

|    | A   | B | C                     |
|----|---|---|-----------------------|
| 1  | <b>Sediment Risk Factor Worksheet</b>   |   | Entry                 |
| 2  | <b>A) R Factor</b>  |   |                       |
| 3  | Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.   |   |                       |
| 4  | <a href="http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm">http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm</a>   |   |                       |
| 5  |   |   | R Factor Value 241.44 |
| 6  | <b>B) K Factor (weighted average, by area, for all site soils)</b>  |   |                       |
| 7  | The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted. |   |                       |
| 8  | <a href="#">Site-specific K factor guidance</a>   |   |                       |
| 9  |   |   | K Factor Value 0.32   |
| 10 | <b>C) LS Factor (weighted average, by area, for all slopes)</b>   |   |                       |
| 11 | The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.   |   |                       |
| 12 | <a href="#">LS Table</a>  |   |                       |
| 13 |   |   | LS Factor Value 0.65  |
| 14 |   |   |                       |
| 15 | <b>Watershed Erosion Estimate (=RxKxLS) in tons/acre</b>  |   | 50.21952              |
| 16 | <b>Site Sediment Risk Factor</b>  |   |                       |
| 17 | Low Sediment Risk: < 15 tons/acre   |   |                       |
| 18 | Medium Sediment Risk: >=15 and <75 tons/acre  |   |                       |
| 19 | High Sediment Risk: >= 75 tons/acre   |   |                       |
| 20 |   |   | Medium                |

| Receiving Water (RW) Risk Factor Worksheet  | Entry     | Score                |
|---|-----------|----------------------|
| <b>A. Watershed Characteristics</b>   | yes/no    |                      |
| <p>A.1. Does the disturbed area discharge (either directly or indirectly) to a <b>303(d)-listed waterbody impaired by sediment</b> (For help with impaired waterbodies please visit the link below) or has a <b>USEPA approved TMDL implementation plan for sediment</b>?:</p> <p><a href="http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml">http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml</a></p> | <b>OR</b> | <b>NO</b> <b>Low</b> |
| <p>A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN &amp; COLD &amp; MIGRATORY? (For help please review the appropriate Regional Board Basin Plan)</p> <p><a href="http://www.waterboards.ca.gov/waterboards_map.shtml">http://www.waterboards.ca.gov/waterboards_map.shtml</a></p>   |           |                      |
| <p><a href="#">Region 1 Basin Plan</a></p> <p><a href="#">Region 2 Basin Plan</a></p> <p><a href="#">Region 3 Basin Plan</a></p> <p><a href="#">Region 4 Basin Plan</a></p> <p><a href="#">Region 5 Basin Plan</a></p> <p><a href="#">Region 6 Basin Plan</a></p> <p><a href="#">Region 7 Basin Plan</a></p> <p><a href="#">Region 8 Basin Plan</a></p> <p><a href="#">Region 9 Basin Plan</a></p>  |           |                      |

## Combined Risk Level Matrix

|                             |      | <u>Sediment Risk</u> |         |         |
|-----------------------------|------|----------------------|---------|---------|
|                             |      | Low                  | Medium  | High    |
| <u>Receiving Water Risk</u> | Low  | Level 1              | Level 2 |         |
|                             | High | Level 2              |         | Level 3 |

Project Sediment Risk: **Medium**

Project RW Risk: **Low**

Project Combined Risk: **Level 2**

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## National Pollutant Discharge Elimination System (NPDES)

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# Rainfall Erosivity Factor Calculator for Small Construction

## Introduction

EPA's stormwater regulations allow NPDES permitting authorities to waive NPDES permitting requirements for stormwater discharges from small construction sites if:

- the construction site disturbs less than five acres, and
- the rainfall erosivity factor ("R" in the revised universal soil loss equation, or RUSLE) value is less than five during the period of construction activity.

If your small construction project is located in an area where EPA is the permitting authority and your R factor is less than five, you qualify for a low erosivity waiver (LEW) from NPDES stormwater permitting. If your small construction project does not qualify for a waiver, then NPDES stormwater permit coverage is required. Follow the steps below to calculate your R-Factor.

LEW certifications are submitted through the NPDES eReporting Tool or "CGP-NeT". Several states that are authorized to implement the NPDES permitting program also accept LEWs. Check with your state NPDES permitting authority for more information.

- Submit your LEW through EPA's eReporting Tool <<https://www.epa.gov/npdes/submitting-notice-intent-noi-notice-termination-not-or-low-erosivity-waiver-lew-under>>

- List of states, Indian country, and territories where EPA is the permitting authority (pdf) <<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit-cover.pdf>>
- Construction Rainfall Erosivity Waiver Fact Sheet <<https://www.epa.gov/npdes/construction-rainfall-erosivity-waiver-fact-sheet>>
- Small Construction Waivers and Instructions (pdf) <<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-c-waivers.pdf>>

The R-factor calculation can also be integrated directly into custom applications using the R-Factor web service <<https://epa.gov/api-docs/>>.

## Steps to Calculate an R Factor for your Small Construction Project

- 1 Select the estimated start and end dates of construction by clicking the calendar icons below and using the dropdown calendar. The period of construction activity begins at initial earth disturbance and ends with final stabilization.

**Start Date:**

01/01/2026

**End Date:**

12/31/2026

- 2 Locate your small construction project by entering the address in the search box or by clicking on the map.

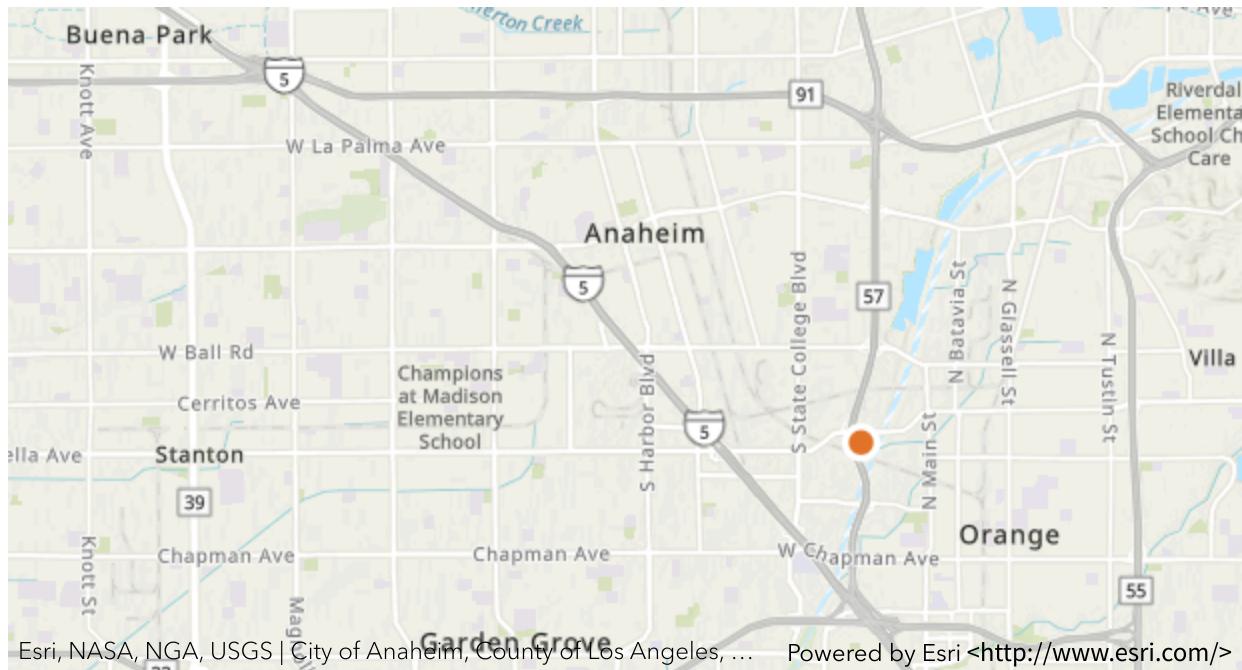
**Location:**

-117.87851125863116 , 33.80441539544

**Search**

+

—



3 Click the "Calculate R Factor" button below.

**Calculate R Factor**

## Facility Information

**R-Factor Calculation:**

1/2026 to 12/2026 = 40.24  
 1/2027 to 12/2027 = 40.24  
 1/2028 to 12/2028 = 40.24  
 1/2029 to 12/2029 = 40.24  
 1/2030 to 12/2030 = 40.24  
 1/2031 to 12/2031 = 40.24  
**Total = 241.44**

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Start Date:</b> 01/01/2026 | <b>Latitude:</b> 33.8044    |
| <b>End Date:</b> 12/31/2026   | <b>Longitude:</b> -117.8785 |

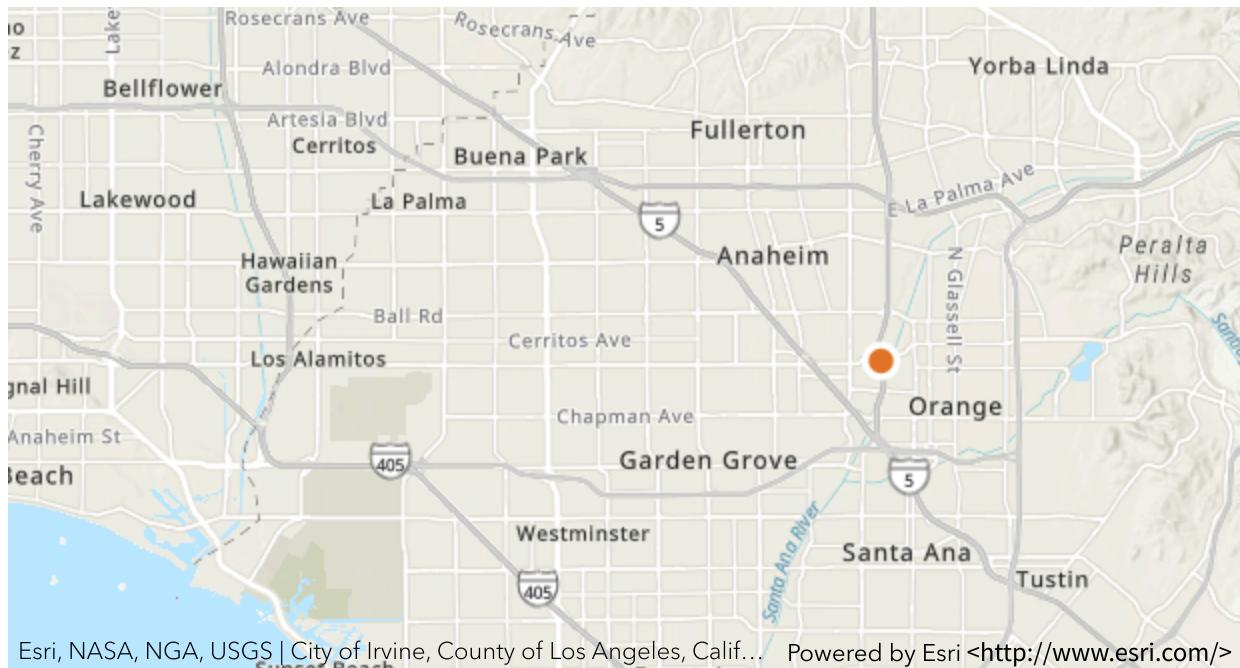
## Calculation Results

**Rainfall erosivity factor (R Factor) = 40.24**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

**You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage.** If you are located in an area where EPA is the permitting authority (pdf)

<<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit->>



- 3 Click the "Calculate R Factor" button below.

### Calculate R Factor

## Facility Information

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Start Date:</b> 01/01/2027 | <b>Latitude:</b> 33.8044    |
| <b>End Date:</b> 12/31/2027   | <b>Longitude:</b> -117.8785 |

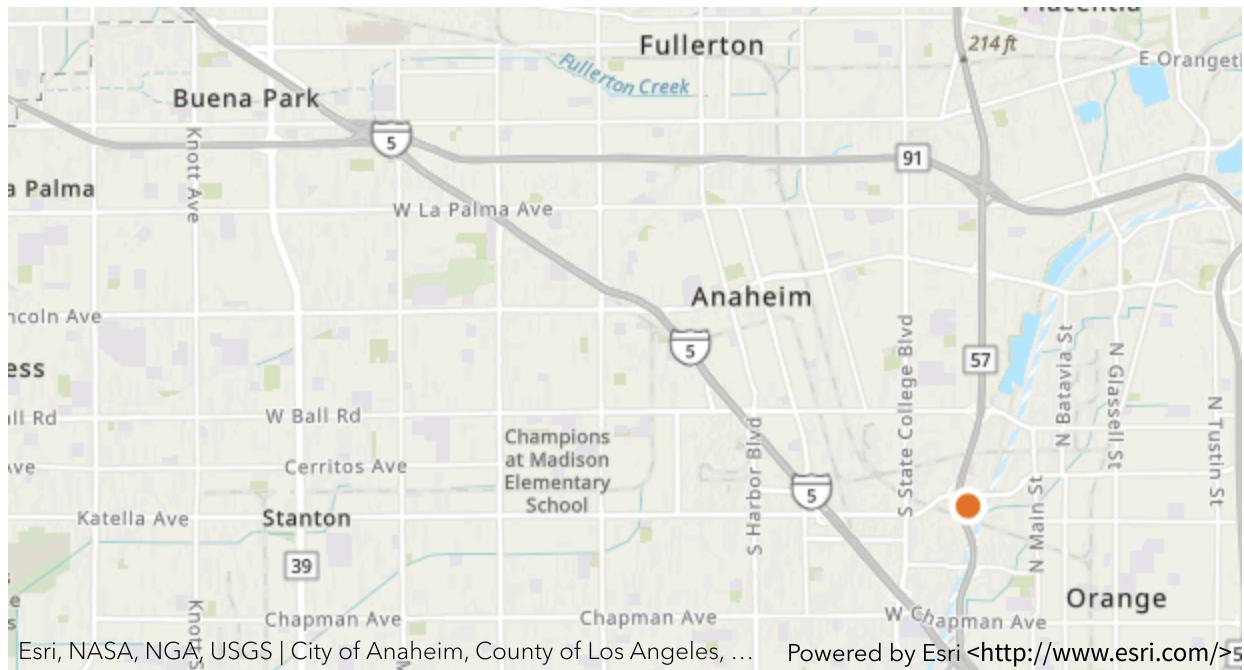
## Calculation Results

**Rainfall erosivity factor (R Factor) = 40.24**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

**You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage.** If you are located in an area where EPA is the permitting authority (pdf)

<<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit->>



3 Click the "Calculate R Factor" button below.

**Calculate R Factor**

## Facility Information

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Start Date:</b> 01/01/2028 | <b>Latitude:</b> 33.8044    |
| <b>End Date:</b> 12/31/2028   | <b>Longitude:</b> -117.8785 |

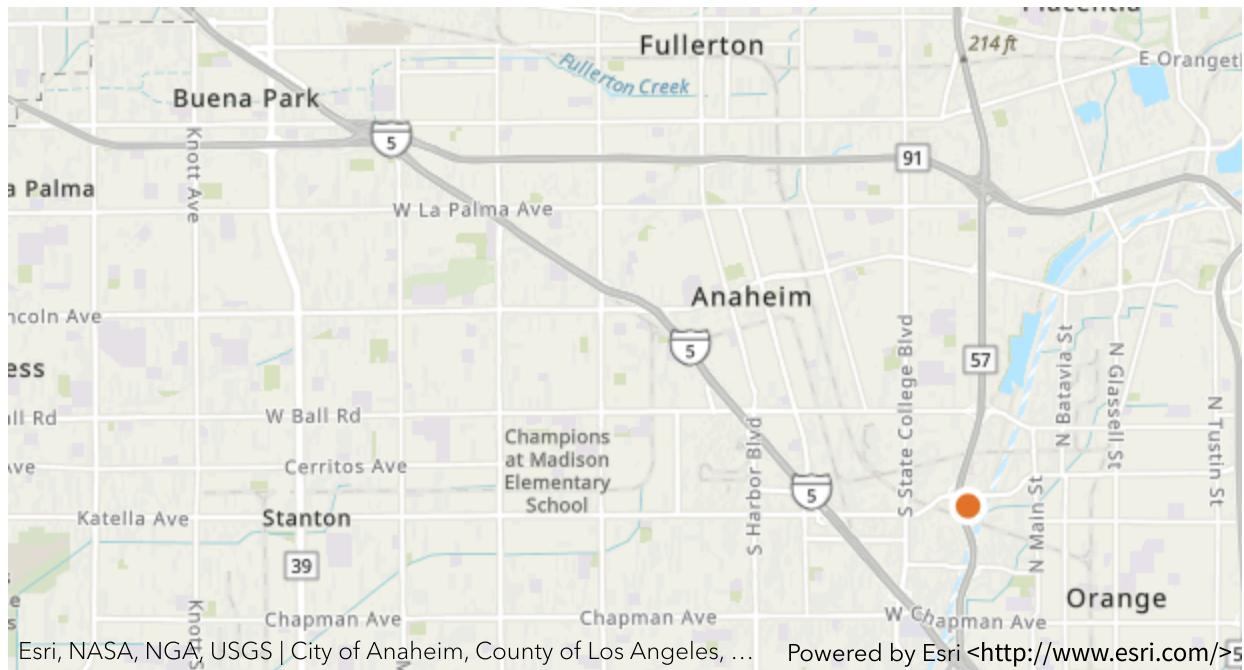
## Calculation Results

**Rainfall erosivity factor (R Factor) = 40.24**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

**You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage.** If you are located in an area where EPA is the permitting authority (pdf)

<<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit->



3 Click the "Calculate R Factor" button below.

**Calculate R Factor**

## Facility Information

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Start Date:</b> 01/01/2029 | <b>Latitude:</b> 33.8044    |
| <b>End Date:</b> 12/31/2029   | <b>Longitude:</b> -117.8785 |

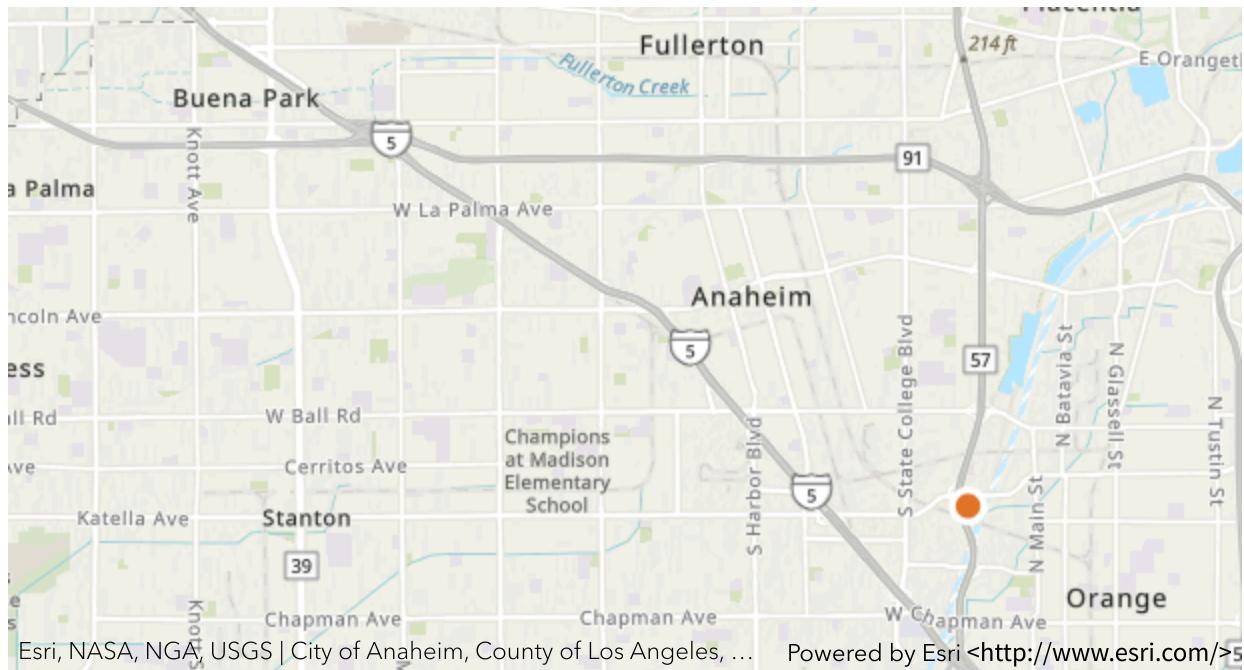
## Calculation Results

**Rainfall erosivity factor (R Factor) = 40.24**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

**You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage.** If you are located in an area where EPA is the permitting authority (pdf)

<<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit->



3 Click the "Calculate R Factor" button below.

**Calculate R Factor**

## Facility Information

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Start Date:</b> 01/01/2030 | <b>Latitude:</b> 33.8044    |
| <b>End Date:</b> 12/31/2030   | <b>Longitude:</b> -117.8785 |

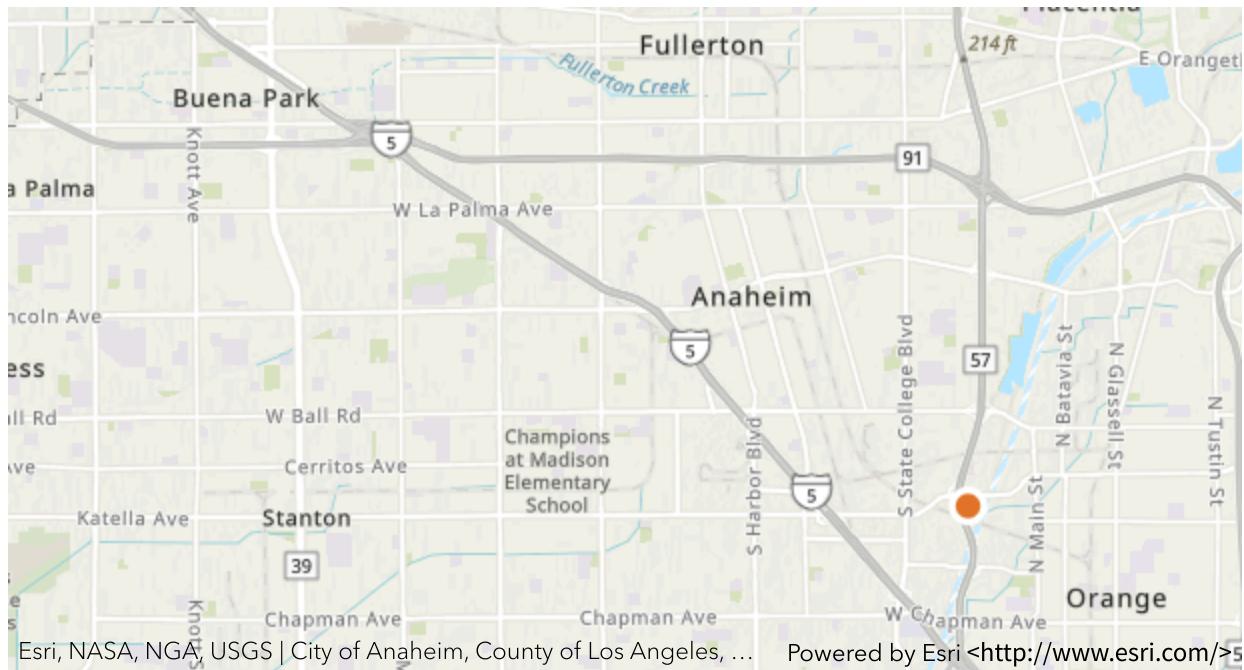
## Calculation Results

**Rainfall erosivity factor (R Factor) = 40.24**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

**You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage.** If you are located in an area where EPA is the permitting authority (pdf)

<<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit->



3 Click the "Calculate R Factor" button below.

**Calculate R Factor**

## Facility Information

|                               |                             |
|-------------------------------|-----------------------------|
| <b>Start Date:</b> 01/01/2031 | <b>Latitude:</b> 33.8044    |
| <b>End Date:</b> 12/31/2031   | <b>Longitude:</b> -117.8785 |

## Calculation Results

**Rainfall erosivity factor (R Factor) = 40.24**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

**You do NOT qualify for a waiver from NPDES permitting requirements and must seek Construction General Permit (CGP) coverage.** If you are located in an area where EPA is the permitting authority (pdf)

<<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit->

cover.pdf>, you must submit a Notice of Intent (NOI) through the NPDES eReporting Tool (NeT) <<https://www.epa.gov/npdes/submitting NOTICE-INTENT-NOI NOTICE-TERMINATION-NOT-OR-LOW-EROSIVITY-WAIVER-LEW-UNDER>>. Otherwise, you must seek coverage under your state's CGP.

For questions or comments, email EPA's CGP staff at [cgp@epa.gov](mailto:cgp@epa.gov).



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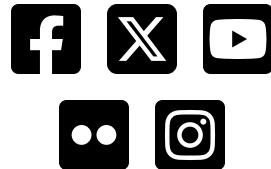
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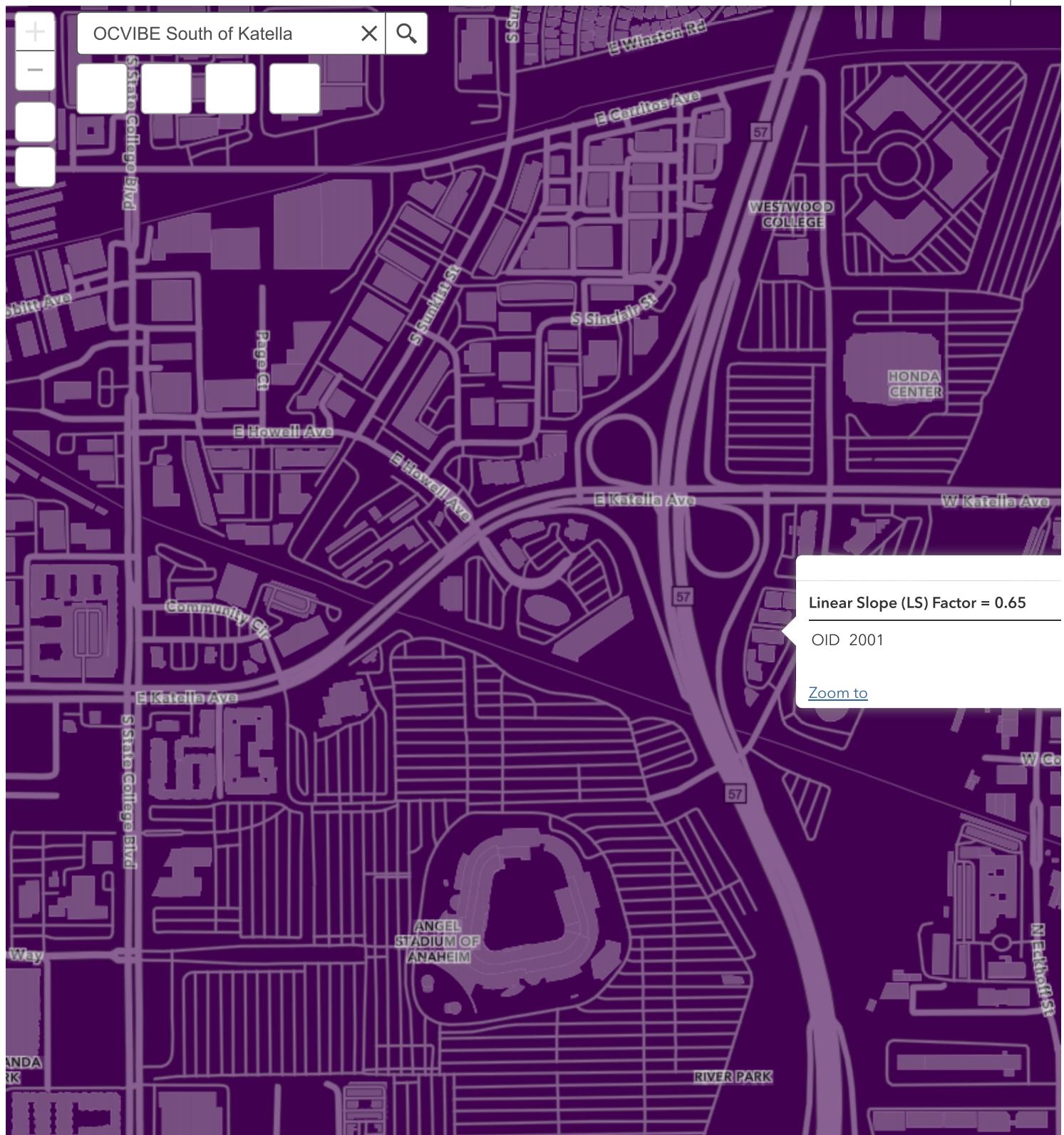
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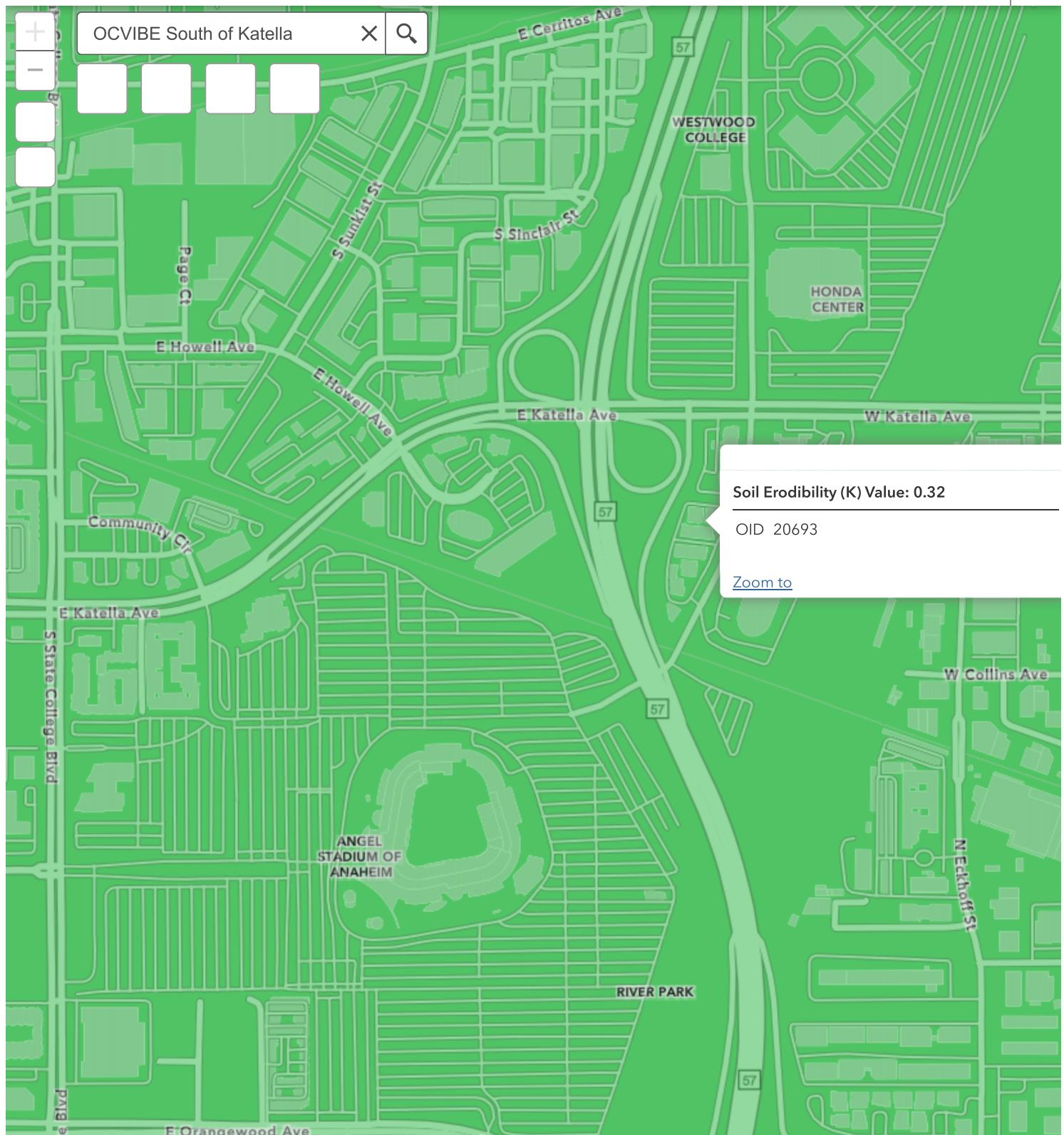


## 2022 Construction Stormwater General Permit Length-Slope (LS) Factor





## 2022 Construction Stormwater General Permit Soil Erodibility (K) Factor





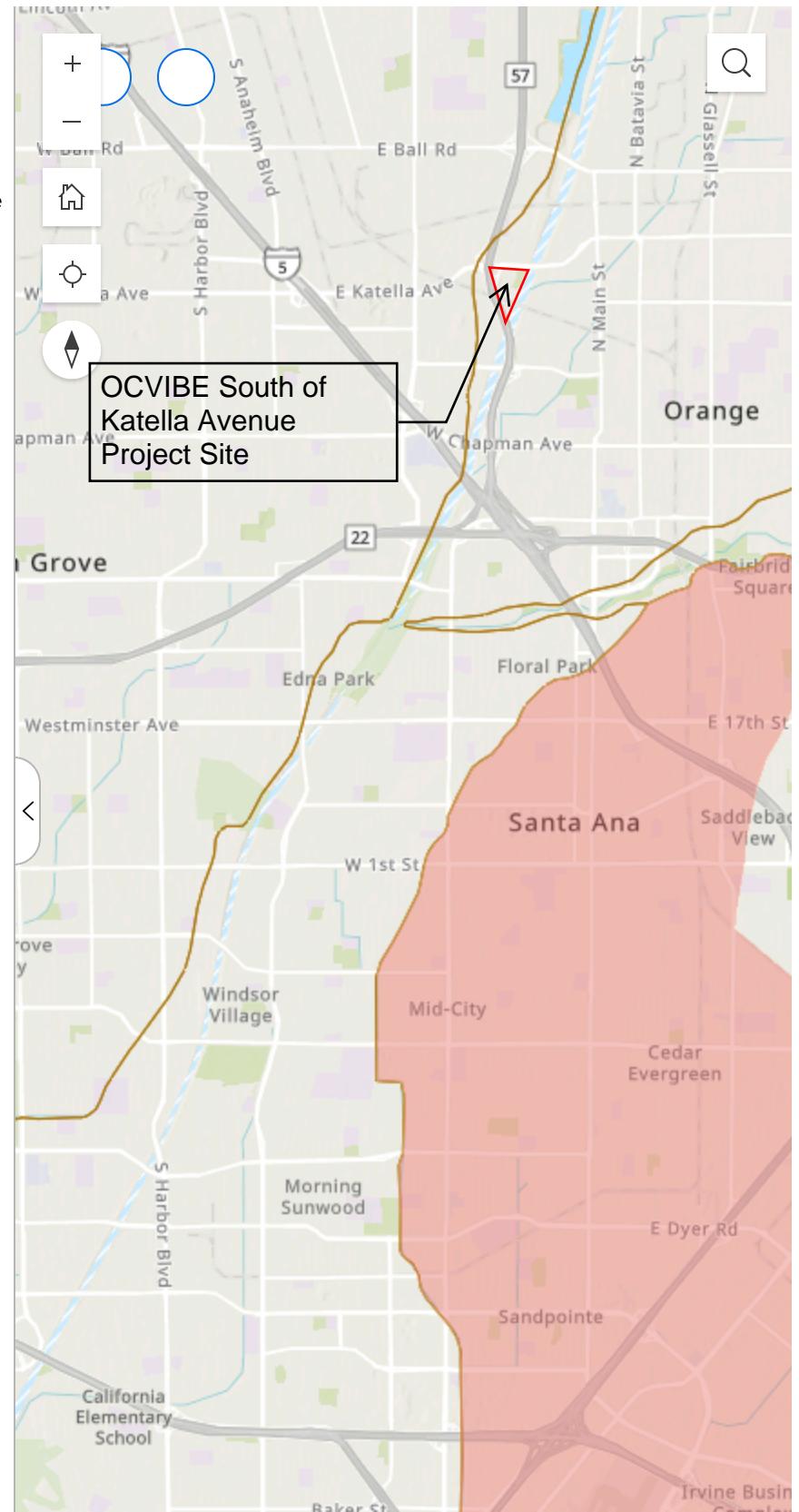
# 2022 Construction Stormwater General Permit High-Risk Receiving Water Map Tool

## 2022 CGP High-Risk Receiving Watershed Tool

Use the search bar to enter the address of the construction site. Click on the resulting blue square to identify the applicable high-risk receiving water watershed to select in the SMARTS Risk tab. Alternatively, zoom into the map and click on the project location. Follow the directions in the pop-up window to view applicable high-risk receiving water watershed information.

High-Risk Receiving Water implementation requirements are located in Attachment D.1 and Attachment E.1 of the Construction Stormwater General Permit Order 2022-0057-DWQ for traditional construction projects and linear underground/overhead projects, respectively.

For help using this resource please refer to the information icon in the top-left corner of the map and contact the Stormwater Help Desk (stormwater@waterboards.ca.gov) if necessary.



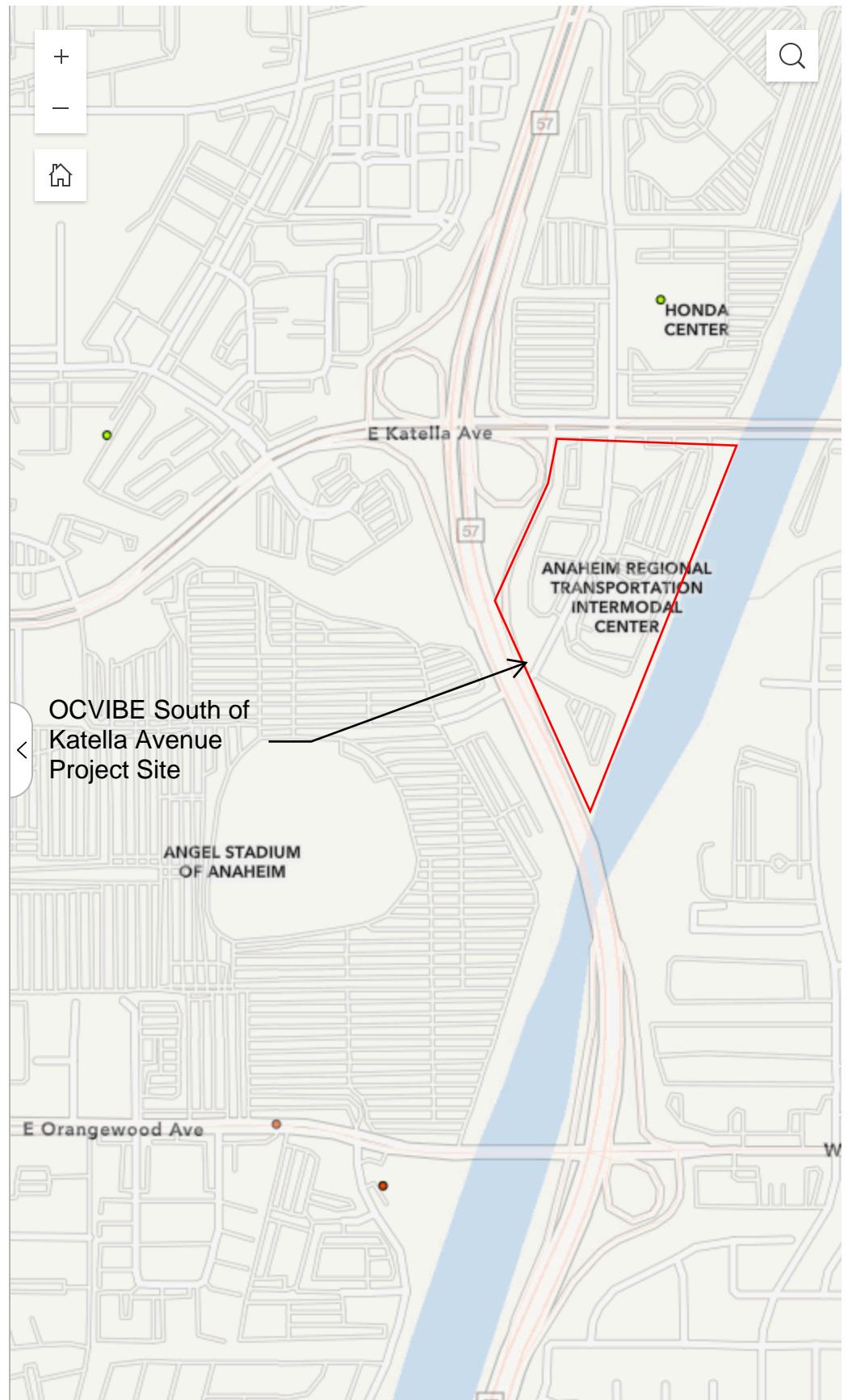


## Welcome to the Total Maximum Daily Load (TMDL) Tool

Use the search bar to enter the closest address of the construction site. Click on the resulting square to identify the applicable TMDL watershed or waterbody to select in the SMARTS TMDL tab. Alternatively, zoom into the map and click on the project location. Follow the directions in the pop-up window to view applicable TMDL watershed or watershed information.

TMDL implementation requirements are located in Attachment H of the Construction Stormwater General Permit Order 2022-0057-DWQ.

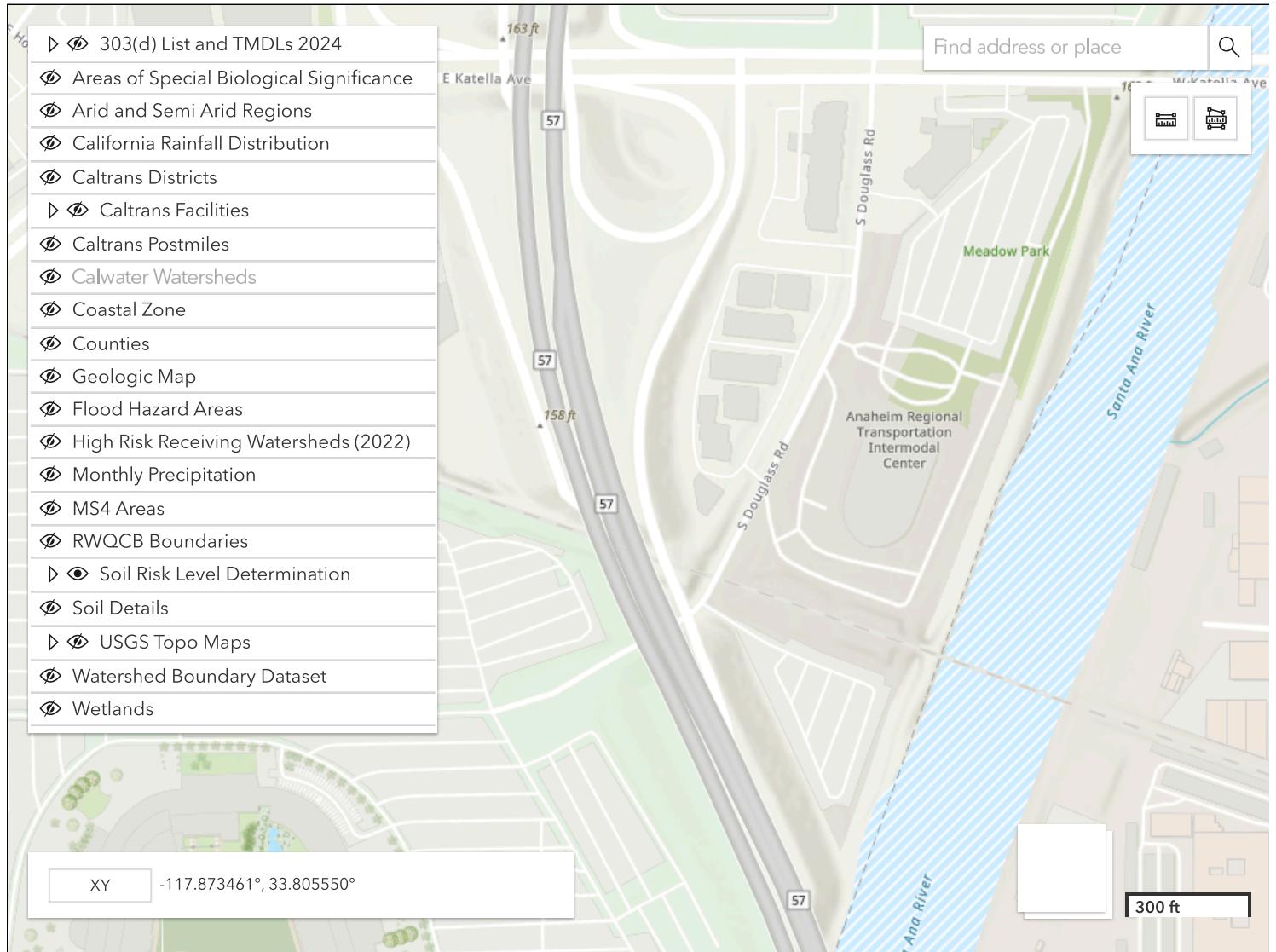
For help using this resource, please refer to the information icon in the top-right corner of the map and contact the Stormwater Help Desk (stormwater@waterboards.ca.gov) if necessary.





## Caltrans Water Quality Planning Tool

The Water Quality Planning Tool was created to help planners and designers comply with environmental permits. It uses a map interface to find information based on a project's location. **This application is being updated for digital accessibility and will continue to function while updates are in progress.**



### Caltrans Postmiles

County:

### Rainfall Erosivity Factor (R Factor)

Start Date  mm / dd / yyyy End Date  mm / dd / yyyy

### Watershed Information

#### CALWATER WATERSHED

|                          |                      |                    |                       |                       |        |
|--------------------------|----------------------|--------------------|-----------------------|-----------------------|--------|
| Hydrologic Unit          | SANTA ANA RIVER      | Hydrologic Area    | Lower Santa Ana River | Hydrologic Sub-Area # | 801.11 |
| Hydrologic Sub-Area Name | East Coastal Plain   | Planning Watershed | 4801110000            | HSA Area (acres)      | 194575 |
| Latitude, Longitude      | 33.80338, -117.87437 |                    |                       |                       |        |

#### WATERSHED BOUNDARY DATASET

Watershed Lower Santa Ana River Subwatershed Walnut Canyon-Santa Ana River Hydrologic Unit Code 180702031002  
 Average Annual Precipitation (inches) 13.72

**TMDLs & 303(d) Listed Water Bodies (2024 List)****Key:** Water body on 303(d) list Water body with a TMDL

| Name  | Pollutant                             | Size         | Sources          | Status                                   |
|---|---------------------------------------|--------------|------------------|--|
| <a href="#">Alamitos Bay</a>  | Copper                                | 327.52 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Alamitos Bay</a>  | DDD (Dichlorodiphenylchloroethane)    | 327.52 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Alamitos Bay</a>  | DDT (Dichlorodiphenyltrichloroethane) | 327.52 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Alamitos Bay</a>  | Indicator Bacteria                    | 327.52 Acres | A Source Unknown | Being addressed with USEPA approved TMDL |
| <a href="#">Alamitos Bay</a>  | Oxygen, Dissolved                     | 327.52 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Alamitos Bay</a>  | PCBs (Polychlorinated biphenyls)      | 327.52 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Anaheim Bay</a>   | Nickel                                | 402.02 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Anaheim Bay</a>   | PCBs (Polychlorinated biphenyls)      | 402.02 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Anaheim Bay</a>   | Toxicity                              | 402.02 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Balboa Beach</a>  | DDT (Dichlorodiphenyltrichloroethane) | 1.84 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Balboa Beach</a>  | Dieldrin                              | 1.84 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Balboa Beach</a>  | PCBs (Polychlorinated biphenyls)      | 1.84 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Bay Marsh</a>   | Toxicity                              | 25.6 Acres   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica Channel</a>   | Ammonia (Unionized)                   | 5.16 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica Channel</a>   | Indicator Bacteria                    | 5.16 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica Channel</a>   | pH                                    | 5.16 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica Ecological Reserve</a>                              | Toxicity                              | 238.96 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica State Beach</a>                                     | Copper                                | 2.64 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica State Beach</a>                                     | Indicator Bacteria                    | 2.64 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bolsa Chica State Beach</a>                                     | Nickel                                | 2.64 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bonita Creek</a>  | Benthic Community Effects             | 3.86 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Bonita Creek</a>  | Toxicity                              | 3.86 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Borrego Creek (from Irvine Blvd to San Diego Creek Reach 2)</a> | Ammonia (Unionized)                   | 2.41 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Borrego Creek (from Irvine Blvd to San Diego Creek Reach 2)</a> | Indicator Bacteria                    | 2.41 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Buck Gully Creek</a>  | Indicator Bacteria                    | 0.34 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Crystal Cove State Park</a>                                     | Indicator Bacteria                    | 0 Miles      | A Source Unknown | TMDL required                            |
| <a href="#">East Garden Grove Wintersburg Channel</a>                       | Ammonia (Unionized)                   | 7.54 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Beach State Park</a>                                 | Indicator Bacteria                    | 2.14 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Beach State Park</a>                                 | PCBs (Polychlorinated biphenyls)      | 2.14 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Huntington City Beach</a>                                       | Indicator Bacteria                    | 3.49 Miles   | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Harbour</a>  | Chlordane                             | 372.61 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Harbour</a>  | Copper                                | 372.61 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Harbour</a>  | Indicator Bacteria                    | 372.61 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Harbour</a>  | Lead                                  | 372.61 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Huntington Harbour</a>  | PCBs (Polychlorinated biphenyls)      | 372.61 Acres | A Source Unknown | TMDL required                            |

|  |                                       |              |   |  |
|--|---------------------------------------|--------------|---|--|
| <a href="#">Huntington Harbour</a>   | Toxicity                              | 372.61 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Little Corona Del Mar Beach</a>  | Indicator Bacteria                    | 0.13 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Los Trancos Creek (Crystal Cove Creek)</a>   | Indicator Bacteria                    | 3.18 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Morning Canyon Creek</a>   | Indicator Bacteria                    | 1.08 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Moro Canyon Creek</a>  | Nitrogen                              | 3.5 Miles    | A Source Unknown  | TMDL required                            |
| <a href="#">Moro Canyon Creek</a>  | Phosphorus                            | 3.5 Miles    | A Source Unknown  | TMDL required                            |
| <a href="#">Moro Canyon Creek</a>  | Selenium                              | 3.5 Miles    | A Source Unknown  | TMDL required                            |
| <a href="#">Moro Canyon Creek</a>  | Toxicity                              | 3.5 Miles    | A Source Unknown  | TMDL required                            |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | Chlordane                             | 106.55 Acres | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | Copper                                | 106.55 Acres | Marinas and Recreational Boating  | TMDL required                            |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | DDT (Dichlorodiphenyltrichloroethane) | 106.55 Acres | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | Dieldrin                              | 106.55 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | Indicator Bacteria                    | 106.55 Acres | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | Nutrients                             | 106.55 Acres | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | PCBs (Polychlorinated biphenyls)      | 106.55 Acres | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)</a> | Toxicity                              | 106.55 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Chlordane                             | 87.93 Acres  | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Copper                                | 87.93 Acres  | Marinas and Recreational Boating  | TMDL required                            |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | DDT (Dichlorodiphenyltrichloroethane) | 87.93 Acres  | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Indicator Bacteria                    | 87.93 Acres  | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Malathion                             | 87.93 Acres  | A Source Unknown  | TMDL required                            |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Nutrients                             | 87.93 Acres  | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | PCBs (Polychlorinated biphenyls)      | 87.93 Acres  | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Sedimentation/Siltation               | 87.93 Acres  | Agriculture Channel Erosion Construction/Land Development Erosion/Siltation | Being addressed with USEPA approved TMDL |
| <a href="#">Newport Bay, Upper (Ecological Reserve)</a>  | Toxicity                              | 87.93 Acres  | A Source Unknown  | TMDL required                            |
| <a href="#">Newport Beach</a>  | Indicator Bacteria                    | 3.47 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Newport Slough</a>   | Indicator Bacteria                    | 1 Miles      | A Source Unknown  | TMDL required                            |
| <a href="#">Peters Canyon Wash (Orange County)</a>   | Benthic Community Effects             | 6.77 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Peters Canyon Wash (Orange County)</a>   | Copper                                | 6.77 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Peters Canyon Wash (Orange County)</a>   | DDT (Dichlorodiphenyltrichloroethane) | 6.77 Miles   | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Peters Canyon Wash (Orange County)</a>   | Indicator Bacteria                    | 6.77 Miles   | A Source Unknown  | TMDL required                            |
| <a href="#">Peters Canyon Wash (Orange County)</a>   | Malathion                             | 6.77 Miles   | A Source Unknown  | TMDL required                            |

|   |   |             |   |  |
|---|---|-------------|---|--|
| <a href="#">Peters Canyon Wash (Orange County)</a>    | pH                                      | 6.77 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">Peters Canyon Wash (Orange County)</a>    | Selenium                                | 6.77 Miles  | Natural Sources   | Being addressed with USEPA approved TMDL |
| <a href="#">Peters Canyon Wash (Orange County)</a>    | Toxaphene                               | 6.77 Miles  | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">Peters Canyon Wash (Orange County)</a>    | Toxicity                                | 6.77 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">Rattlesnake Reservoir (Orange County)</a> | pH                                      | 36.31 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Rhine Channel</a>                         | Copper                                  | 29.07 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Rhine Channel</a>                         | Lead                                    | 29.07 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Rhine Channel</a>                         | Mercury                                 | 29.07 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Rhine Channel</a>                         | PCBs (Polychlorinated biphenyls)        | 29.07 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Rhine Channel</a>                         | Toxicity                                | 29.07 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">Rhine Channel</a>                         | Zinc                                    | 29.07 Acres | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Benthic Community Effects               | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Bifenthrin                              | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | DDT (Dichlorodiphenyltrichloroethane)   | 8.63 Miles  | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 1</a>               | Indicator Bacteria                      | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Malathion                               | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Nitrogen                                | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Nutrients                               | 8.63 Miles  | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 1</a>               | Pyrethroids                             | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Sedimentation/Siltation                 | 8.63 Miles  | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 1</a>               | Selenium                                | 8.63 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 1</a>               | Toxaphene                               | 8.63 Miles  | See TMDL documentation  | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 1</a>               | Toxicity                                | 8.63 Miles  | Unknown Nonpoint Source   | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 2</a>               | Benthic Community Effects               | 4.99 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 2</a>               | Indicator Bacteria                      | 4.99 Miles  | A Source Unknown  | TMDL required                            |
| <a href="#">San Diego Creek Reach 2</a>               | Nutrients                               | 4.99 Miles  | Agriculture Groundwater Loadings<br>Urban Runoff/Storm Sewers                     | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 2</a>               | Sedimentation/Siltation                 | 4.99 Miles  | Agriculture Channel Erosion<br>Construction/Land Development<br>Erosion/Siltation | Being addressed with USEPA approved TMDL |
| <a href="#">San Diego Creek Reach 2</a>               | Toxicity                                | 4.99 Miles  | Unknown Nonpoint Source   | Being addressed with USEPA approved TMDL |
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | Chlordane                               | 11848 Acres | See TMDL documentation<br>Urban Runoff/Storm Sewers                               | Being addressed with USEPA approved TMDL |
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | Copper                                  | 11848 Acres | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | DDE (Dichlorodiphenyl dichloroethylene) | 11848 Acres | A Source Unknown  | Being addressed with USEPA approved TMDL |
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | DDT (Dichlorodiphenyltrichloroethane)   | 11848 Acres | See TMDL documentation  | Being addressed with USEPA approved TMDL |

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|---|---|-------------|------------------|--|
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | PCBs (Polychlorinated biphenyls)                                | 11848 Acres | A Source Unknown | Being addressed with USEPA approved TMDL |
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) | 11848 Acres | A Source Unknown | Being addressed with USEPA approved TMDL |
| <a href="#">San Pedro Bay Near Off Shore Zones</a>    | Toxicity  | 11848 Acres | A Source Unknown | Being addressed with USEPA approved TMDL |
| <a href="#">Sand Canyon Reservoir (Orange County)</a> | pH  | 23.75 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Santa Ana Delhi Channel</a>               | Chlordane   | 3.75 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Santa Ana Delhi Channel</a>               | DDT (Dichlorodiphenyltrichloroethane)                           | 3.75 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Santa Ana Delhi Channel</a>               | PCBs (Polychlorinated biphenyls)                                | 3.75 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Seal Beach (Orange County)</a>            | Indicator Bacteria  | 1.59 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Seal Beach (Orange County)</a>            | PCBs (Polychlorinated biphenyls)                                | 1.59 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Serrano Creek</a>                         | Ammonia (Unionized)   | 7.44 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Serrano Creek</a>                         | Benthic Community Effects                                       | 7.44 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Serrano Creek</a>                         | Indicator Bacteria  | 7.44 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Serrano Creek</a>                         | pH  | 7.44 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Serrano Creek</a>                         | Toxicity  | 7.44 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Siphon Reservoir (Orange County)</a>      | pH  | 23.53 Acres | A Source Unknown | TMDL required                            |
| <a href="#">Sunset Beach</a>                          | Indicator Bacteria  | 1.84 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Talbert Channel (Orange County)</a>       | Toxicity  | 5.48 Miles  | A Source Unknown | TMDL required                            |
| <a href="#">Veeh Reservoir (Orange County)</a>        | Mercury   | 8.98 Acres  | A Source Unknown | TMDL required                            |

## Water Quality Objectives

The following waterbodies are in or near HSA 801.11. Click on the waterbody to get information on water quality objectives and beneficial uses

| Waterbody Name   | Beneficial Uses   | Sediment-Sensitive Waterbody |
|--|---|------------------------------|
| <a href="#">Anaheim Bay</a>  | ALL   | False                        |
| <a href="#">Agua Chinon Wash</a>   | GWR, REC1, REC2, WARM, WILD   | False                        |
| <a href="#">Alamitos Bay</a>   | COMM, EST, IND, MAR, NAV, RARE, REC1, REC2, SHELL, WET, WILD        | False                        |
| <a href="#">Alamitos Bay - Long Beach Marina - Public Beach Areas</a>                        | AGR   | False                        |
| <a href="#">Alamitos Bay - Long Beach Marina</a>   | COMM, MAR, RARE, REC1, REC2, SHELL                                  | False                        |
| <a href="#">Alamitos Bay - Long Beach Marina - All Other Areas</a>                           | COMM, MAR, RARE, REC1, REC2, SHELL                                  | False                        |
| <a href="#">Alamitos Bay - Long Beach Marina - Public Beach Areas</a>                        | COMM, MAR, NAV, RARE, REC1, REC2, SPWN                              | False                        |
| <a href="#">Alamitos Bay - Los Cerritos Channel Estuary</a>                                  | COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD | False                        |
| <a href="#">Alamitos Bay - Los Cerritos Wetlands</a>   | COMM, EST, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WET, WILD      | False                        |
| <a href="#">Alamitos Bay - Los Cerritos Wetlands</a>   | AGR, AQUA, MUN, PROC  | False                        |
| <a href="#">Alamitos Bay - San Gabriel River Estuary</a>                                     | COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD | False                        |
| <a href="#">Aliso Creek</a>  | AGR, REC1, REC2, WARM, WILD   | False                        |
| <a href="#">Aliso Creek Mouth</a>  | MAR, RARE, REC1, REC2, WILD   | False                        |
| <a href="#">All other minor San Gabriel Mountain streams tributary to San Gabriel Valley</a> | ALL   | False                        |
| <a href="#">Anaheim Bay - Outer Bay</a>  | BIOL, MAR, NAV, RARE, REC1, REC2, SPWN, WILD                        | False                        |
| <a href="#">Anaheim Bay - Seal Beach National Wildlife Refuge</a>                            | BIOL, EST, MAR, RARE, REC1, REC2, SPWN, WILD                        | False                        |
| <a href="#">Anaheim Lake - Lower Santa Ana River Basin</a>                                   | GWR, REC1, REC2, WARM, WILD   | False                        |
| <a href="#">Arroyo Seco S. of Devil's Gates. (L)</a>   | MUN, REC1, REC2, WARM, WILD   | False                        |
| <a href="#">Ballona Creek</a>  | MUN, REC1, REC2, WARM, WILD   | False                        |
| <a href="#">Bee Canyon Wash</a>  | GWR, REC1, REC2, WARM, WILD   | False                        |
| <a href="#">Bixby Slough and Harbor Lake</a>   | MUN, RARE, REC1, REC2, WARM, WET, WILD                              | False                        |
| <a href="#">Black Star Creek</a>   | GWR, MUN, RARE, REC1, REC2, WARM, WILD                              | False                        |

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|--|---|-------|
| <a href="#">Blue Bird Canyon</a>   | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Boat Canyon</a>  | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Bolsa Bay</a>  | BIOL, COMM, MAR, RARE, REC1, REC2, SHELL, SPWN, WILD                      | False |
| <a href="#">Bolsa Chica Ecological Reserve</a>   | BIOL, EST, MAR, RARE, REC1, REC2, SPWN, WILD                              | False |
| <a href="#">Bonita Creek</a>   | GWR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Borrego Canyon Wash</a>  | GWR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Cabrillo Beach</a>   | COMM, MAR, MIGR, NAV, REC1, REC2, SHELL, SPWN, WILD                       | False |
| <a href="#">Colorado Lagoon</a>  | COMM, REC1, REC2, SHELL, WARM, WILD                                       | False |
| <a href="#">Compton Creek</a>  | GWR, MUN, REC1, REC2, WARM, WET, WILD                                     | False |
| <a href="#">Coyote Creek (within Santa Ana Regional boundary) - San Gabriel River Drainage</a> | MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Coyote Creek to Estuary</a>  | IND, MUN, PROC, RARE, REC1, REC2, WARM, WILD                              | False |
| <a href="#">Dana Point Harbor</a>  | COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD            | False |
| <a href="#">Del Mar Boat Basin</a>   | COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD            | False |
| <a href="#">Dockweiler Beach</a>   | COMM, IND, MAR, NAV, REC1, REC2, SPWN, WILD                               | False |
| <a href="#">Dominguez Channel Estuary</a>  | COMM, EST, MAR, MIGR, NAV, RARE, REC1, REC2, SPWN, WILD                   | False |
| <a href="#">Dominguez Channel to Estuary</a>   | MUN, RARE, REC1, REC2, WARM, WILD   | False |
| <a href="#">Echo Lake</a>  | MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">El Dorado Lakes</a>  | MUN, REC1, REC2, WARM, WET, WILD  | False |
| <a href="#">Elysian Reservoir</a>  | IND, MUN, PROC, REC1, REC2, WARM, WILD                                    | False |
| <a href="#">Emerald Canyon</a>   | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Encino Reservoir</a>   | IND, MUN, PROC, REC1, REC2, WARM, WILD                                    | False |
| <a href="#">English Canyon</a>   | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Hermosa Beach</a>  | COMM, MAR, NAV, REC1, REC2, SHELL, SPWN, WILD                             | False |
| <a href="#">Hicks Canyon Wash</a>  | GWR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Hobo Canyon</a>  | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Irvine Lake (Santiago Reservoir)</a>   | ALL   | False |
| <a href="#">Irvine Lake (Santiago Reservoir) - Lower Santa Ana River Basin</a>                 | AGR, COLD, MUN, REC1, REC2, WARM, WILD                                    | False |
| <a href="#">Ivanhoe Reservoir</a>  | IND, MUN, PROC, REC1, REC2, WARM, WILD                                    | False |
| <a href="#">Jan Joaquin Freshwater Marsh Wetland (Inland)</a>                                  | BIOL, RARE, REC1, REC2, WARM, WILD  | False |
| <a href="#">King Harbor</a>  | AGR, AQUA, MUN, PROC  | False |
| <a href="#">LA - Long Beach Harbor - All Other Inner Areas</a>                                 | COMM, IND, MAR, NAV, RARE, REC1, REC2, SHELL                              | False |
| <a href="#">LA - Long Beach Harbor - Dominguez Channel Estuary</a>                             | COMM, EST, MAR, MIGR, NAV, RARE, REC1, REC2, SPWN, WILD                   | False |
| <a href="#">LA - Long Beach Harbor - Los Angeles River Estuary</a>                             | COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WET, WILD  | False |
| <a href="#">LA - Long Beach Harbor - Marinas</a>   | COMM, IND, MAR, NAV, RARE, REC1, REC2, SHELL                              | False |
| <a href="#">LA - Long Beach Harbor - Outer Harbor</a>  | COMM, MAR, NAV, RARE, REC1, REC2, SHELL                                   | False |
| <a href="#">LA - Long Beach Harbor - Public Beach Areas</a>                                    | COMM, MAR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD                       | False |
| <a href="#">Ladd Creek</a>   | GWR, MUN, RARE, REC1, SPWN, WARM, WILD                                    | False |
| <a href="#">Laguna Canyon</a>  | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Laguna Canyon Wash</a>   | GWR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Laguna Stream - Lower Santa Ana River Basin</a>                                    | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Lambert Stream - Lower Santa Ana River Basin</a>                                   | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Lincoln Park Lake</a>  | MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Long Beach</a>   | COMM, MAR, MIGR, NAV, REC1, REC2, SHELL, SPWN, WILD                       | False |
| <a href="#">Los Angeles River</a>  | GWR, IND, MUN, REC1, REC2, WARM, WILD                                     | False |
| <a href="#">Los Angeles River Estuary</a>  | COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WET, WILD  | False |
| <a href="#">Los Angeles River to Estuary</a>   | GWR, IND, MAR, MIGR, MUN, PROC, RARE, REC1, REC2, SHELL, SPWN, WARM, WILD | False |
| <a href="#">Los Cerritos Channel Estuary</a>   | COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD       | False |
| <a href="#">Los Cerritos Channel to Estuary</a>  | MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Los Cerritos Wetlands</a>  | COMM, EST, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WET, WILD            | False |
| <a href="#">Lower Newport Bay</a>  | BIOL, COMM, MAR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD                 | False |
| <a href="#">Madrona Marsh</a>  | REC1, REC2, WARM, WET, WILD   | False |
| <a href="#">Manhattan Beach</a>  | COMM, MAR, NAV, REC1, REC2, SHELL, SPWN, WILD                             | False |
| <a href="#">Marine Stadium</a>   | COMM, MAR, RARE, REC1, REC2, SHELL  | False |
| <a href="#">Mission Bay</a>  | COMM, EST, IND, MAR, MIGR, RARE, REC1, REC2, SHELL, WILD                  | False |
| <a href="#">Moro Canyon</a>  | AGR, REC1, REC2, WARM, WILD   | False |
| <a href="#">Nearshore Zone - Poppy Street to Southeast Regional Boundary</a>                   | BIOL, COMM, MAR, MUN, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD            | False |

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|---|--|-------|
| <a href="#">Nearshore Zone - San Gabriel River to Poppy Street in Corona Del Mar</a>                  | COMM, IND, MAR, MUN, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD              | False |
| <a href="#">Oceanside Harbor</a>  | COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD             | False |
| <a href="#">Offshore Zone - Water between Nearshore Zone and Limit of State Waters</a>                | COMM, IND, MAR, MUN, NAV, RARE, REC1, REC2, SPWN, WILD                     | False |
| <a href="#">Pacific Ocean</a>   | AQUA, BIOL, COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD | False |
| <a href="#">Peters Canyon Streams - Lower Santa Ana River Basin</a>                                   | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Peters Canyon Wash</a>  | GWR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Rattlesnake Canyon Wash</a>   | GWR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Rattlesnake Stream - Lower Santa Ana River Basin</a>                                      | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Redondo Beach</a>   | COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD             | False |
| <a href="#">Rim Rock Canyon</a>   | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Rio Hondo below Spreading Grounds</a>   | GWR, MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Rio Hondo to Spreading Grounds</a>  | GWR, MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">San Diego Bay</a>   | BIOL, COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, WILD        | False |
| <a href="#">San Diego Creek Reach 1 - below Jeffrey Road</a>  | REC1, REC2, WARM, WILD   | False |
| <a href="#">San Diego Creek Reach 2 -above Jeffrey Road to Headwaters</a>                             | GWR, REC1, REC2, WARM, WILD  | False |
| <a href="#">San Gabriel River Estuary</a>   | COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD        | False |
| <a href="#">San Gabriel River, Firestone Blvd-Estu</a>  | MUN, REC1, REC2, WARM, WILD  | False |
| <a href="#">San Gabriel River, Whittier N-Firestone</a>   | GWR, IND, MUN, PROC, RARE, REC1, REC2, WARM, WILD                          | False |
| <a href="#">Sand Canyon Streams - Lower Santa Ana River Basin</a>                                     | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Sand Canyon Wash</a>  | GWR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Santa Ana River Reach 1 - Tidal Prism to 17th Street in Santa Ana</a>                     | BIOL, REC1, WARM   | False |
| <a href="#">Santa Ana River Reach 1- Tidal Prism to 17th Street in Santa Ana</a>                      | REC2, WILD   | False |
| <a href="#">Santa Ana River Reach 2 - 17th Street in Santa Ana to Prado Dam</a>                       | AGR, GWR, RARE, REC1, REC2, WARM, WILD                                     | False |
| <a href="#">Santa Ana River Salt Marsh</a>  | BIOL, EST, MAR, RARE, REC1, REC2, WILD                                     | False |
| <a href="#">Santiago Creek Reach 1 - below Irvine Lake</a>  | GWR, MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Santiago Creek Reach 3 - Irvine Lake to Modjeska Canyon</a>                               | GWR, MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Santiago Creek Reach 4 - in Modjeska Canyon</a>   | GWR, MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Serrano Creek</a>   | GWR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Silver Lake Reservoir</a>   | IND, MUN, PROC, REC1, REC2, WARM, WILD                                     | False |
| <a href="#">Silverado Creek</a>   | GWR, MUN, REC1, REC2, WARM, WILD   | False |
| <a href="#">Sims Pond</a>   | MUN, REC1, REC2, WARM, WET, WILD   | False |
| <a href="#">Siphon Reservoir - Lower Santa Ana River Basin</a>  | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Streams of Palos Verdes</a>   | GWR, MUN, RARE, REC1, REC2, WARM, WILD                                     | False |
| <a href="#">Sulphur Creek</a>   | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Sunset Bay - Huntington Harbor</a>  | COMM, MAR, NAV, RARE, REC1, REC2, SPWN, WILD                               | False |
| <a href="#">Tidal Prism of Flood Control Channels Discharging to Coastal or Bay Waters</a>            | COMM, MAR, REC1, REC2, WILD  | False |
| <a href="#">Tidal Prism of San Gabriel River - River Mouth to Marina Drive</a>                        | COMM, EST, IND, MAR, RARE, REC1, REC2, SHELL, WILD                         | False |
| <a href="#">Tidal Prism of Santa Ana River (to within 1000' of Victoria St.) &amp; Newport Slough</a> | COMM, MAR, RARE, REC1, REC2, WILD  | False |
| <a href="#">Torrance Beach</a>  | COMM, MAR, MIGR, NAV, REC1, REC2, SHELL, SPWN, WILD                        | False |
| <a href="#">Unnamed intermittent coastal streams</a>  | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Unnamed intermittent coastal streams</a>  | AGR, REC1, REC2, WARM, WILD  | False |
| <a href="#">Upper Newport Bay</a>   | BIOL, COMM, EST, MAR, RARE, REC1, REC2, SHELL, SPWN, WILD                  | False |
| <a href="#">Wood Canyon</a>   | AGR, REC1, REC2, WARM, WILD  | False |

## Caltrans Facilities

### MAINTENANCE STATIONS

| Name          | Address                   |
|---------------|---------------------------|
| Bolsa Chica   | 13072 Bolsa Chica Road    |
| Orange Region | 1808 North Batavia Street |
| Orange        | 691 South Tustin Street   |
| Stanton       | 8122 Katella Avenue       |
| Costa Mesa    | 1090 Bristol Street       |

### FREEWAYS AND HIGHWAYS

| Route Length (miles) |      |
|----------------------|------|
| 1                    | 21.8 |
| 5                    | 19.7 |
| 22                   | 13.8 |
| 39                   | 11.6 |
| 55                   | 17.5 |

|  |                 |     |      |
|--|-----------------|-----|------|
| District 12 Office 3347 Michelson Dr Suite 100 | 57              | 5.7 |      |
| Marina Way                                     | 6641 Marina Way | 73  | 9.6  |
| Toll Road                                      | 6685 Marina Way | 91  | 1.4  |
|  |                 | 133 | 8.5  |
|  |                 | 241 | 9.4  |
|  |                 | 261 | 6.2  |
|  |                 | 405 | 20.9 |

## PARK & RIDE LOTS

| Name                               | District | County | Route | Post    | Mile |
|------------------------------------|----------|--------|-------|---------|------|
| NEWPORT BEACH TRANSP. CENTER       | 12       | ORA    | 1     | 16.4    |      |
| SOUTH COAST PLAZA                  | 12       | ORA    | 405   | 9.889   |      |
| KING OF GLORY LUTHERAN CHURCH      | 12       | ORA    | 405   | 13.8    |      |
| MILE SQUARE PARK                   | 12       | ORA    | 405   | 14.796  |      |
| CHURCH OF THE NAZARENE             | 12       | ORA    | 22    | R6.811  |      |
| SHEPHERD OF PEACE LUTHERAN CHURCH  | 12       | ORA    | 405   | 5.6     |      |
| FED. SOUTHWEST REGIONAL RESEARCH   | 12       | ORA    | 405   | 20.971  |      |
| UNITED METH. CTR. OF GOOD SHEPHERD | 12       | ORA    | 405   | 16.671  |      |
| GOLDEN WEST TRANS. CENTER          | 12       | ORA    | 405   | 17.001  |      |
| LINCOLN                            | 12       | ORA    | 55    | 16.914  |      |
| JEFFREY                            | 12       | ORA    | 5     | R24.805 |      |

## REST AREAS

| Name | District | County | Route | Post | Mile |
|------|----------|--------|-------|------|------|
|------|----------|--------|-------|------|------|

## Additional Information

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[Help](#) for the Water Quality Planning Tool

[Precipitation Frequency](#) data from NOAA ATLAS 14

[TMDL](#) information from the SWRCB

[Construction General Permit Order 2009-0009-DWQ](#) information from the SWRCB

[2022 Construction Stormwater General Permit Reissuance](#) information from the SWRCB

[Risk level determination worksheet](#) from the SWRCB

[Groundwater Depth](#) information from the California Department of Water Resources

R Factor erosivity [calculations](#) from the EPA