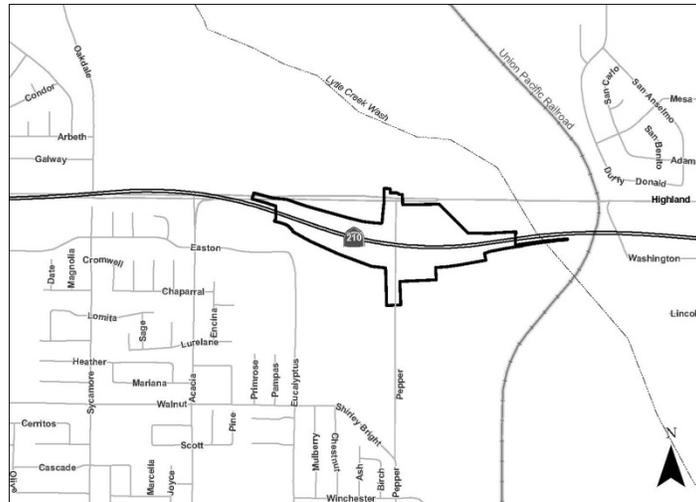


SCOPING QUESTIONNAIRE FOR WATER QUALITY ISSUES

State Route 210/Pepper Avenue New Interchange Project



City of Rialto, San Bernardino County
08-SBd-210 PM19.3/PM20.1
EA 08-443940
PN 0800020180



May 2014

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Scoping Questionnaire for Water Quality Issues

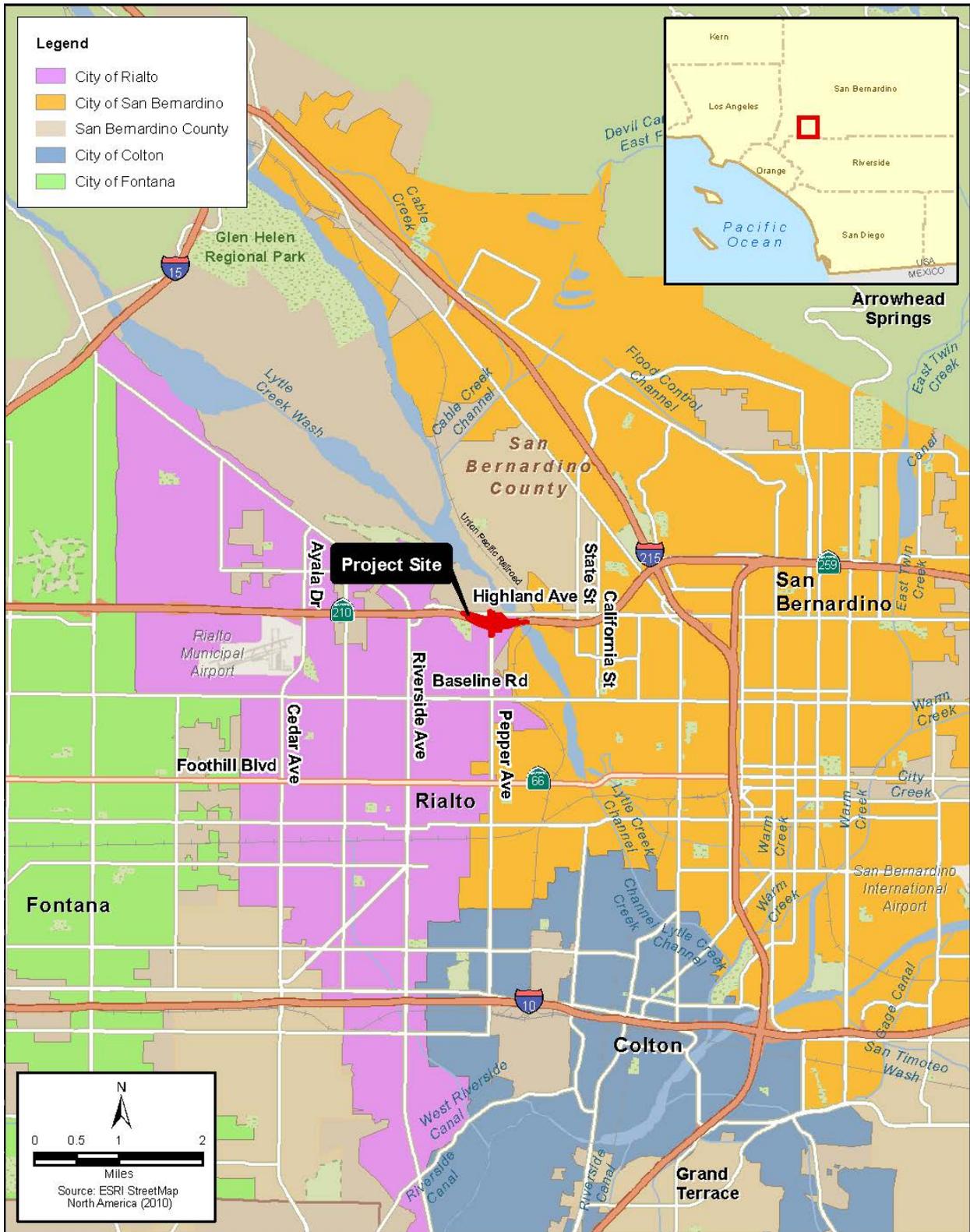
The purpose of this scoping questionnaire is to determine whether preparation of a Water Quality Assessment Report (WQAR) is necessary to adequately determine and address potential impacts to water quality resulting from the proposed State Route (SR) 210 at Pepper Avenue New Interchange Project (Project) in conjunction with completing applicable California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements. The California Department of Transportation (Caltrans) is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is also the lead agency under the California Environmental Quality Act (CEQA). San Bernardino Associated Governments (SANBAG), in cooperation with Caltrans and the City of Rialto (City), proposes to construct a new tight diamond interchange along State Route (SR) 210 at Pepper Avenue (between post mile [PM] 19.3 and PM 20.1) in portions of the Cities of Rialto and San Bernardino, and unincorporated San Bernardino County, California. The total length of the project on SR-210 is approximately 0.8 mile. **Figure 1** on page 3 and **Figure 2** on page 5 show the vicinity where the Project area is located and the Project location, respectively.

In addition to a field visit to the Project site, data utilized to complete this questionnaire was obtained from the following:

- 1995 Water Quality Control Plan for the Santa Ana River Basin (Region 8), updated February 2008, and June 2011.
http://www.swrcb.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml
- Preliminary Materials Report, SR-210/Pepper Ave Interchange, prepared by Group Delta Consultants, dated June 18, 2012, revised April 17, 2013.
- Location Hydraulic Study, dated October 16, 2012.
- Summary Floodplain Encroachment Report, dated October 12, 2012.
- Report of Initial Site Assessment (ISA) State Route 210 Pepper Avenue Interchange, prepared by Group Delta Consultants, Inc., dated August 3, 2012.
- State Route 210/Pepper Avenue New Interchange Natural Environment Study (NES), prepared by ICF International, dated January 2014.
- Storm Water Data Report (Long Form), dated December 2013, revised March 2014.
- Log of Test Borings, Pepper Avenue Undercrossing, dated March 21 and 22, 2000.

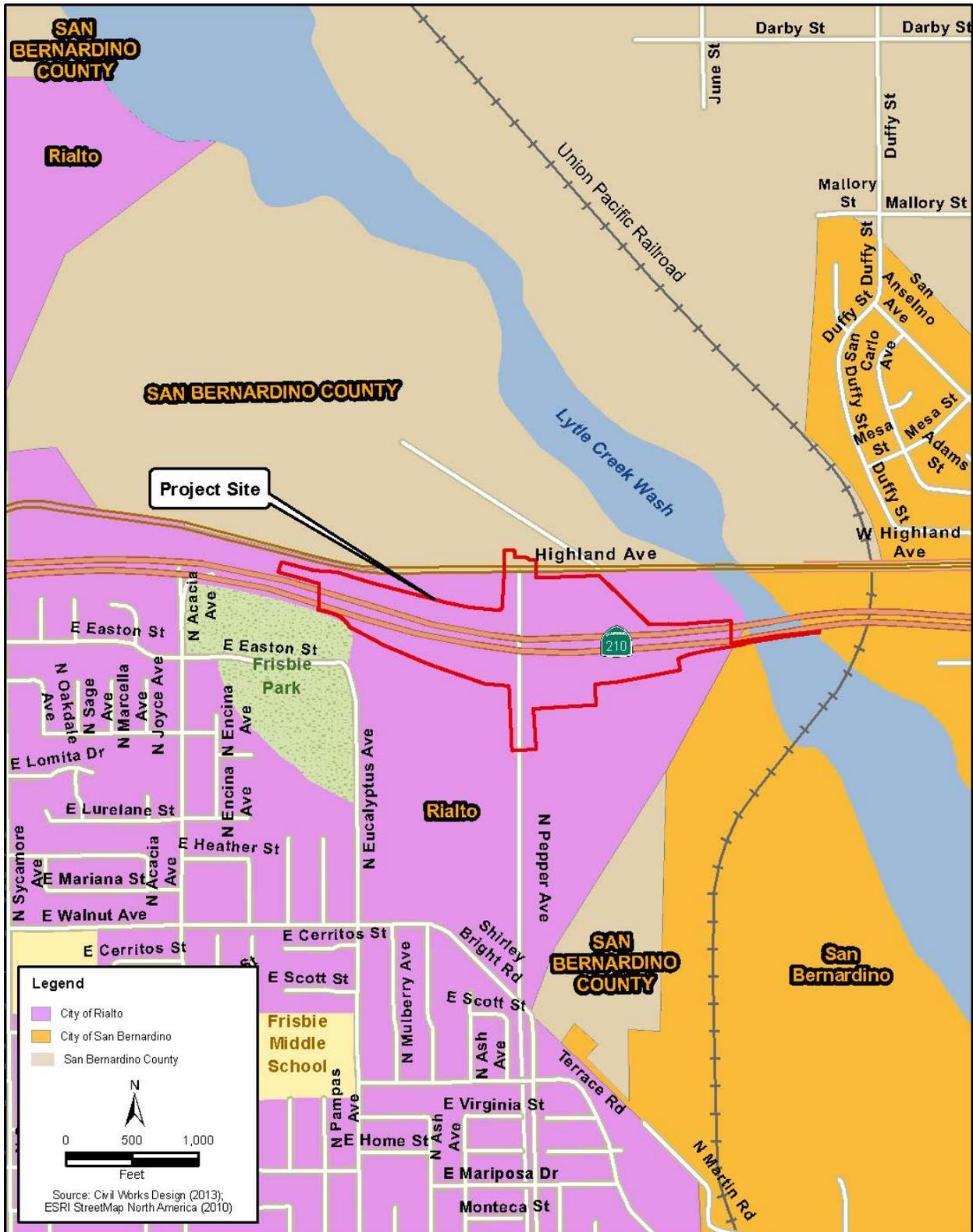
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Figure 1 – Project Vicinity Map



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Figure 2 – Project Location Map



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A. Existing Conditions in the Affected Environment of the Project

1) What is the receiving water body, and what are the Basin Plan requirements for it (e.g., what are the beneficial uses, is the receiving water listed for 303(d) impairment, and/or established TMDLs)? Does the Department discharge storm water from the highways causing or contributing to the reasons for the impairment of the receiving water?

The receiving water body for the proposed project is Lytle Creek, a tributary to Santa Ana River. Lytle Creek crosses under SR-210 approximately 0.4 mile east from the portion of the existing Pepper Avenue alignment associated with the SR-210 Undercrossing. The proposed project footprint is within the Bunker Hill Hydrologic Subarea (HSA) (801.52), Colton HSA (801.44), and Sycamore HSA (801.59), which are part of the Santa Ana Regional Water Quality Control Basin (see **Figure 3** on page 9).

The beneficial use designations for Lytle Creek and HSAs are: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Services Supply (IND), Industrial Process Supply (PROC), Hydropower Generation (POW), Rare, Threatened or Endangered Species (RARE), Water Contact Recreation (REC 1¹), Non-contact Water Recreation (REC 2^{*}), Wildlife Habitat (WILD), Cold Freshwater Habitat (COLD), and Groundwater Recharge (GWR).

Lytle Creek is on the 303(d) list for pathogens. The Santa Ana Regional Water Quality Control Board expects to establish a Total Maximum Daily Load (TMDL) for pathogens by 2019. Caltrans does not target pathogens as a design constituent. Currently no TMDLs have been established.

2) Does the Permit have a location-specific requirement for the project area/receiving water body (if yes, identify the constituents of concern)?

No.

3) Is the site within an ASBS area (Area of Special Biological Significance)?

No.

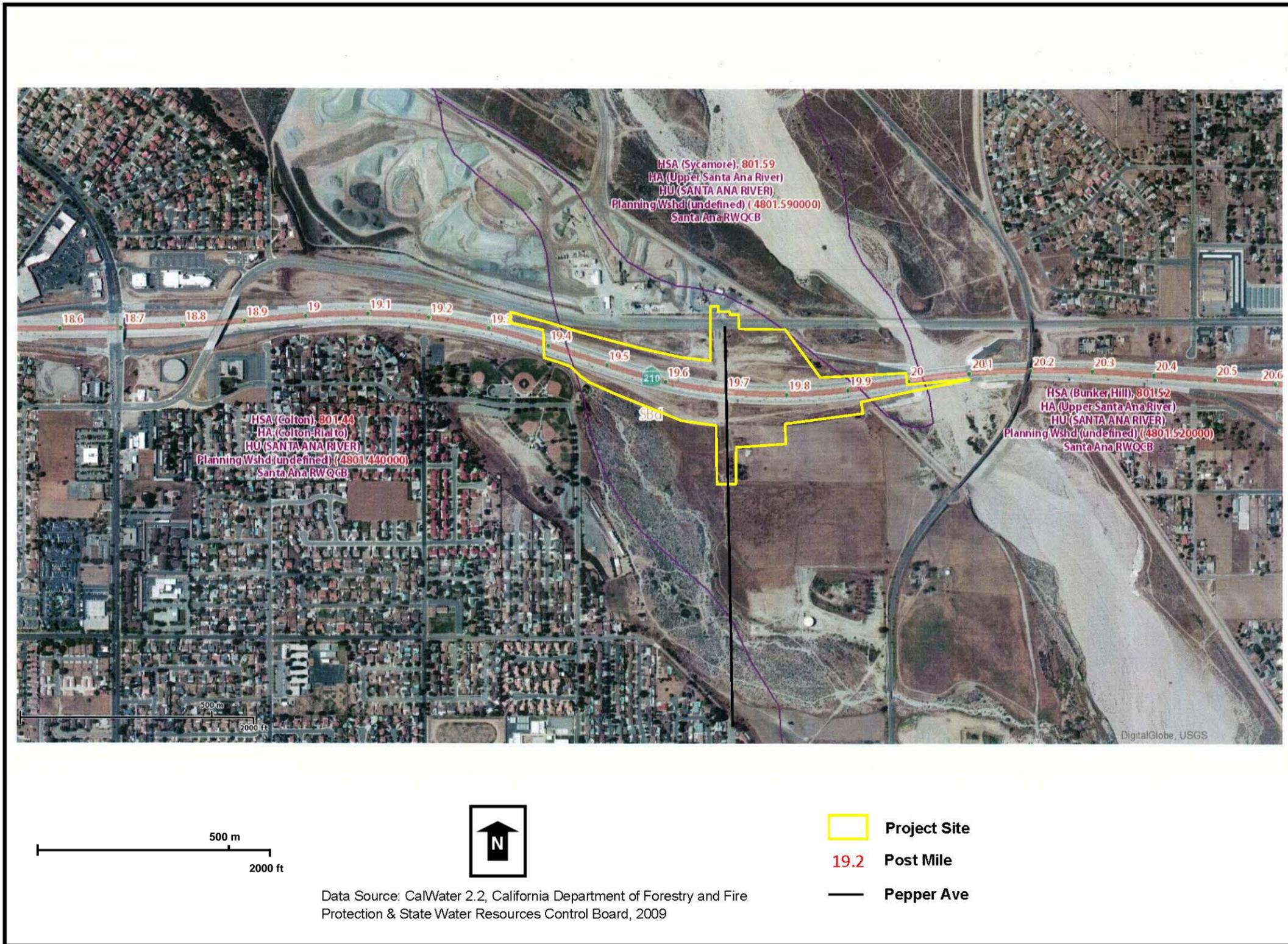
4) Is the project site within the watershed of Lake Tahoe or Mono Lake?

No.

¹ The REC 1 and REC 2 beneficial use of designations assigned to surface waterbodies in this Region [Santa Ana Region] should not be construed as encouraging recreational activities. In some cases, such as Lake Mathews and certain reaches of the Santa Ana River, access to the waterbodies is prohibited because of potentially hazardous conditions and/or because of the need to protect other uses, such as municipal supply or sensitive wildlife habitat. Where REC 1 or REC 2 is indicated as a beneficial use in Table 3-1 [in Chapter 3 of the 1995 Water Quality Control Plan for the Santa Ana Region Basin (Region 8), updated in February 2008 and in June 2011], the designations are intended to indicate that the uses exist or that the water quality of the waterbody could support recreational uses.

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Figure 3 – Santa Ana River Watershed and Hydrological Subareas Map



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5) Is the project site within the jurisdictional boundaries of a Wild and Scenic River?

No.

6) Will the project impact a domestic or municipal drinking water resource, water recharge facility, or other “high risk” areas (e.g., would runoff be directed into a “drinking water reservoir or water recharge facilities”)?

No.

7) Would any downstream HSAs (hydrologic sub-areas) be impacted?

No. The proposed Project is not expected to result in impacts to any downstream HSAs. Although the Project is expected to result in a temporary and permanent increase in paved, impermeable surfaces within the Project area, 100 percent of the runoff from the increased impervious surface would be managed in two water quality basins designed to infiltrate runoff and provide peak attenuation of flood events.

8) Will site development permanently alter the alignment of a stream or the configuration of the water body?

No alteration of Lytle Creek will occur from project implementation. The proposed project would directly impact 0.015 acre of non-wetland Waters of the U.S. and Waters of the State, and 0.029 acre of California Department of Fish and Wildlife (DFW) unvegetated streambeds. The proposed project would not impact jurisdictional wetlands or DFW riparian habitat.

9) Are there wetlands, special aquatic site(s), or endangered aquatic or wetland-dependent species, within the project limits that will be affected by the project?

No.

10) What is the quality of and depth to groundwater within project area? Would groundwater be reasonably expected to be affected by the project?

No groundwater was encountered during exploratory drilling for this project. Borings were made to a maximum depth of 35 feet. The Department of Water Resources (DWR) database of groundwater elevations identifies groundwater elevation of 904 feet (approximately 124 feet from the surface) at the closest monitoring well to the site. It is expected that the permanent groundwater table at the site is greater than 100 feet below ground surface. Locally higher groundwater will be present within and adjacent to the washes during flood periods.

The westernmost portion of proposed Project is located approximately 1200 feet (0.227 mile) from the eastern limits of the Rialto-Colton Groundwater Sub basin (see **Figure 4**

on page 13), which has been studied for the presence of perchlorate. Perchlorate was first detected in several water supply wells in the Rialto-Colton Basin in 1997. It should be noted that elevated levels of halogenated organic chemicals, including tetrachloroethylene (also known as perchloroethylene PCE and trichloroethylene TCE) were found on site. However, the pattern of contamination indicates a release or releases occurred in northwest San Bernardino and contaminants have migrated more than 5 miles toward the Santa Ana River to the southeast. The groundwater flows in a southeast direction, away from the site. In addition, the project is located approximately 8,000 feet (1.5 miles) to the nearest portion of the eastern limit of the Maximum Perchlorate Concentrations (<http://www.ci.rialto.ca.us/plume-map.pdf>). Based on the distance, this does not represent a recognized environmental condition (REC) for the for the Project location.

11) Are there known hazardous materials above or below ground that would be affected by the project?

The following is based upon the results of the ISA prepared for the SR-210/Pepper Avenue New Interchange project:

- Aerially Deposited Lead (ADL) is anticipated to be found in the unpaved soil adjacent to Highland Avenue. The existing SR-210 Freeway was constructed after 2005; therefore, newly constructed on-ramps and off-ramps are unlikely to contain traces of ADL.
- The area east of the project site was used as orchards from 1930 to sometime prior to 1977. There is a possibility that some of the pesticides and herbicides used on the east bordering parcel could have traveled to the project site, and that traces of pesticides and herbicides can be found in the upper 0.5 ft of the eastern portion of the Pepper Avenue extension. It is not expected that the concentrations of pesticides and herbicides in the soil exceed ESLs, and therefore do not represent a REC. However, if any soil excavated from the eastern portion of the Pepper Avenue extension should be disposed off site, the excavated soil should be stockpiled and tested for Organochlorine Pesticides (test method 8081A) and Chlorinated Herbicides (test method 8151A) prior to disposal.
- The project site is a public thoroughway with a newly constructed concrete undercrossing. No potential lead-based paint materials were observed at the Site.
- The project site is a public thoroughway with a newly constructed concrete undercrossing. No potential asbestos-containing materials were observed at the Site.

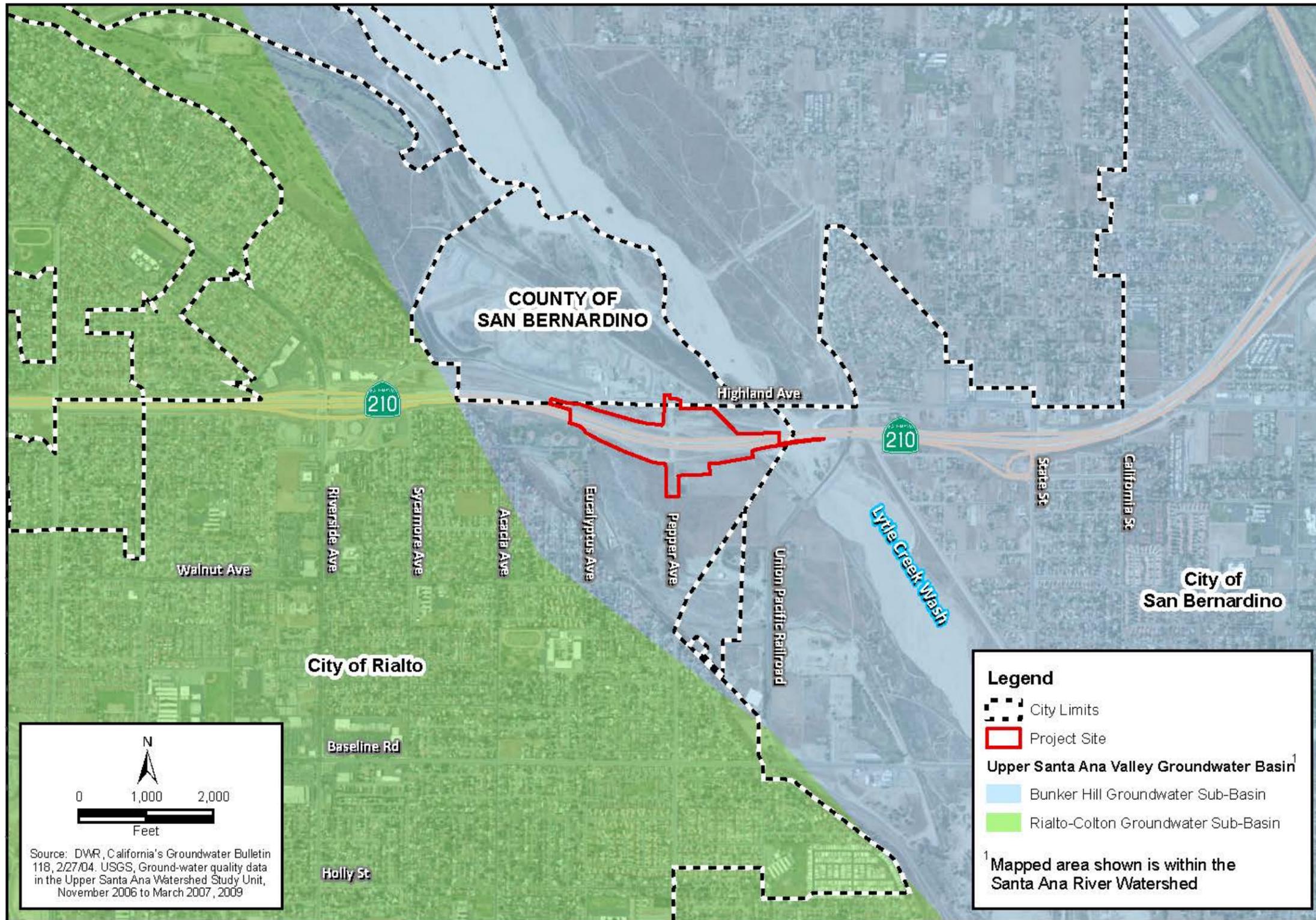
12) Are there fish passage issues that will affect the project?

No.

13) Will the project encroach within a floodplain?

Yes. According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) #06071C7940H, the proposed project is within areas designated as Zone X: Other Flood Areas (Zone X) and Zone A: Special Flood Hazard Areas Subject to

Figure 4 – Santa Ana River Watershed and Groundwater Basin Map



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Inundation by the 1 Percent Annual Chance Flood (Zone A). The proposed project is primarily situated within Zone X, which is defined as: Areas of 0.2 percent annual chance flood; areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1 percent annual chance flood.

A small portion of the proposed project east of Pepper Avenue is within Zone A, which is defined as: 1 percent annual flood (100-year flood); flood that has a 1 percent chance of being equaled or exceeded in any given year; area subject to flooding by the 1 percent annual chance flood; base flood elevation is the water-surface elevation of the 1 percent annual flood.

The proposed construction within Zone A is incidental, very minor in nature, and will not have any significant adverse effect on the floodplain.

14) Does information available at this time suggest that other ESAs (environmentally sensitive areas) not already mentioned are present within the project limits?

Critical habitat for the San Bernardino kangaroo rat (SBKR) is present on site; however, focused surveys conducted in July 2012 found no SBKR. The outlet on the west side of Pepper Avenue, south of the eastbound mainline, which spreads out onto the land area south of the freeway, is environmentally sensitive.

B. Project Description and Impacts

1) What is the approximate acreage of net new impervious surface to be added as a result of project?

Approximately 6.0 acres. This acreage does not include the surface associated with the City of Rialto's Pepper Avenue Gap Closure project (0.6 acre) and Pepper Avenue Extension project (5.2 acres).

2) What is the conceptual roadway drainage system, including any part of an existing system that will be incorporated (e.g., outfalls, sump areas used for percolation)?

An existing infiltration basin is located northwest of the interchange to treat runoff from the existing mainline west of the project. A second infiltration basin is located northeast of the project site, near the Lytle Creek Bridge, and treats existing mainline runoff from the Pepper Avenue undercrossing to Lytle Creek. Two additional detention/infiltration basins are proposed to treat the storm water runoff and provide peak attenuation; the conceptual location of these treatment BMPs is east of Pepper Avenue, one each to the north and south of SR-210 (Storm Water Data Report) Right-of-way acquisition is necessary for the proposed treatment BMP south of SR-210. Catch basins have been proposed to collect surface runoff from the project and direct the runoff to the basins. Both basins are planned large enough to achieve substantial peak attenuation. These BMPs would provide some detention and reduce runoff rates, as well as provide for storm water pollutant removal. Overall, the project would not substantially increase the amount or rate of runoff within the drainage features' watersheds. It should be noted, the existing outlet is not to Lytle Creek, it is on the other side of the levee.

Runoff from the impervious surfaces will be treated in the two proposed basins. The basins perform two functions, water quality and flood attenuation. The runoff from the southern portion of Pepper Avenue will be treated by the City of Rialto. Runoff from a portion of the westbound off-ramp and the eastbound on-ramp will flow to the existing storm drain system. The proposed basins will drain into a tributary of Lytle Creek; the north basin will drain through an existing storm drain and the south basin through a proposed storm basin. The drainage from the slopes on the south side of the eastbound off-ramp and eastbound on-ramp does not have to be collected since it currently sheet flows onto the adjacent property. The basins are designed to not increase the runoff over the existing amount at the existing outlet for the 100-year storm.

In conjunction with the City of Rialto's completion of their Pepper Avenue Extension and Pepper Avenue Gap Closure projects, extending Pepper Avenue to Highland Avenue, the City plans to construct a Contech Stormfilter System to handle approximately 3.3 cubic feet per second. That system will tie into a culvert discharging into Little Lytle Creek. The impermeable surface area resulting from the Pepper Avenue Extension and the Pepper Avenue Gap Closure are 5.2 acres and 0.6 acre, respectively.

3) Are there known or reasonably expected (surface) water quality issues that will arise due to the project associated with the general topography (e.g., large cuts) or soil properties (e.g., known highly erosive soils)?

No. There are no slope stabilization concerns within the project limits. Utilizing Caltrans Water Quality Planning Tool (WQPT), project soils are considered Hydrologic Group A, indicating good permeability. Geotechnical conditions were examined during the PA&ED phase. The following categories of BMPs will be used, as appropriate, for controlling potential pollutants on construction sites: Soil Stabilization Practices; Sediment Control Practices; Tracking Control Practices; Wind Erosion Control; Non-Storm Water Controls; and Waste Management and Material Pollution Controls.

4) Will the discharge of storm water from the proposed facility or activity cause or contribute to a violation of water quality standards or water quality objectives (collectively WQSs)?

No. This project will comply with NPDES #CAS000002, #CAS000003, and #CAS618036CAS618036 permits. The project will file a Notice of Intent (NOI) as required for submittal at least 30 days prior to start of construction. Both Construction BMPs and Post Construction Treatment Control BMPs are required within these three permits. It is not anticipated the discharge of storm water will contribute to a violation of water quality standards when complied with these three permits.

5) Will the discharges cause any of the following conditions that would create a condition of nuisance or adversely affect beneficial uses of waters of the State:

a. Floating, suspended solids, or deposited macroscopic particulate matter, or foam;

No.

b. Bottom deposits or aquatic growths;

No.

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

No.

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

No.

e. Toxic or deleterious substances present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption.

No.

6) Has a determination been made for the possible hydrologic impacts to the downstream receiving waterbody (e.g., increase in volume of runoff; change in the time of concentration; change in the duration of the runoff)?

Yes. It is not anticipated that this project would result in hydraulic impacts to the downstream receiving body because the basins would attenuate the peak flows, and any increase in roadway contaminants that could ultimately affect surface water quality would be removed during infiltration at the water quality basins designed to infiltrate runoff and contain the 50-year flood event. Runoff generated by storms greater than the 50-year event would flow to the existing storm drain and eventually to the Santa Ana River.

Presently, some runoff from the project area does flow into Lytle Creek via the reinforced concrete pipe flowing east (constructed with SR-210, Segment 10). All water entering Lytle Creek, either at present by sheet-flowing to the south into Frisbee Creek and then to Lytle Creek, or directly through the connecting storm drain line to the east at project completion, will not be increased during the 100-year 24-hour storm, but reduced.

Moreover, during the 100-year 24-hour storm, for the proposed northern basin Peak Inflow will be 22.1 cubic feet per second (cfs) with a Peak Outflow of 11.8 cfs (Existing Peak Runoff = 16.8 cfs), and for the proposed southern basin Peak Inflow will be 28.4 cfs with a Peak Outflow of 16.9 cfs (Existing Peak Runoff = 17.27 cfs), which will provide both water quality treatment and peak reduction.

7) Will the project involve a depressed section drained by a pump? If yes, are dry weather flows anticipated (e.g., drainage of the groundwater)?

No.

8) Have selections been made for the Design Program Pollution (DPP) and Treatment BMPs?

DPP BMPs were evaluated in the Storm Water Data Report. The DPP BMPs will be implemented to protect slopes and surfaces, to protect concentrated flow conveyance systems, and to preserve existing vegetation.

Treatment BMPs are the two water quality basins described above (see No. 6). Biofiltration swales and dry-weather diversion devices are not applicable due to the project site conditions.

9) Will soil containing aerially deposited lead be proposed for reuse?

The results of an investigation for determination of concentrations of ADL in the site's unpaved areas show that most of the site soils are non-hazardous and can be used without restriction. Whether or not excavated soil from the two new infiltration basin systems will be re-used, will be determined during final design.

10) Are any other projects within the immediate project vicinity that would likely be constructed within the same general timeframe as the project that would also contribute to the volume of surface water discharged, groundwater affected, and pollutants discharged into receiving waters?

Yes. The City of Rialto's Pepper Avenue Extension Project and Gap Closure Project are scheduled to be completed in April 2014.

11) Will the project require a CWA Section 404 permit from the U.S. Army Corps of Engineers and therefore a Section 401 Water Quality Certification from the RWQCB?

The project will qualify for a Section 404 Nationwide permit and will be required to obtain a Section 401 Water Quality Certification from the Santa Ana Regional Water Quality Control Board. CDFW will be notified of impacts to waters under CDFW jurisdiction and CDFW may determine that a Streambed Alteration Agreement is required.

12) Has a Total Maximum Daily Loading (TMDL) been established for the receiving waters? Has the Department been named as a stakeholder and/or been assessed a Waste Load Allocation?

No TMDL has been established.

C. Temporary (Construction) Effects

1) What is the acreage of clearing and grubbing activities?

Approximately 18.5 acres, including the staging areas.

2) What is the acreage of disturbed soil area not included above?

All of the disturbed areas are included above.

3) What is the acreage (plan view) of new cut and fill slopes greater than 2H:1V?

None.

4) What is the quantity of Imported Borrow?

No imported borrow is anticipated.

5) Is storage or stockpiling of earthwork or construction materials near water bodies or ESAs under consideration?

Yes. Storage or stockpiling of earthwork or construction materials will be located approximately 850 feet from the nearest water body of Lytle Creek Wash; however, ESAs will be designated to protect water bodies and biological sensitive habitat and resources.

6) Is a sand blasting operation over streams or water bodies expected?

No.

7) How many construction activities below groundwater and/or in water courses requiring dewatering or water diversion (includes use of cofferdams, pipe jacking, etc.) are expected?

None.

8) Are unpaved access roads expected to be used as part of the project?

No.

C. Temporary (Construction) Effects (cont)

9) Are there any seasonal construction restrictions or construction exclusion dates set forth by state or local regulatory agencies that are applicable to the project area?

No. There are no construction exclusion dates on this project unless the pre-construction surveys show presence of raptors or bats on Caltrans facilities.

10) Has a Construction General Permit "Risk Assessment" been conducted, and are there implications from that rating?

Yes. The project risk level was determined by the GIS Map Method (EPA Rainfall Erosivity Calculator & GIS Map). The sediment risk is classified as "low" and the receiving water risk is classified as "low," indicating a project combined Risk Level of 1 (RL-1).

11) Are there any other construction activities anticipated not covered in the previous questions that could raise potential stormwater runoff issues?

No.

12) Can a SWPPP be developed and implemented such that stormwater discharges and authorized non-storm water discharges will not adversely impact human health or the environment?

Yes.

13) Is the receiving water on the CWA Section 303(d) list as impaired for sediment, turbidity and/or temperature?

No.

