain	1000	5	5	10	20,926	0.4804
51	Eucalyptus Ave. (Avalon Dr-Alister St)	-117.23174	33.20121	Buena Vista Creek	Channel	Concrete	yes	Remove trash and dead plants	Remove excessive vegetative growth, as needed.	Within 2 years	Hand work (weed-whip, edger, loppers). Bobcat for silt/debris removal.	Vector	Turbidity curtain	2	5	5	10	3,690	0.0847
Equip. in Earthen Channel																			
8	1119 Warmhards Avenue	-117.20993	33.21447	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	no	Remove sediment and debris.	N/A	Within 2 years	Bobcat and Dingo on inlet side and through pipe culvert. Maintain outlet only.	Excavator	Silt barriers	12	1	10	20	427	0.0098
15	1540 to 1585 Elm Drive	-117.21489	33.21581	Unnamed Tributary to Brengle Terrace Park Detention Basin	Inlet/Outlet	Earthen	no	Remove silt/debris (weeds). Trim trees; remove trash (east).	Remove sediment, as needed.	Within 2 years	Backhoe (excavator) for silt removal.	Vector (infrequent) for site cleanup.	Silt barriers	20	1	10	20	109	0.0025
21	Vale Terrace Dr / Alta Mesa Dr	-117.21427	33.20684	Unnamed Tributary to Buena Vista Creek	Outlet	Earthen	yes	Maintain wingwall only.	Remove dead trees blocking drainage.	Within 2 years	Backhoe (excavator) for silt removal.	Vector (periodic); winch to remove dead trees (limited).	Silt barriers	5	3	10	20	26	0.0006
45	Monte Vista Detention Basin Outlet	-117.21325	33.19177	Unnamed Tributary to Buena Vista Creek	Outlet	Earthen	after rain only	Remove trash and dead plants	Remove sediment, as needed.	Within 2 years	Backhoe and Bobcat to remove sediment	Backhoe, bobcat, Vector (periodic) for site cleanup.	Silt barriers	20	1	40	40	35	0.0008
46 (old #56)	Daly Ditch Inlet	-117.22936	33.21606	Unnamed Tributary to Buena Vista Creek	Outlet	Earthen	yes	Remove trash and dead plants	Remove sediment, as needed.	Within 2 years	Excavator	Excavator, backhoe	Silt barriers	25	10	20	20	314	0.0072

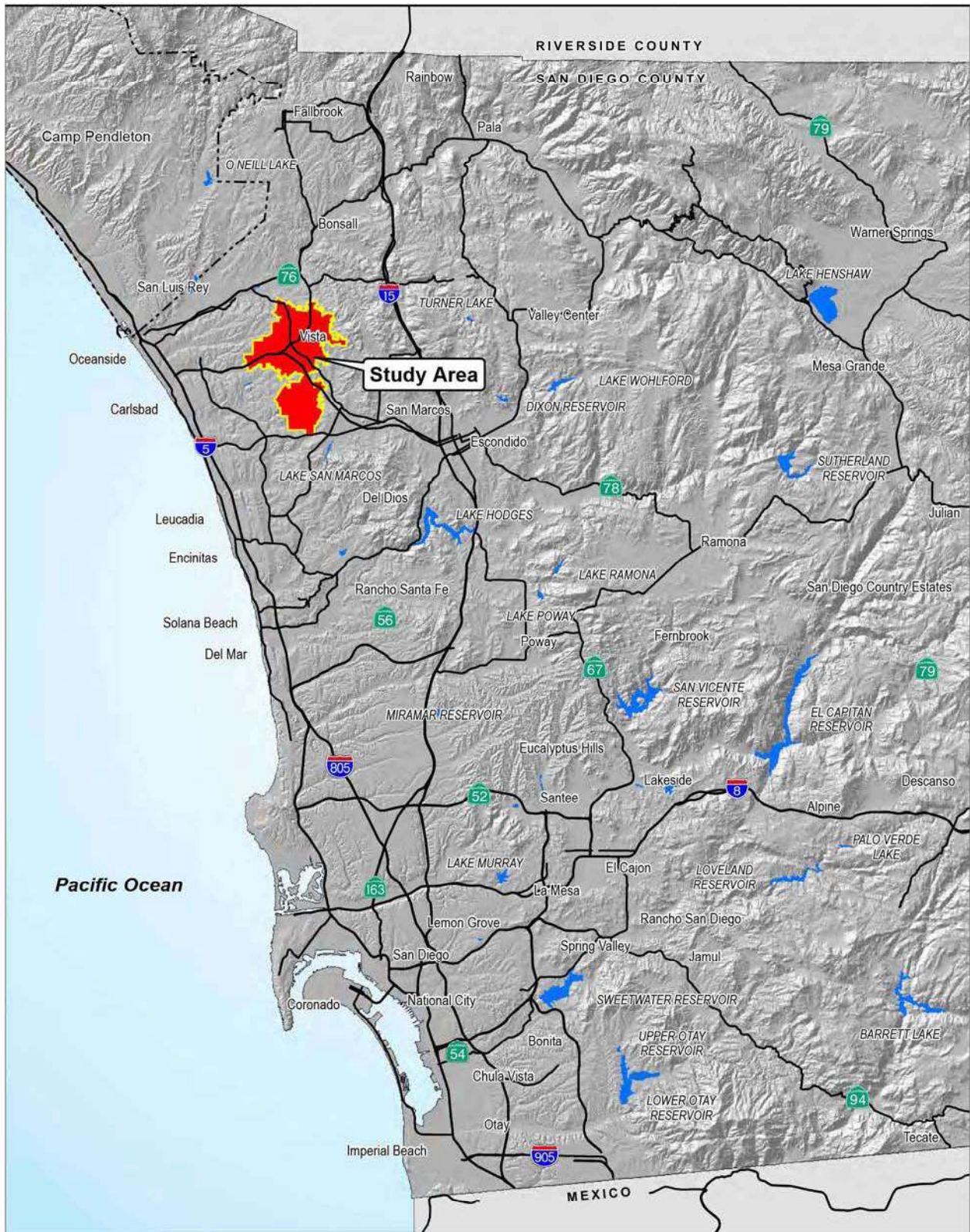
* - new sites not included in previous authorizations

* To protect surface waters during channel maintenance activities, maintenance will be conducted during dry conditions when possible. Although maintenance is predominantly conducted during dry conditions, if maintenance is necessary when flow is present then BMPs such as the following will be put in place to control sediment.

Turbidity curtain in concrete channels - While conducting channel maintenance activities in concrete channels in low flow conditions a turbidity curtain will be installed, anchored to the concrete structure prior to start of work, and will be removed after work has been completed to allow any suspended sediment to settle within the work area (typically one to two days).

Silt barriers in earthen channels - While conducting channel maintenance activities in earthen channels in low flow conditions, a stacked silt barrier will be installed prior to start of work. Silt barriers are permeable which would allow any running water to pass through while holding back sediment. Silt barriers will be removed upon completion of work and once the sediment has settled.

Silt barriers may also be used in earthen channels during no flow conditions to control sediment, if necessary.



Source: Esri; SanGIS; SANDAG.

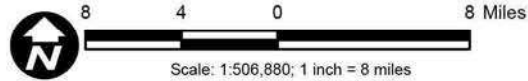
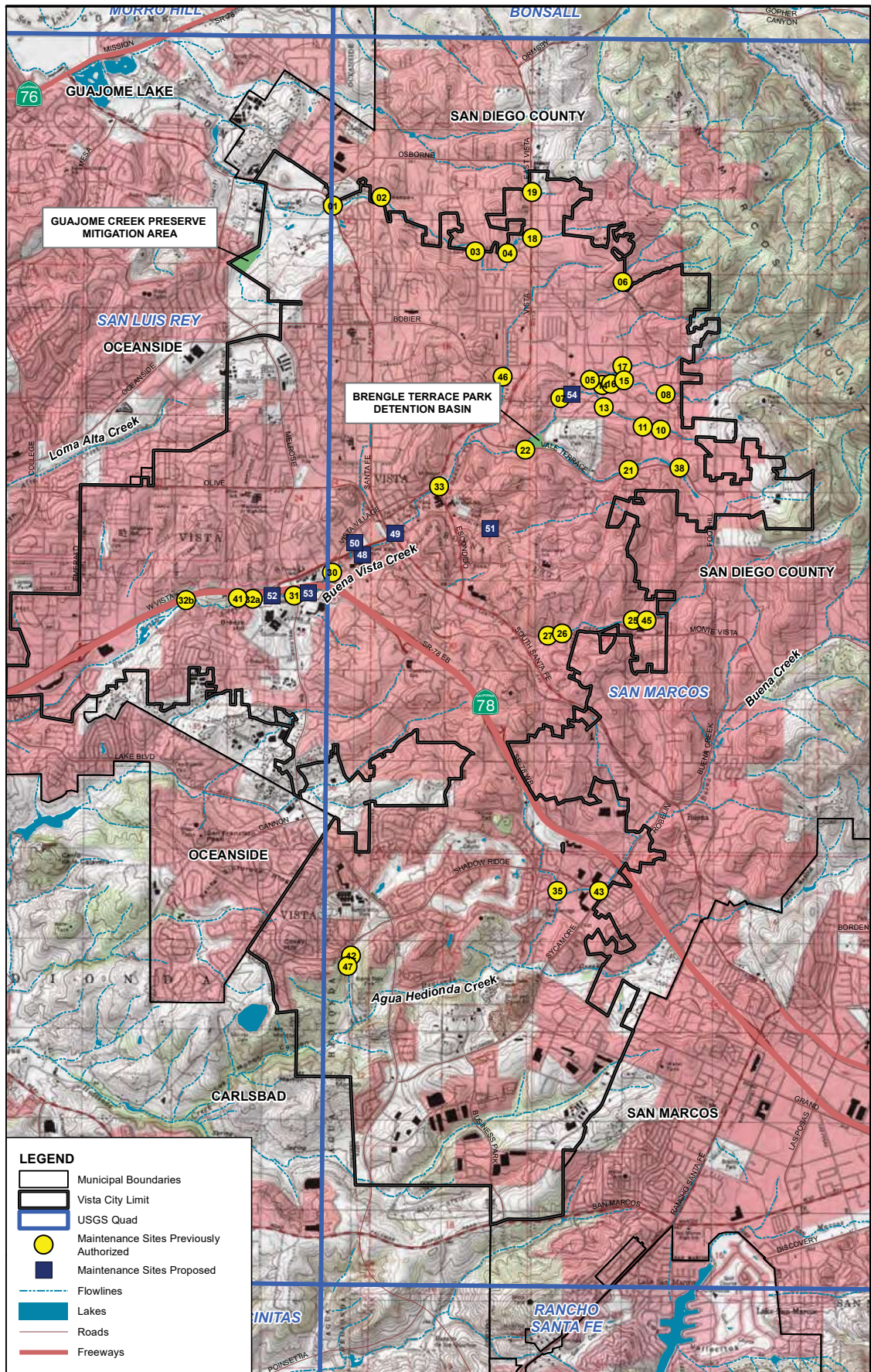


Figure 1
Regional Location Map

Vista Channel Maintenance Program

Path: P:_6053\60530725_Vista_StormW\900-CAD-GIS\920 GIS\map_docs\mxd\TO15_Maintenance\Report\JDR\Fig1_Regional_Location.mxd, 5/21/2020, paul.moreno



Source: SanGIS 2018, City of Vista 2016, National Hydrography Dataset 2014
 3,500 1,750 0 3,500 Feet



Scale: 1:42,000 1 in = 3,500 feet

Figure 2
Study Area Vicinity