



## 4.10 HYDROLOGY AND WATER QUALITY

This section evaluates the potential impacts to hydrology and water quality conditions from implementation of the Development Project. The analysis in this section is based in part on the following studies:

- *Project Specific Preliminary Water Quality Management Plan for Sunset Crossing*, Proactive Engineering Consultants West, Inc., June 2023.
- *Sunset Crossing Preliminary Hydrology and Hydraulics Study*, Proactive Engineering Consultants West, Inc., June 2023.
- *Water Supply Assessment, Sunset Crossroads Specific Plan*, Romo Planning Group, Inc., July 2022.
- *Sunset Crossroads Project Delineation of Jurisdictional Waters*, Wood Environment & Infrastructure Solutions, Inc., June 2023.
- *Geologic and Geotechnical Review, Sunset Crossroads Project*, Leighton and Associates, Inc., June 2022.

Complete copies of these studies are included in **Appendices H-1, H-2, K, D-6, and F-1**, respectively, of this Environmental Impact Report (EIR).

While development of the Mt. San Jacinto College (MSJC) Site is not anticipated at this time, a programmatic discussion of potential impacts to hydrology and water quality that may result from future development of the MSJC Site is provided in **Chapter 5.0** of this EIR.

### 4.10.1 Scoping Process

The City of Banning (City) received nine comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to **Appendix A** of this EIR. Three of the comment letter(s) included comments related to hydrology and water quality issues.

- **Ron Roy and Kim Floyd NOP Comment Letter**
  - Toxic runoff from the Development Project and how it will be handled.
  - Discussion of impacts on water supply, sustainability, groundwater, runoff, pollution and/or diversion or division of the flow of water to off-site receiving waters and watersheds.
  - Reliance of Banning on groundwater and the Development Project's impact to groundwater.
- **California Department of Fish and Wildlife (CDFW) NOP Comment Letter**
  - Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Development Site, including volume, velocity, and frequency of existing and post-Development Project surface flows; polluted runoff, soil erosion and/or



sedimentation in streams and water bodies; and post-Development Project fate of runoff from the Development Site.

- **Riverside County Flood Control and Water Conservation District NOP Comment Letter**
  - The Development Project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board (SWRCB).
  - If the Development Project involves a Federal Emergency Management Agency (FEMA) mapped floodplain, the City should require the applicant to provide all studies, calculations, plans, and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation, or other final approval of the Development Project and a Letter of Map Revision (LOMR) prior to occupancy.
  - If the Development Project affects a natural watercourse or mapped floodplain, the City should require the applicant to obtain a Section 1602 Agreement from the CDFW and a Federal Clean Water Act (CWA) Section 404 Permit from the U.S. Army Corps of Engineers (USACE), or written correspondence from these agencies indicating the Development Project is exempt from these requirements. A CWA Section 401 Water Quality Certification may be required from the local California Regional Water Quality Control Board (RWQCB) prior to issuance of the USACE Section 404 permit.

#### 4.10.2 Methodology

The Development Project impacts to hydrology and water quality are evaluated based on the Development Project's adherence to local, regional, State, and federal standards; the proposed land uses and project design; changes in pre- and post-project storm water flows; and proposed best management practices (BMPs) for control of surface runoff and reduction of pollutants in storm water runoff.

#### 4.10.3 Existing Environmental Setting

##### 4.10.3.1 Surface Waters and On-Site Drainage

The Development Project is located within the Whitewater River Watershed. The Whitewater River Watershed spans 1,500 square miles in Riverside and San Bernardino counties, including the Coachella Valley and portions of several surrounding mountain ranges.

For planning purposes, the Colorado River Basin RWQCB uses a watershed classification that divides surface waters into hydrologic units (HUs), areas, and subareas. As designated by the Colorado River Basin RWQCB, the Development Site is located in the Whitewater HU, the San Gorgonio hydrologic area, and the Banning subarea (Refer to **Figure 4.10-1: Hydrologic Units and Subunits**).

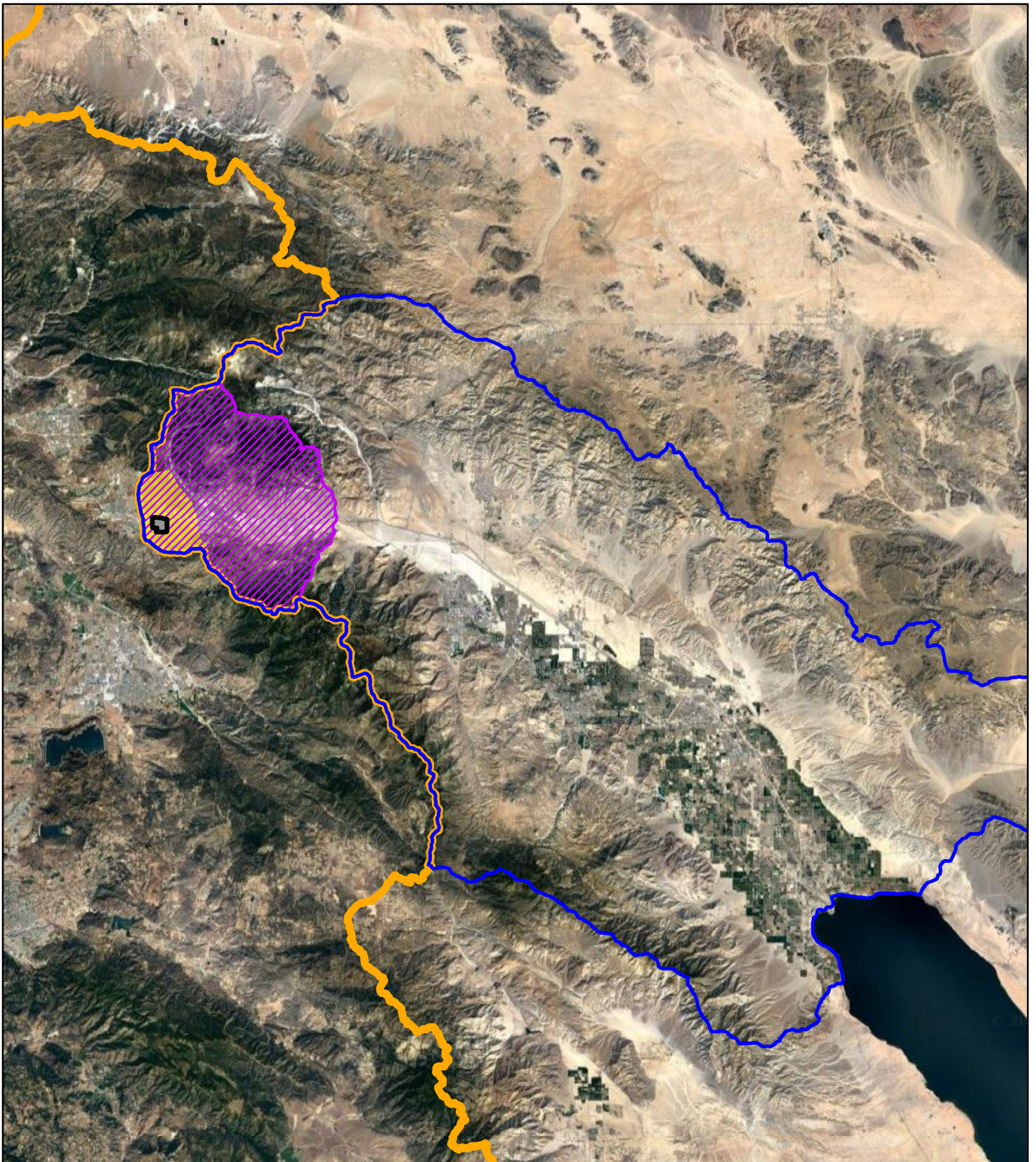





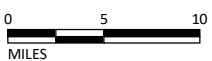


FIGURE 4.10-1

LSA

LEGEND

-  Project Location
-  Region: Colorado River
-  Hydrologic Unit: Whitewater
-  Hydrologic Area: San Gorgonio
-  Hydrologic Subarea: Banning



SOURCE: Google Maps (2022)

I:\NPD2001\GIS\MXD\EIR\HydroUnits\_Subunits.mxd (7/10/2023)

Sunset Crossroads  
Hydrologic Units and Subunits



**This Page Intentionally Left Blank**



The Development Project is located within an undeveloped open grassland valley where two main creeks flow: Smith Creek and Pershing Creek, both of which flow in a southeasterly manner across the Development Site. Storm water on the Development Site, under existing conditions, either flows into Smith or Pershing Creek or infiltrates into the ground.

Highland Wash, a tributary to Smith Creek, also crosses the Development Site until it meets with Smith Creek where the future Sun Lakes Boulevard Extension (SLB Extension) would be developed.<sup>1</sup> Smith Creek and Pershing Creek confluence outside of the Development Site limits and continue to flow east until they confluence with the San Gorgonio River, ultimately joining the Whitewater River, and draining into the Salton Sea.<sup>2</sup> Highland Wash originates in the gently sloping alluvial fan area north of 8th Street and east of Highland Springs Avenue in the City of Banning. Highland Wash crosses under Interstate 10 (I-10) and the Union Pacific Railroad (UPRR) line approximately 900 feet west of the northwest Development Site boundary and travels in a southeasterly direction through the Sun Lakes Country Club, located west of the Development Site. Highland Wash enters the Development Site approximately 1,000 feet south of the northwest corner of the Development Site and conflues with Smith Creek on the Development Site where the future SLB Extension would be developed by the City. **Figure 4.10-2: Existing Surface Waters** shows the existing surface waters that flow through the Development Site.

Smith Creek originates north of the City of Banning in the San Bernardino Mountains and drains an area of 3,560 acres. Smith Creek passes beneath I-10 through two existing double 10-foot by 8-foot reinforced concrete boxes (RCBs) and enters the Development Site at its northern boundary, approximately 160 feet south of the UPRR right-of-way (ROW). Smith Creek flows to the south through the Development Site, eventually leaving the Development Site at a point approximately 0.33 mile southeast of Sun Lakes Boulevard. Smith Creek has an existing 100-year flow rate of 3,684 cubic feet per second (cfs) through the Development Site.<sup>3</sup>

Pershing Creek originates north of the City of Banning and drains approximately 1,010 acres of land. Like Smith Creek, Pershing Creek passes beneath I-10 through two existing 10-foot by 10-foot RCBs, and flows southeast under the UPRR ROW, to the Development Site's northern boundary. Pershing Creek enters the Development Site along its northern boundary, approximately 0.62 mile west of Sunset Avenue, and flows southeast across the Development Site until it exits the site along the eastern boundary, approximately 0.23 mile south of the Sunset Avenue/West Westward Avenue intersection. Pershing Creek has an existing 100-year flow rate of 2,090 cfs through the Development Site.<sup>4</sup>

<sup>1</sup> Wood Environment & Infrastructure Solutions, Inc. 2023. Sunset Crossroads Project Delineation of Jurisdictional Waters, Figure 6 Jurisdictional Areas. June.

<sup>2</sup> Proactive Engineering Consultants West, Inc. 2023. Project Specific Preliminary Water Quality Management Plan for Sunset Crossroads, pages 1-1 and 1-3. June.

<sup>3</sup> Proactive Engineering Consultants West, Inc. 2023. Sunset Crossroads Preliminary Hydrology and Hydraulics Study, page 4. June.

<sup>4</sup> Ibid.



**This Page Intentionally Left Blank**

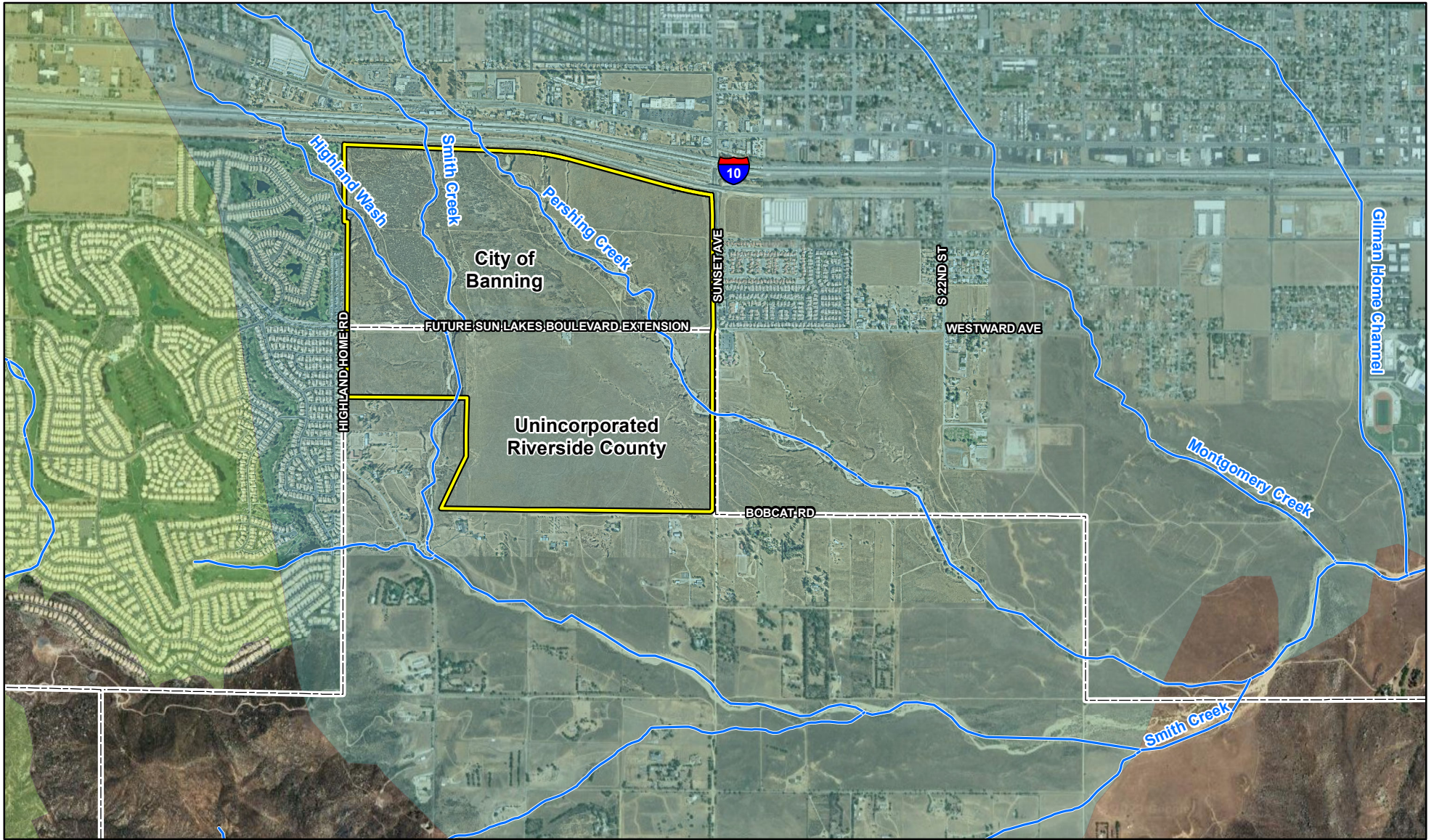
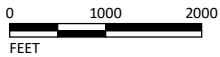


FIGURE 4.10-2

LSA

LEGEND

- Project Location
- City Boundary
- Surface Waters
- Coachella Valley
- Upper Santa Ana Valley



SOURCE: Nearmap Imagery (10/12/2020); Google (2022)

I:\NPD2001\GIS\MXD\EIR\Surface\_and\_GroundWaters.mxd (7/10/2023)



**This Page Intentionally Left Blank**





Other hydrologic features that were identified on the Development Site during jurisdictional delineation field surveys include an unnamed tributary northeast of Pershing Creek and an unnamed ponded area in the southern portion of the Development Site.<sup>5</sup>

All drainages on site are considered ephemeral and only have flowing water during and immediately after storm events. Existing drainage infrastructure near the Development Site is limited and includes the existing culverts under I-10 (as discussed above), a concrete drainage ditch located along a portion of the Sunset Avenue frontage on the east side of the Development Site, and a series of remnant water conveyance and erosion control features on the Development Site. The latter features utilized spots to divert water in drainages, and “weir types,” or check-dams, which slowed water flow within larger on-site drainages but were mainly associated with the Pershing Wash and its tributaries located within the eastern half of the Development Site. These features were associated with a series of man-made berms utilized to direct water into the natural drainages and reduce erosion within the pasture lands on the Development Site.<sup>6</sup> Under existing conditions, the Development Site is divided into two drainage areas: Drainage Area A (Smith Creek) and Drainage Area B (Pershing Creek). **Figure 4.10-3: Existing On-Site Drainage Areas** shows the location and extent of Drainage Area A and Drainage Area B on the Development Site under existing conditions.

**Surface Water Quality.** Receiving waters include Smith Creek, Pershing Creek, Highland Wash, the San Gorgonio River, the Whitewater River, the Coachella Valley Storm Water Channel, and the Salton Sea. The Coachella Valley Storm Channel is listed on the 2018 303(d) list as impaired for Ammonia, Dichlorodiphenyltrichloroethane (DDT), Dieldrin, Disulfoton, Indicator Bacteria, Dissolved Oxygen, Polychlorinated biphenyls (PCBs), Toxaphene, and Toxicity. The Salton Sea is listed on the 2018 303(d) list as impaired for Ammonia, Arsenic, Chloride, Chlorpyrifos, DDT, Enterococcus, Low Dissolved Oxygen, Nutrients, Salinity, and Toxicity.<sup>7</sup> Smith Creek, Pershing Creek, Highland Wash, the San Gorgonio River, and the Whitewater River were not included on the 2018 303(d) list of impaired waters.

#### 4.10.3.2 Groundwater

The City of Banning and the Development Site are located within the boundary of the Coachella Valley Groundwater Basin, San Gorgonio Pass Subbasin. The subbasin is bounded on the north by the San Bernardino Mountains and by semi-permeable rocks, and on the south by the San Jacinto Mountains. A surface drainage divide between the Colorado River and South Coastal Hydrologic Study Areas bounds the subbasin on the west. The eastern boundary is formed by a bedrock constriction that creates a groundwater cascade into the Indio Subbasin.<sup>8</sup> The San Gorgonio Pass Subbasin is divided into the following five storage units:<sup>9</sup> Beaumont Storage Unit (Beaumont Basin), Banning Storage Unit,

<sup>5</sup> Wood Environment & Infrastructure Solutions, Inc. 2023. Sunset Crossroads Project Delineation of Jurisdictional Waters, page 5-11, Table 1 Survey Site Information. June.

<sup>6</sup> Brian F. Smith and Associates, Inc. 2022. A Phase I Cultural Resources Assessment for the Sunset Crossroads Project, City of Banning, California, page 4.0-6. July.

<sup>7</sup> State Water Resources Control Board. 2018 *California Integrated Report (Clean Water Act Section 303(d) List and 305 (b) Report)*. Website: [https://www.waterboards.ca.gov/water\\_issues/programs/water\\_quality\\_assessment/2018\\_integrated\\_report.html](https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html) (accessed April 7, 2022).

<sup>8</sup> California Department of Water Resources. 1964. Coachella Valley Investigation. Bulletin 108. 145 p. 13 plates.

<sup>9</sup> Romo Planning Group, Inc. 2022. Water Supply Assessment, Sunset Crossroads Specific Plan. July 22.



**This Page Intentionally Left Blank**

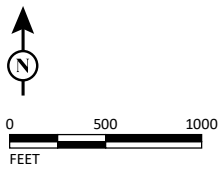


FIGURE 4.10-3

LSA

LEGEND

- Project Location
- City Boundary
- Surface Waters



SOURCE: Nearmap Imagery (10/12/2020); Google (2022)  
 I:\NPD2001\GIS\MXD\EIR\Existing OnSite\_DrainageAreas.mxd (7/10/2023)



**This Page Intentionally Left Blank**



Banning Bench Storage Unit, Banning Canyon Storage Unit, and Cabazon Storage Unit. **Table 4.10.A: Historic Groundwater Production** identifies the historic groundwater production of each storage unit between 2016 and 2022.

**Table 4.10.A: Historic Groundwater Production (afy)**

Basin Name	2016	2017	2018	2019	2020	2021	2022
Beaumont Storage Unit	1,762	1,469	2,276	2,058	2,243	3,660	3,580
Banning Storage Unit	1,396	1,967	1,957	1,326	1,405	1,239	1,039
Banning Bench Storage Unit	237	87	354	431	470	445	541
Cabazon Storage Unit	1,211	685	1,006	526	0	0	98
Banning Canyon Storage Unit	2,428	3,367	2,342	2,826	3,705	2890	2,848
<b>Total</b>	<b>7,034</b>	<b>7,575</b>	<b>7,935</b>	<b>7,167</b>	<b>7,823</b>	<b>8,234</b>	<b>8,106</b>

Source 1: Table 2, *Water Supply Assessment, Sunset Crossroads Specific Plan* (Romo Planning Group, Inc. July 2022).

Source 2: Email communications with Arturo Vela, City of Banning Department of Public Works, September 6 and 8, 2023.

afy = acre-feet per year

The surface area of the subbasin is approximately 60 square miles, with average annual rainfall over the subbasin ranging from 15 to 18 inches. The main water-bearing deposits in the subbasin are Holocene and Pleistocene age alluvium and Pliocene to Pleistocene age San Timoteo Formation. In 1987, the total storage capacity of the San Gorgonio Pass Subbasin was estimated at 2,200,000 acre-feet.<sup>10</sup>

According to the Geologic and Geotechnical Review prepared for the Development Project,<sup>11</sup> no groundwater was encountered to a depth of 50 feet during exploratory excavations completed at the Development Site; however, based on historical groundwater levels, groundwater is expected 100 feet below the ground surface of the Development Site. In September 2003, four City-monitored wells on the Development Site recorded groundwater depths of 375 to 475 feet below ground surface (bgs). Even with such results, groundwater levels at the Development Site can be expected to fluctuate seasonally, and, during the rainy season, groundwater and/or seepage may be prevalent in the creek bottoms and drainage areas.

**Groundwater Quality.** According to the City General Plan, groundwater quality in the City is considered excellent.<sup>12</sup> Groundwater in the subbasin is characterized as predominantly calcium-sodium bicarbonate type, and total dissolved solid (TDS) content for groundwater samples from the San Gorgonio Pass Subbasin ranges from 106 to 205 milligrams/liter (mg/L). (Surface water and

<sup>10</sup> State of California, California Groundwater Bulletin 118, Hydrologic Region Colorado River, Coachella Valley Groundwater Basin, San Gorgonio Pass Subbasin. Website: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/7\\_021\\_04\\_SanGorgonioPassSubbasin.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/7_021_04_SanGorgonioPassSubbasin.pdf) (accessed April 11, 2022).

<sup>11</sup> Leighton and Associates, Inc. 2022. Geologic and Geotechnical Review, Sunset Crossroads Specific Plan, Approximately 533.8-Acre Site, City of Banning, California. June 23.

<sup>12</sup> City of Banning, General Plan Water Resources Element, January 31, 2006, page IV-12.



groundwater with TDS exceeding 3,000 mg/L is not considered suitable for municipal or domestic water supply.)<sup>13</sup>

#### 4.10.3.3 Floodplains

According to FEMA Flood Insurance Rate Map (FIRM) No. 06065C0816G (effective August 28, 2008), the northern reaches of Smith Creek and Pershing Creek on the Development Site are located in Flood Hazard Zone A.<sup>14</sup> Flood Zone A areas are subject to inundation by the 1-percent-annual-chance flood event. The remaining portions of the Development Site are in Zone X, which are areas outside the 1-percent-annual-chance flood event. **Figure 4.10-4: Development Site FEMA Flood Map** shows the FEMA Mapping of the Development Site and the location of the Flood Zone A and X areas on site.

#### 4.10.4 Regulatory Setting

This section includes applicable federal, State, regional, and City regulations.

##### 4.10.4.1 Federal Regulations

**Clean Water Act.** In 1972, the Federal Water Pollution Control Act (now referred to as the Clean Water Act) was amended to require that the discharge of pollutants into waters of the United States from any point source be effectively prohibited unless the discharge is in compliance with an NPDES permit. In 1987, the CWA was again amended to require that the United States Environmental Protection Agency (EPA) establish regulations for the permitting of storm water discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that Municipal Separate Storm Sewer System (MS4) discharges to surface waters be regulated by an NPDES permit.

The CWA requires states to adopt water quality standards for water bodies and have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, the EPA Region IX established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR).

When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired.

<sup>13</sup> State of California, California Groundwater Bulletin 118, Hydrologic Region Colorado River, Coachella Valley Groundwater Basin, San Gorgonio Pass Subbasin. Website: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/7\\_021\\_04\\_SanGorgonioPassSubbasin.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/7_021_04_SanGorgonioPassSubbasin.pdf) (accessed April 11, 2022).

<sup>14</sup> Federal Emergency Management Agency, Flood Insurance Rate Map (FIRM), Map No. 06065C0816G. Website: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-117.04267821289032,33.8542142909214,-116.71034178710954,33.99665275843608> (accessed April 11, 2022).

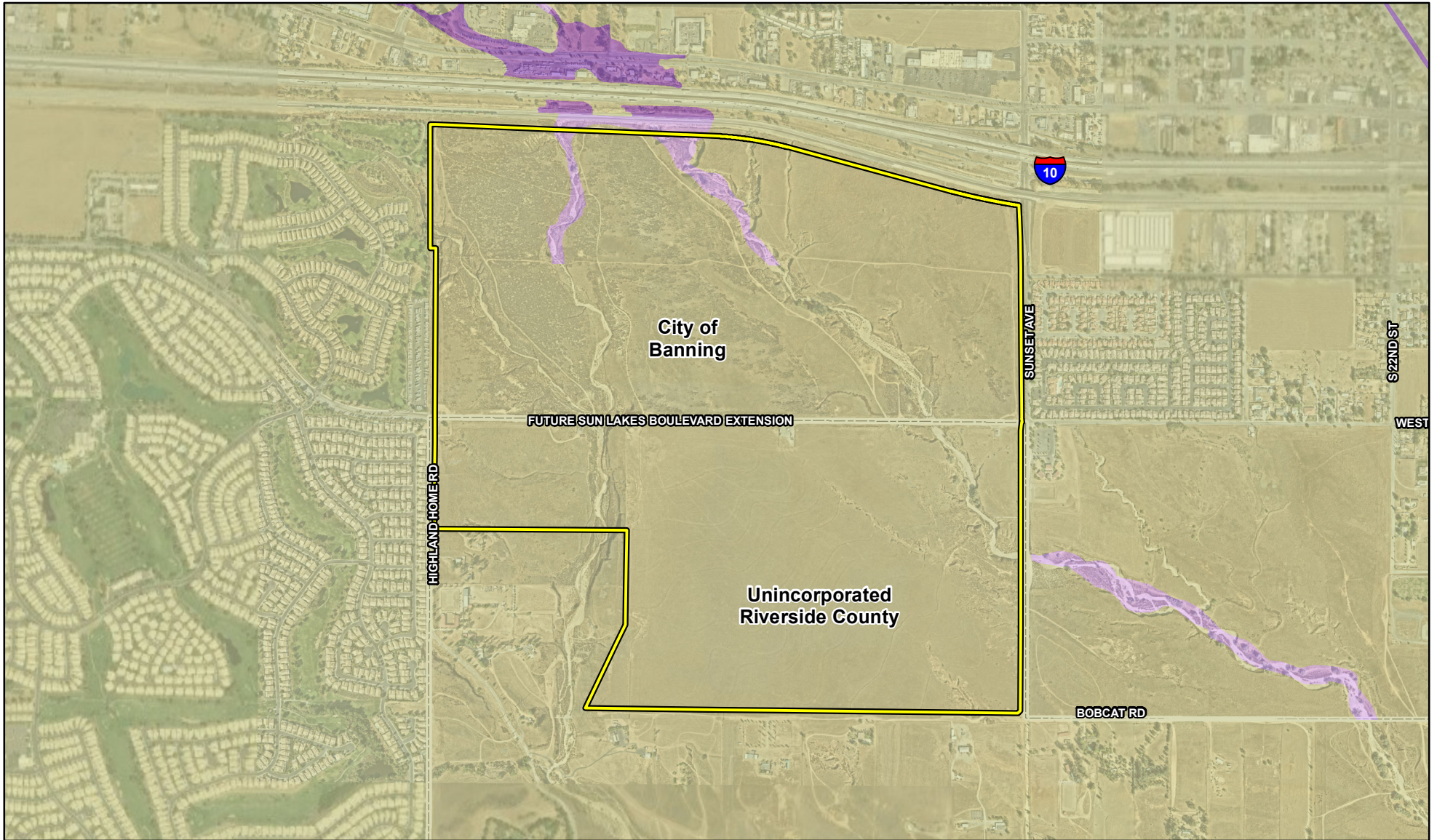




FIGURE 4.10-4

LSA






0 625 1250  
FEET

LEGEND

-  Project Location
-  City Boundary

FEMA FIRM and Flood Hazard Area

-  X (= areas outside 1% annual chance or 1% chance with depths less than 1 ft, drainages less than 1 sq mi, or levee protected areas)
-  A (= 1 % annual chance)
-  AE (= 1% annual chance determined by detailed methods)

SOURCE: Nearmap Imagery (10/12/2020); Google (2022); NFHL (2020)

I:\NPD2001\GIS\MXD\EIR\FEMA\_Flood.mxd (7/10/2023)

Sunset Crossroads  
Development Site FEMA Flood Map



**This Page Intentionally Left Blank**





Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body. Direct discharges of pollutants into waters of the United States are not allowed except in accordance with the NPDES program established in Section 402 of the CWA.

**Clean Water Act, Section 303, List of Impaired Water Bodies.** The SWRCB, in compliance with Section 303(d) of the CWA, prepared a 2014/2016 list of impaired water bodies in California. The SWRCB approved the 2014/2016 California Integrated Report (CWA Section 303(d) List/305(b) Report) on October 3, 2017. On April 6, 2018, the EPA approved the 2014/2016 California 303(d) List of Water Quality Limited Segments (Section 303(d) list). The Section 303(d) list includes a priority schedule for the development of TMDL implementation for each contaminant affecting the water body.

**National Flood Insurance Act.** Congress acted to reduce the costs of disaster relief by passing the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts was to reduce the need for large, publicly funded flood control structures and disaster relief efforts by restricting development in floodplains. FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in a floodplain. FEMA issues FIRMs of communities participating in the NFIP. These maps delineate flood hazard zones in the community. The City of Banning manages local storm drain facilities, and the Riverside County Flood Control and Water Conservation District is responsible for regional flood control planning within Riverside County.

#### **4.10.4.2 State Regulations**

**Porter-Cologne Water Quality Control Act of 1970.** The CWA places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs.

California’s primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California’s responsibility under the CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste.



The City, including the Development Site, is within the jurisdictional boundaries of the Colorado River RWQCB (Region 7).

**California Toxics Rule.** As stated previously, because California had not established a complete list of acceptable water quality criteria for toxic pollutants, EPA Region IX established numeric water quality criteria for toxic constituents in the form of the CTR. The CTR provides water quality criteria for certain potentially toxic compounds for inland surface waters, enclosed bays, estuaries, and waters designated for human health or aquatic life uses. The CTR is often used by the RWQCBs when establishing water quality objectives and TMDLs. Although the CTR criteria do not apply directly to discharges of storm water runoff, they are utilized as benchmarks for toxics in urban runoff. The CTR is used as a benchmark to evaluate the potential ecological impacts of storm water runoff to receiving waters. The CTR establishes acute and chronic surface water quality standards for certain water bodies. Acute criteria provide benchmarks for the highest permissible concentration below which aquatic life can be exposed for short periods of time without negative effects. Chronic criteria provide benchmarks for an extended period of time (i.e., 4 days or more) without negative effects. The acute CTR criteria have a shorter relevant averaging period (less than 4 days) and provide a more appropriate benchmark for comparison for storm water flows.

CTR criteria apply to the receiving water body and are calculated based on the probable hardness values of the receiving waters. At higher hardness values for receiving waters, certain constituents (including copper, lead, and zinc) are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

**General Construction Activity Storm Water Permit.** The *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Construction General Permit), adopted by the SWRCB, regulates construction activity that includes clearing, grading, and excavation resulting in soil disturbance of at least 1 acre of total land area. The Construction General Permit (CGP) authorizes the discharge of storm water to surface waters from construction activities.

The CGP requires that all developers of land where construction activities will occur over more than 1 acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three risk levels established in the General Permit.
- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the United States.
- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies BMPs that will reduce pollution in storm water discharges to the Best Available Technology/Economically Achievable/Best Conventional Pollutant Control Technology standards.
- Perform inspections and maintenance of all BMPs.
- Conduct storm water sampling, if required based on risk level.



To obtain coverage under the CGP, a project applicant must electronically file all permit registration documents with the SWRCB prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI);
- Risk Assessment;
- Site map;
- SWPPP;
- Annual fee; and
- Signed certification statement.

Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, and control pollutants from construction materials. The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

***Sustainable Groundwater Management Act.*** The Sustainable Groundwater Management Act (SGMA) of 2014 is a comprehensive three-bill package that Governor Jerry Brown signed into California State law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention if necessary to protect the resource. The plan is intended to ensure a reliable groundwater supply for California for years to come.

The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdrafts of groundwater basins. The SGMA requires the formation of local groundwater sustainability agencies (GSAs) that are required to adopt Groundwater Sustainability Plans to manage the sustainability of the groundwater basins.

The SGMA, which was enacted in September 2014, requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. The SGMA requires the formation of local GSAs, which are required to adopt Groundwater Sustainability Plans to manage the sustainability of the groundwater basins. The Development Site is in the Coachella Valley Groundwater Basin, San Gorgonio Pass Subbasin, which the California Department of Water Resources designates as a medium priority basin.<sup>15</sup> The San Gorgonio Pass Subbasin is divided into water storage units (“Basins”). The City and Development Site are located within the Beaumont Storage Unit (Beaumont Basin). The Beaumont Basin is an adjudicated basin established by the *Stipulation for Entry of Judgment Adjudicating Groundwater Rights in the Beaumont Basin*. Pursuant to the Judgment, the five-member Watermaster Committee determines the amount of groundwater to which each producer is entitled from the Beaumont Basin without incurring a replenishment obligation.

---

<sup>15</sup> Integrated Data and Analysis Branch Division of Statewide Integrated Water Management, Water Management Planning Tool. Website: <https://gis.water.ca.gov/app/boundaries/> (accessed May 17, 2022).



The San Gorgonio Pass Subbasin has three GSAs, and all three work together to produce one Groundwater Sustainability Plan.<sup>16</sup> The various water agencies that overlie the subbasin include the Desert Water Agency, Mission Springs Water District, Cabazon Water District, the City of Banning, the Banning Heights Mutual Water Company, and the San Gorgonio Pass Water Agency.

The San Gorgonio Pass Subbasin Groundwater Sustainability Plan (Subbasin Plan) was adopted in January 2022. The plan indicates that although the subbasin experienced a decline of a portion of its stored groundwater in the recent prolonged drought period, the aquifers within the subbasin contain a substantial amount of water in storage (see **Table 4.19.B**). This extensive storage volume has lessened the effects of water level declines during the hydrologic cycle's extended drought periods, providing a buffer against extreme fluctuations in recharge supplies that are dependent on rainfall and mountain runoff each year. The main goal of the Subbasin Plan is to maintain the trend of cyclical water table variations that provide long-term groundwater storage, with the understanding that water levels will fluctuate based on the season, hydrologic cycle, and changing groundwater demands within the subbasin.<sup>17</sup>

The Groundwater Sustainability Plan identifies various projects and management actions to support implementation efforts of the Groundwater Sustainability Plan. These projects include municipal water conservation, storm water capture, and additional imported water spreading and new pipelines at various spreading basins and storage units. Management actions include implementation of an Action Plan if groundwater levels fall below minimum thresholds, implementation of well head requirements, investigation of issues regarding water quality and unexpected water pumping, imposing fees on pumpers to encourage reduced pumping and conservation, groundwater pumping allocation, and groundwater basin adjudication.<sup>18</sup>

#### 4.10.4.3 Regional Regulations

**Water Quality Control Plans (Basin Plans).** The Colorado River Basin RWQCB has adopted a Basin Plan for its region of responsibility that delineates water resource area boundaries based on hydrological features. For the purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the surface waters and groundwater management zones described in the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives are established, and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses.

---

<sup>16</sup> San Gorgonio Pass Subbasin Groundwater Sustainability Agency, Governance. Website: <https://www.sgpgsas.org/governance/#:~:text=in%20their%20efforts-,Groundwater%20Sustainability%20Agencies,three%20GSA's%20for%20the%20subbasin> (accessed May 17, 2022).

<sup>17</sup> Provost & Pritchard Consulting Group and Intera Geoscience and Engineering Solutions, San Gorgonio Pass Subbasin Groundwater Sustainability Agency. 2022. San Gorgonio Pass Subbasin Groundwater Sustainability Plan. January. Website: [https://www.sgpgsas.org/wp-content/uploads/2022/01/Final\\_SGPGSP\\_1230\\_2021-web.pdf](https://www.sgpgsas.org/wp-content/uploads/2022/01/Final_SGPGSP_1230_2021-web.pdf) (accessed May 17, 2022).

<sup>18</sup> Provost & Pritchard Consulting Group and Intera Geoscience and Engineering Solutions, San Gorgonio Pass Subbasin Groundwater Sustainability Agency. 2022. San Gorgonio Pass Subbasin Groundwater Sustainability Plan, pages 6-1 through 6-23. January. Website: [https://www.sgpgsas.org/wp-content/uploads/2022/01/Final\\_SGPGSP\\_1230\\_2021-web.pdf](https://www.sgpgsas.org/wp-content/uploads/2022/01/Final_SGPGSP_1230_2021-web.pdf) (accessed May 17, 2022).



For planning and reporting purposes, the Colorado River Basin Region has been divided into seven major planning areas on the basis of different economic and hydrologic characteristics. The Development Site is within the Coachella Valley Planning Area, which is almost entirely in Riverside County and covers 1,920 square miles in the west central portion of the Colorado River Basin Region. This Coachella Valley Planning Area contains the Whitewater Hydrologic Unit and the East Salton Sea Hydrologic Unit.

**Table 4.10.B: Beneficial Uses of Surface Receiving Waters** shows the beneficial uses of surface receiving waters for the Development Site: Municipal and Domestic Supply (MUN), Agriculture Supply (AGR), Aquaculture (AQUA), Freshwater Replenishment (FRSH), Industrial Service Supply (IND), Groundwater Recharge (GWR), Water Contact Recreation (REC I), Non-Contact Water Recreation (REC II), Warm Freshwater Habitat (WARM), Cold Freshwater Habitats (COLD), Wildlife Habitat (WILD), Hydropower Generation (POW), and Preservation of Rare, Threatened, or Endangered Species (RARE).

**Table 4.10.B: Beneficial Uses of Surface Receiving Waters**

Water Bodies	MUN	AGR	AQUA	FRSH	IND	GWR	REC I	REC II	WARM	COLD	WILD	POW	RARE
San Gorgonio River	P	X				X	X	X		X	X		
Whitewater River <sup>4</sup>	X	X				X	X	X	I	X	X	X	
Coachella Valley Storm Channel <sup>2</sup>				X			X <sup>1</sup>	X <sup>1</sup>	X		X		X <sup>3</sup>
Salton Sea			X		P		X	X	X		X		X

Source: California Regional Water Quality Control Board, Colorado River Basin Region, State Water Resources Control Board, Water Quality Control Plan for the Colorado River Basin Region, Table 2-3, January 8, 2018.

<sup>1</sup> Unauthorized use.

<sup>2</sup> Section of perennial flow from approximately Indio to the Salton Sea.

<sup>3</sup> Rare, endangered, or threatened wildlife exists in or utilizes some of these waterways. If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Wildlife on its own initiative and/or at the request of the Regional Water Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Water Board.

<sup>4</sup> Includes the section of flow from the headwaters in the San Gorgonio Mountains to (and including) the Whitewater Recharge Basins near Indian Avenue crossing in Palm Springs.

AGR = Agriculture Supply

AQUA = Aquaculture

COLD = Cold Freshwater Habitats

FRSH = Freshwater Replenishment

GWR = Groundwater Recharge

I = Intermittent uses

IND = Industrial Service Supply

MUN = Municipal and Domestic Supply

P = Potential uses

POW = Hydropower Generation

RARE = Preservation of Rare, Threatened, or Endangered Species

REC I = Water Contact Recreation

REC II = Non-Contact Water Recreation

WARM = Warm Freshwater Habitat

WILD = Wildlife Habitat

Beneficial uses of the San Gorgonio Hydrologic Subunit include Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), and Industrial Service Supply (IND).<sup>19</sup> Basin Plans also establish implementation programs to achieve water quality objectives to protect beneficial uses and require monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State antidegradation policy (State Board Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

<sup>19</sup> State Water Resources Control Board, California Regional Water Quality Control Board, Colorado River Basin Region, Table 2-5: Beneficial Uses of Ground Waters in the Colorado River Basin, Pg. 2-17, January 8, 2019.



Basin Plans have established narrative and numeric water quality objectives for inland surface streams and groundwater. If water quality objectives are exceeded, the RWQCBs can use their regulatory authority to require municipalities to reduce pollutant loads to the affected receiving waters. Relevant surface water quality objectives for all inland surface waters and groundwater under the jurisdiction of the Colorado River RWQCB that are applicable to the receiving waters for the Development Site are shown in **Table 4.10.C: Surface Water Quality Objectives for Inland Waters** and **Table 4.10.D: Groundwater Objectives**, respectively.

**Municipal Phase I Program MS4.** The City of Banning is a Co-Permittee of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Within the Whitewater River Watershed Riverside County Flood Control and Water Conservation District, County of Riverside, Coachella Valley Water District and Incorporated Cities of Riverside County within the Whitewater River Basin (Whitewater River Watershed MS4 Permit), Order R7-2013-0011, NPDES No. CAS617002. The City of Banning does not share an interconnected MS4 with other permittees, although it is included as a Permittee on the Whitewater River Watershed MS4 permit to facilitate coordination with the regional programs implemented by other permittees and to reduce administrative duties on the Regional Water Board. The MS4 operated by the City discharges directly into the San Gorgonio River; however, most MS4 discharges from the City infiltrate.<sup>20</sup> The Whitewater River Watershed MS4 permit requires permittees to comply with the Whitewater River Region Water Quality Management Plan (WQMP), including incorporating appropriate BMPs to the Maximum Extent Practicable (MEP) to achieve water quality goals and objectives.

#### 4.10.4.4 Local Regulations

**City of Banning General Plan.** The City of Banning General Plan includes a Water Resources Element and Flooding and Hydrology Element, both of which provide goals and policies pertaining to hydrology and water quality in the City. The Water Resources Element addresses water quality, availability, and conservation for the City's current and future needs. The following policies from the Water Resources Element would apply to the Development Project:

**Policy 2:** The City shall require the use of drought-tolerant, low water consuming landscaping as a means of reducing water demand for new development.

**Policy 3:** The City shall require the use of recycled wastewater for new development, or where it is unavailable, the infrastructure for recycled water when it becomes available, as a means of reducing demand for groundwater resources.

**Policy 4:** Require that all new development be connected to the sewage treatment system, or install dry sewers until such time as that connection is possible.

**Policy 5:** The City shall provide guidelines for the development of on-site storm water retention facilities consistent with local and regional drainage plans and community design standards.

<sup>20</sup> California Water Boards. 2013. *Order No. R7-2013-011, NPDES No. CAS617002*. June 20. Website: [https://www.waterboards.ca.gov/coloradoriver/board\\_decisions/adopted\\_orders/orders/2013/0011cv\\_ms4.pdf](https://www.waterboards.ca.gov/coloradoriver/board_decisions/adopted_orders/orders/2013/0011cv_ms4.pdf) (accessed April 11, 2022).



**Table 4.10.C: Surface Water Quality Objectives for Inland Waters**

Constituent	Concentration												
<b>General Surface Water Quality Objectives</b>													
Aesthetic Qualities	All waters shall be free from substances attributable to wastewater of domestic or industrial origin or other discharges which adversely affect beneficial uses not limited to: settling to form objectionable deposits; floating as debris, scum, grease, oil, wax, or other matter that may cause nuisances; and producing objectionable color, odor, taste, or turbidity.												
Tainting Substances	Water shall be free of unnatural materials which individually or in combination produce undesirable flavors in the edible portions of aquatic organisms.												
Toxicity	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, 96-hour bioassay or bioassays of appropriate duration or other appropriate methods as specified by the Regional Water Board. Effluent limits based upon bioassays of effluent will be prescribed where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances will be encouraged.												
Temperature	The natural receiving water temperature of surface waters shall not be altered by discharges of wastewater unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.												
pH	Since the regional waters are somewhat alkaline, pH shall range from 6.0 to 9.0. Discharges shall not cause any changes in pH detrimental to beneficial water uses.												
Dissolved Oxygen	The dissolved oxygen concentration shall not be reduced below the following minimum levels at any time: Warm Freshwater Habitat (WARM) = 5.0 milligrams per liter (mg/L); Cold Freshwater Habitats (COLD) = 8.0 mg/L; and WARM and COLD = 8.0 mg/L.												
Suspended Solids and Settleable Solids	Discharges of wastes or wastewater shall not contain suspended or settleable solids in concentrations which increase the turbidity of receiving waters, unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in turbidity does not adversely affect beneficial uses.												
Total Dissolved Solids	Discharges of wastes or wastewater shall not increase the total dissolved solids content of receiving waters, unless it can be demonstrated to the satisfaction of the Regional Water Board that such an increase in total dissolved solids does not adversely affect beneficial uses of receiving waters. Additionally, any discharge, excepting discharges from agricultural sources, shall not cause the concentration of total dissolved solids (TDS) in surface waters to exceed the following limits: Coachella Valley Drains – Annual Average = 2,000 mg/L; Maximum = 2,500 mg/L.												
Bacteria	<p>In waters designated for water contact recreation (REC I) or non-contact water recreation (REC II), the following bacterial objectives apply. Although the objectives are expressed as fecal coliforms, E. coli, and enterococci bacteria, they address pathogenic microorganisms in general<sup>1</sup> (e.g., bacteria, viruses, and fungi). Based on a statistically sufficient number of samples (generally not less than five samples equally spaced over a 30-day period), the geometric mean of the indicated bacterial densities should not exceed one or the other of the following:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">E. Coli</td> <td style="width: 33%; text-align: center;">REC I = 126 per 100 milliliters (ml)</td> <td style="width: 33%; text-align: center;">REC II = 630 per 100 ml</td> </tr> <tr> <td style="text-align: center;">enterococci</td> <td style="text-align: center;">REC I = 33 per 100 ml</td> <td style="text-align: center;">REC II = 165 per 100 ml</td> </tr> </table> <p>Nor shall any sample exceed the following maximum allowable:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">E. Coli</td> <td style="width: 33%; text-align: center;">REC I = 400 per 100 ml</td> <td style="width: 33%; text-align: center;">REC II = 2000 per 100 ml</td> </tr> <tr> <td style="text-align: center;">enterococci</td> <td style="text-align: center;">REC I = 100 per 100 ml</td> <td style="text-align: center;">REC II = 500 per 100 ml</td> </tr> </table> <p>In addition to the objectives above, in waters designated for water contact recreation (REC I), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a log mean of 200 most probable number (MPN) per 100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN per 100 ml.</p>	E. Coli	REC I = 126 per 100 milliliters (ml)	REC II = 630 per 100 ml	enterococci	REC I = 33 per 100 ml	REC II = 165 per 100 ml	E. Coli	REC I = 400 per 100 ml	REC II = 2000 per 100 ml	enterococci	REC I = 100 per 100 ml	REC II = 500 per 100 ml
E. Coli	REC I = 126 per 100 milliliters (ml)	REC II = 630 per 100 ml											
enterococci	REC I = 33 per 100 ml	REC II = 165 per 100 ml											
E. Coli	REC I = 400 per 100 ml	REC II = 2000 per 100 ml											
enterococci	REC I = 100 per 100 ml	REC II = 500 per 100 ml											
Biostimulatory Substances	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses. Nitrate and phosphate limitations will be placed on industrial discharges to New and Alamo Rivers and irrigation basins on a case-by-case basis, taking into consideration the beneficial uses of these streams.												



**Table 4.10.C: Surface Water Quality Objectives for Inland Waters**

Constituent	Concentration																										
Sediment	The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.																										
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.																										
Radioactivity	<p>Radionuclides shall not be present in waters in concentrations which are deleterious to human, plant, animal or aquatic life or that result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal or aquatic life. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the limits specified in Tables 64442 and 64443 of sections 64442 and 64443, respectively, of title 22 of the California Code of Regulations, which are incorporated by reference into this plan. This incorporation by reference is prospective, including future revisions to the incorporated provisions as the revisions take effect.</p> <table border="1" data-bbox="535 709 1250 1066"> <thead> <tr> <th data-bbox="535 709 885 737">Constituent</th> <th data-bbox="885 709 1250 737">Maximum Contaminant Level, PCi/L</th> </tr> </thead> <tbody> <tr> <td data-bbox="535 737 885 764">Combined Radium-226 and Radium-228</td> <td data-bbox="885 737 1250 764">5</td> </tr> <tr> <td data-bbox="535 764 885 827">Gross Alpha Particle activity (excluding Radon and Uranium)</td> <td data-bbox="885 764 1250 827">15</td> </tr> <tr> <td data-bbox="535 827 885 890">Tritium</td> <td data-bbox="885 827 1250 890">20,000 (equivalent to 4 millirem/year dose to total body)</td> </tr> <tr> <td data-bbox="535 890 885 953">Strontium-90</td> <td data-bbox="885 890 1250 953">8 (equivalent to 4 millirem/year dose to bone marrow)</td> </tr> <tr> <td data-bbox="535 953 885 1037">Beta / photon emitters</td> <td data-bbox="885 953 1250 1037">4 MREM (4 millirem/year annual dose equivalent to the total body or any internal organ)</td> </tr> <tr> <td data-bbox="535 1037 885 1066">Uranium</td> <td data-bbox="885 1037 1250 1066">20</td> </tr> </tbody> </table>	Constituent	Maximum Contaminant Level, PCi/L	Combined Radium-226 and Radium-228	5	Gross Alpha Particle activity (excluding Radon and Uranium)	15	Tritium	20,000 (equivalent to 4 millirem/year dose to total body)	Strontium-90	8 (equivalent to 4 millirem/year dose to bone marrow)	Beta / photon emitters	4 MREM (4 millirem/year annual dose equivalent to the total body or any internal organ)	Uranium	20												
Constituent	Maximum Contaminant Level, PCi/L																										
Combined Radium-226 and Radium-228	5																										
Gross Alpha Particle activity (excluding Radon and Uranium)	15																										
Tritium	20,000 (equivalent to 4 millirem/year dose to total body)																										
Strontium-90	8 (equivalent to 4 millirem/year dose to bone marrow)																										
Beta / photon emitters	4 MREM (4 millirem/year annual dose equivalent to the total body or any internal organ)																										
Uranium	20																										
Chemical Constituents	<p>No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in hazardous chemical concentrations found in bottom sediments or aquatic life. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) based upon drinking water standards specified in the following provisions of title 22 of the California Code of Regulations, which are incorporated by reference into this plan:</p> <table border="1" data-bbox="646 1251 1156 1633"> <thead> <tr> <th colspan="2" data-bbox="646 1251 1156 1314"><i>Maximum Contaminant Levels (MCLs) for Organic and Inorganic Chemicals</i></th> </tr> <tr> <th data-bbox="646 1314 1047 1341"><u>Inorganic Chemical Constituents</u></th> <th data-bbox="1047 1314 1156 1341"><u>MCL, mg/L</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="646 1341 1047 1369">Arsenic</td> <td data-bbox="1047 1341 1156 1369">0.01</td> </tr> <tr> <td data-bbox="646 1369 1047 1396">Barium</td> <td data-bbox="1047 1369 1156 1396">1.0</td> </tr> <tr> <td data-bbox="646 1396 1047 1423">Cadmium</td> <td data-bbox="1047 1396 1156 1423">0.005</td> </tr> <tr> <td data-bbox="646 1423 1047 1451">Chromium</td> <td data-bbox="1047 1423 1156 1451">0.05</td> </tr> <tr> <td data-bbox="646 1451 1047 1478">Fluoride</td> <td data-bbox="1047 1451 1156 1478">2.0</td> </tr> <tr> <td data-bbox="646 1478 1047 1505">Lead</td> <td data-bbox="1047 1478 1156 1505">0.015</td> </tr> <tr> <td data-bbox="646 1505 1047 1533">Mercury</td> <td data-bbox="1047 1505 1156 1533">0.002</td> </tr> <tr> <td data-bbox="646 1533 1047 1560">Nitrate (as NO<sub>3</sub>)</td> <td data-bbox="1047 1533 1156 1560">45.0</td> </tr> <tr> <td data-bbox="646 1560 1047 1587">Nitrate + Nitrite (sum of nitrogen)</td> <td data-bbox="1047 1560 1156 1587">10.0</td> </tr> <tr> <td data-bbox="646 1587 1047 1614">Selenium</td> <td data-bbox="1047 1587 1156 1614">0.05</td> </tr> <tr> <td data-bbox="646 1614 1047 1633">Silver</td> <td data-bbox="1047 1614 1156 1633">0.10</td> </tr> </tbody> </table>	<i>Maximum Contaminant Levels (MCLs) for Organic and Inorganic Chemicals</i>		<u>Inorganic Chemical Constituents</u>	<u>MCL, mg/L</u>	Arsenic	0.01	Barium	1.0	Cadmium	0.005	Chromium	0.05	Fluoride	2.0	Lead	0.015	Mercury	0.002	Nitrate (as NO <sub>3</sub> )	45.0	Nitrate + Nitrite (sum of nitrogen)	10.0	Selenium	0.05	Silver	0.10
<i>Maximum Contaminant Levels (MCLs) for Organic and Inorganic Chemicals</i>																											
<u>Inorganic Chemical Constituents</u>	<u>MCL, mg/L</u>																										
Arsenic	0.01																										
Barium	1.0																										
Cadmium	0.005																										
Chromium	0.05																										
Fluoride	2.0																										
Lead	0.015																										
Mercury	0.002																										
Nitrate (as NO <sub>3</sub> )	45.0																										
Nitrate + Nitrite (sum of nitrogen)	10.0																										
Selenium	0.05																										
Silver	0.10																										





**Table 4.10.C: Surface Water Quality Objectives for Inland Waters**

Constituent	Concentration	
	<u>Organic Chemical Constituents</u>	<u>MCL, mg/L</u>
	Chlorinated Hydrocarbons	
	Endrin	0.002
	Lindane	0.0002
	Methoxychlor	0.03
	Toxaphene	0.003
	Chlorophenoxys	
	2,4-D	0.07
	2,4,5-TP Silvex	0.05
Pesticide Wastes	The discharge of pesticidal wastes from pesticide manufacturing processing or cleaning operations to any surface water is prohibited.	
<b>Specific Surface Water Quality Objectives – Salton Sea</b>		
Total Dissolved Solids	The total dissolved solids concentration of the Salton Sea in 1992 was approximately 44,000 mg/L and over 61,000 mg/L in 2017. The water quality objective for the Salton Sea is to reduce the present level of salinity and stabilize it at 35,000 mg/L, unless it can be demonstrated that a different level of salinity is optimal for the sustenance of the sea's wild and aquatic life. However, the achievement of this water quality objective shall be accomplished without adversely affecting the primary purpose of the Salton Sea, which is to receive and store agricultural drainage, seepage, and storm waters. Also, because of economic considerations, 35,000 mg/L may not be realistically achievable. In such case, any reduction in salinity which still allows for survival of the sea's aquatic life shall be deemed an acceptable alternative or interim objective. Because of the difficulty and predicted costliness of achieving salinity stabilization of the Salton Sea, it is unreasonable for the Regional Water Board to assume responsibility for implementation of this objective. That responsibility must be shared jointly by all of the agencies which have direct influence on the sea's fate. Additionally, there must be considerable public support for achieving this objective, without which it is unlikely that the necessary funding for Salton Sea salinity control will ever be realized.	
Selenium	The following objectives apply to all surface waters that are tributaries to the Salton Sea: a. A four-day average value of selenium shall not exceed 0.005 mg/L. b. A one-hour average value of selenium shall not exceed 0.2 mg/L.	
<b>Specific Surface Water Quality Objectives – Coachella Valley Storm Water Channel</b>		
Bacteria	The following bacterial objectives apply to a limited section of the Coachella Valley Storm Water Channel (CVSC) where perennial flow exists specifically, that part of the channel that begins at the Valley Sanitary District Wastewater Treatment Plant in the City of Coachella, and extends to the south for approximately 17 miles, where it discharges into the Salton Sea at the northern shore. The bacterial water quality objectives for this reach of the CVSC are expected to protect human health against gastro-intestinal illness caused by exposure to pathogenic organisms present in surface waters. These objectives are based on several epidemiological studies sponsored by the U.S. Environmental Protection Agency, which determined that Escherichia coli (E. coli) is the most reliable indicator bacteria for protecting human health, given that E. coli is more specifically intestinal in origin than fecal coliform. E. coli density limits for the CVSC are as follows: <ul style="list-style-type: none"> <li>• Based on a minimum of five samples equally spaced over a 30-day period, the geometric mean of E. coli densities must not exceed the following: REC I = 126 MPN per 100 ml; and REC II = 630 MPN per 100 ml;</li> <li>• Nor shall any single sample exceed the following for E. coli densities: REC I = 400 MPN per 100 ml; and REC II = 2000 MPN per 100 ml.</li> </ul>	

Source: State Water Resources Control Board, California Regional Water Quality Control Board, Colorado River Basin Region, Water Quality Control Plan for the Colorado River Basin Region, pgs. 3-1 through 3-10, January 8, 2019.

Note: There are no site-specific water quality objectives for Smith Creek, San Gorgonio River, or Whitewater River.



**Table 4.10.D: Groundwater Objectives**

Constituent	Concentration
Taste and Odors	Groundwater for use as domestic or municipal supply shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.
Bacteriological Quality	In groundwater designated for use as domestic or municipal supply (MUN), the concentration of coliform organisms shall not exceed the limits specified in section 64426.1 of title 22 of the California Code of Regulations.
Chemical and Physical Quality	Groundwater designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64444-A of section 64444 (Organic Chemicals), and Table 64678-A of section 64678 (Determination of Exceedances of Lead and Copper Action Levels). This incorporation is prospective, including future revisions to the incorporated provisions as the revisions take effect. The Regional Water Board acknowledges that specific treatment requirements are imposed by State and federal drinking water regulations on the consumption of surface waters under specific circumstances. To protect all beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.
Brines	Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to groundwater usable for domestic and municipal purposes are prohibited.
Radioactivity	Groundwater designated for use as domestic or municipal supply (MUN) shall not contain radioactive material in excess of the maximum contaminant levels (MCLs) specified in Tables 64442 and 64443 of sections 64442 and 64443, respectively, of title 22 of the California Code of Regulations (CCR).

Source: State Water Resources Control Board, California Regional Water Quality Control Board, Colorado River Basin Region, Water Quality Control Plan for the Colorado River Basin Region, pgs. 3-10 and 3-11, January 8, 2019.

<sup>1</sup> Fecal coliforms and E. coli bacteria are being used as the indicator microorganisms in the region until better and similarly practical tests become readily available in the region to more specifically target pathogens.

**Policy 6:** Coordinate with the San Geronio Pass Water Agency, Banning Heights Mutual Water Company, the Beaumont-Cherry Valley Water District, the California Regional Water Quality Control Board and other appropriate agencies to share information on potential groundwater contaminating sources.

**Policy 7:** The City shall ensure that no development proceeds that has potential to create groundwater hazards from point and non-point sources, and shall confer with other appropriate agencies, as necessary, to assure adequate review and mitigation.

The Flooding and Hydrology Element addresses potential drainage and flooding hazards within the City of Banning. The main goal of this Element is to protect the general health, safety, and welfare of the community from potential flood and associated hazards. The following goals and policies from the Flooding and Hydrology Element would apply to the Development Project:

**Goal:** A comprehensive system of flood control facilities and services effectively protecting lives and property.

**Policy 4:** The City shall cooperate in securing FEMA map amendments, recognizing the importance of redesignation of the 100-year flood plains within the City boundaries and sphere-of-influence as improvements are completed.



**Policy 6:** All new development shall be required to incorporate adequate flood mitigation measures, such as grading that prevents adverse drainage impacts to adjacent properties, on-site retention of runoff, and the adequate siting of structures located within flood plains.

**Policy 7:** Assure that adequate, safe, all-weather crossing over drainage facilities and flood control channels are provided where necessary, and are maintained for passage during major storm events.

**City of Banning Ordinance No. 1415 Stormwater Code.** City of Banning Ordinance No. 1415 Stormwater Code requires compliance with all applicable local, State, and federal regulations and BMPs related to stormwater runoff and catchment basins, which are subject to regular inspection to ensure compliance.

**City of Banning Municipal Code.** Section 13.24.110 of the City of Banning Municipal Code requires that any construction in the City comply with the Stormwater Management Provisions as codified in Chapter 13.24 and the Uniform Building Code, as well as the City of Banning Ordinance 1388. In addition, development of all land within the City must include provisions for the management of storm water runoff from the property to be developed to prevent any deterioration of water quality, including volumetric or flow-based treatment control BMP design criteria, and/or exceptions to these requirements, and methodologies used to ensure proper management of storm water runoff post-construction. This management shall consist of constructing storage and/or infiltration facilities, which includes infiltration basins. At a minimum, all development will make provisions to retain storm water runoff from rainfall events up to and including the 100-year, 3-hour duration event, and post-development peak urban runoff discharge rates shall not exceed pre-development peak urban runoff discharge rates.

**County of Riverside General Plan.** The County of Riverside General Plan includes a Land Use Element, Multipurpose Open Space Element, and Safety Element, all of which provide goals and policies pertaining to hydrology and water quality in the County. The Land Use Element functions as the ultimate pattern of development and designates the general distribution, location, and extent of land uses. The following policies from the Land Use Element would apply to the Development Project:

**Policy LU 4.1:** Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts:

- f. Incorporate water conservation techniques, such as groundwater recharge basins, use of porous pavement, drought tolerant landscaping, and water recycling, as appropriate.

**Policy LU 7.7:** Require buffers to the extent possible between development and watercourses, including their associated habitat.

**Policy LU 18.1:** Ensure compliance with Riverside County's water-efficient landscape policies. Ensure that projects seeking discretionary permits and/or approvals develop and implement landscaping plans prepared in accordance with the Water-Efficient Landscape Ordinance (Ordinance No. 859), the County of Riverside Guide to California Friendly Landscaping and



Riverside County's California Friendly Plant List. Ensure that irrigation plans for all new development incorporate weather based controllers and utilize state-of-the-art water-efficient irrigation components.

**Policy LU 18.5:** Emphasize and expand the use of recycled water in conjunction with local water agencies. Recycled water determined to be available pursuant to Section 13550 of the California State Water Code shall be used for appropriate non-potable uses whenever it: a) provides a beneficial use to the customer; b) is economically and technically feasible; c) is consistent with applicable regulatory requirements; and d) is in the best interests of public health, safety, and welfare. With the exception of non-common areas of single-family home residential developments, all other irrigation systems must be designed and installed to accommodate the current or future use of recycled water for irrigation. If no recycled water availability exists or is imminent in the vicinity of a project (as determined by prevailing water agency), all subsurface piping shall be installed as "recycled water ready" to reduce future retrofit costs. Such irrigation plans shall be developed in accordance with standards and policies of the applicable recycled water purveyor. Recycled water systems shall be designed to meet regulatory requirements of the California Department of Public Health and the local recycled water purveyor.

The Multipurpose Open Space Element addresses the conservation, management, and preservation of renewable and non-renewable resources. The following policies from the Multipurpose Open Space Element would apply to the Development Project:

**Policy OS 1.4:** Promote the use of recycled water for landscape irrigation.

**Policy OS 2.2:** Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.

**Policy OS 3.3:** Minimize pollutant discharge into storm drainage systems, natural drainages, and aquifers.

**Policy OS 3.6:** Design the necessary stormwater detention basins, recharge basins, water quality basins, or similar water capture facilities to protect water-quality. Such facilities should capture and/or treat water before it enters a watercourse. In general, these facilities should not be placed in watercourses, unless no other feasible options are available.

**Policy OS 3.7:** Where feasible, decrease stormwater runoff by reducing pavement in development areas, reducing dry weather urban runoff, and by incorporating "Low Impact Development," green infrastructure and other Best Management Practice design measures such as permeable parking bays and lots, use of less pavement, bio-filtration, and use of multi-functional open drainage systems, etc.

**Policy OS 4.4:** Incorporate natural drainage systems into developments where appropriate and feasible.

**Policy OS 4.5:** Encourage streets in a vicinity of watercourses to include park strips or other open space areas that allow permeability.



**Policy OS 4.6:** Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding. Such retention may occur through “Low Impact Development” or other Best Management Practice measures.

**Policy OS 4.9:** Discourage development within watercourses and areas within 100 feet of the outside boundary of the riparian vegetation, the top of the bank, or the 100 year floodplain, whichever is greater.

**Policy OS 5.3:** Based upon site specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues: a) public safety; b) erosion; c) riparian or wetland buffer; d) wildlife movement corridor or linkage; e) slopes; f) type of watercourse; and g) cultural resources.

**Policy OS 5.5:** Preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Prohibit fencing that constricts flow across watercourses and their banks. Incentives shall be utilized to the maximum extent possible.

**Policy OS 18.3:** Prohibit the planting or introduction of invasive, non-native species to watercourses, their banks, riparian areas, or buffering setbacks.

The Safety Element addresses the County’s goals, policies, and actions to minimize the hazards to safety in and around unincorporated Riverside County. The following policies from the Safety Element would apply to the Development Project:

**Policy S 3.1:** All residential, commercial, and industrial structures should be flood-proofed, to the maximum extent possible and as required by law, from the mapped 100-year storm flow, or to an appropriate level determined by site-specific hydrological studies for areas not mapped by the Federal Emergency Management Agency. This may require that the finished floor elevation be constructed at such a height as to meet this requirement. Nonresidential (commercial or industrial) structures may be allowed with a “flood-proofed” finished floor below the Base Flood Elevation (i.e., 100-year flood surface) to the extent permitted by state, federal, and local regulations. New critical facilities should be constructed above-grade to the satisfaction of the Building Official, based on federal, state, or other reliable hydrologic studies. Residential, commercial, and industrial structures shall meet these standards as a condition of approval.

**Policy S 3.3:** Prohibit alteration of floodways and channelization unless alternative methods of flood control are not technically feasible or alternative methods are used to the maximum extent practicable. The intent is to balance floodway protection with prudent land use solutions, recreational needs, and habitat requirements, and as applicable to provide incentives for natural watercourse preservation.

- a. Prohibit the construction, location, or substantial improvement of structures in areas designated as floodways, except upon approval of a plan which provides that the proposed development will not result in any significant increase in flood levels during the occurrence of a 100-year flood discharge.
- b. Prohibit the filling or grading of land for nonagricultural purposes and for non-authorized flood control purposes in areas designated as floodways, except upon approval of a plan



which provides that the proposed development will not result in any significant increase in flood levels during the occurrence of a 100-year flood discharge.

**Policy S 3.4:** Prohibit substantial modification to watercourses, unless the modification does not adversely affect adjacent wetlands or riparian habitat or become detrimental to adjacent property as a result of increased erosion, sedimentation, or water velocity. Substantial modifications to watercourses shall be done in the least environmentally damaging manner practicable and shall restore natural conditions to the greatest extent possible, to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.

**Policy S 3.5:** Development within the floodway fringe should only be allowed if the proposed structures can be adequately flood-proofed and will not contribute to property damage or risks to public safety, as required by law. Such developments shall be required to be capable of withstanding flooding and minimize the use of fill. Compatible uses shall not, however, obstruct flows or adversely affect upstream or downstream properties with increased velocities, erosion backwater effects, or concentrations of flows.

**Policy S 3.6:** All projects in unincorporated Riverside County should address and mitigate where applicable, adverse impacts to the carrying capacity of local and regional storm drain systems.

While the Southern Portion of the Development Site is currently within unincorporated Riverside County and would fall within the County's General Plan jurisdiction, the parcels that make up the Southern Portion of the Development Site would be annexed by the City of Banning prior to construction. This action would bring the entirety of the Development Site within the City of Banning's jurisdiction, and County General Plan policies, including those listed above, would not apply to the Development Project.

***Riverside County Flood Control and Water Conservation District Hydrology Manual.*** The Riverside County Flood Control and Water Conservation District (District) prepared and approved a Hydrology Manual in April 1978 to document design hydrology methods and criteria currently used by the Riverside County Flood Control and Water Conservation District and implemented by various projects being developed within the County. The materials contained in the manual are intended for the use of both District personnel and engineers submitting hydrologic computations to the District. Methods of the Hydrology Manual are considered applicable to the hydrologic design of underground storm drains, open channels, retention basins, dams, and debris basins, as well as subdivision review and flood plain mapping.<sup>21</sup> As the Development Project is located within the jurisdiction of the County Flood Control and Water Conservation District, design techniques from the Hydrology Manual would be applicable.

***Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development.*** The Riverside County Flood Control and Water Conservation District prepared and approved the Whitewater River Region Stormwater Quality Best Management

---

<sup>21</sup> Riverside County Flood Control and Water Conservation District. 1978. Hydrology Manual. April. Website: <https://rcflood.org/Portals/0/Downloads/Hydrology-Manual-20180814.pdf?ver=2020-02-05-091623-987> (accessed May 17, 2022).



Practice Design Handbook for Low Impact Development (Handbook) in June 2014.<sup>22</sup> The purpose of the Handbook is to provide selection and design guidance for storm water BMPs for Priority Development Projects (PDPs) within the Whitewater River Region of Riverside County while meeting the goals of Low Impact Development (LID), where feasible. LID in the Whitewater River Region seeks to control runoff pollutants close to their source but has a slightly different approach than in areas with more annual rainfall. The majority of PDPs within the Whitewater River Region have historically been and continue to be subject to local onsite retention requirements. In the past, these local requirements were implemented to address downstream impacts; more recently, these requirements have been noted for their ability to meet the goals of LID. As the Development Project is located within the jurisdiction of the Riverside County Flood Control and Water Conservation District Whitewater River Region, BMPs from the Handbook would be applicable.

#### 4.10.5 Thresholds of Significance

The thresholds for hydrology and water quality impacts used in this analysis are consistent with Appendix G of the *CEQA Guidelines* and the City's CEQA Significance Thresholds Guide. The Development Project may be deemed to have a significant impact with respect to hydrology and water quality if it would:

- Threshold 4.10.1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.**
- Threshold 4.10.2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**
- Threshold 4.10.3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on or off site; (ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site; (iii) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) Impede or redirect flood flows.**
- Threshold 4.10.4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.**
- Threshold 4.10.5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.**

<sup>22</sup> Riverside County Flood Control and Water Conservation District. 2014. Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development. June.



## 4.10.6 Project Impacts

### 4.10.6.1 Violate Water Quality Standards

**Threshold 4.10-1: Would the Development Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

**Construction.** The 533.8-acre Development Site would be developed with 268,400 square feet of general commercial uses (retail, restaurant, recreation and wellness, travel, and hospitality uses) including a 90,000-square-foot hotel, up to 5,545,000 square feet of industrial use, and 28.3 acres of circulation features. Approximately 65.6 acres of land would be designed for open space, including 53.0 acres of Open Space – Resources land and 12.6 acres of Open – Space Parks land. Pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on groundwater, on-site surface water, and off-site downstream receiving waters. During construction, approximately 10,000 cubic yards of material would be disturbed on a daily basis. During soil-disturbing construction activities, excavated soil would be exposed and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via storm water runoff into receiving waters. Sediment from increased soil erosion and chemicals from spills and leaks have the potential to be discharged to downstream receiving waters during storm events, which can affect water quality and impair beneficial uses.

Because construction of the Development Project would disturb greater than 1 acre of soil, the Development Project is subject to the requirements of the Construction General Permit, as specified in **Regulatory Compliance Measure (RCM) WQ-1**, identified below. As also specified in **RCM WQ-1**, an SWPPP would be prepared and construction BMPs detailed in the SWPPP would be implemented during construction, in compliance with the requirements of the CGP. In addition, as specified in **RCM WQ-2**, an Erosion and Sediment Control Plan would be prepared and submitted to the City's Public Works Department prior to issuance of any grading in compliance with the City's Municipal Code.

As construction of the Development Project is expected to occur over a number of years, an Erosion and Sediment Control Plan would also be prepared annually during construction and submitted to the City's Public Works Department for approval prior to September 15th of each year. The SWPPP and Erosion and Sediment Control Plans would detail the BMPs to be implemented during construction and would reduce any amount of sedimentation flowing off-site and into downstream receiving waters. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into Highland Wash, Smith Creek, and Pershing Creek and into downstream receiving waters. Compliance with the requirements of the CGP and City Municipal Code, including incorporation of construction BMPs to target and reduce pollutants of concern in storm water runoff and reduce sediment release to receiving waters, would ensure that construction impacts related to water quality standards, waste discharge requirements (WDRs), and degradation of surface water quality would be **less than significant**.





According to the Geologic and Geotechnical Review prepared for the Development Project,<sup>23</sup> no groundwater was encountered on the Development Site during activities for exploratory borings drilled to a 50-foot depth; however, based on historical groundwater levels, groundwater is expected 100 feet below the ground surface of the Development Site. The City of Banning Public Works Department monitors four on-site wells, which have recorded groundwater depths of 375 to 475 feet below ground surface. Based on the depth of groundwater underlying the Development Site, dewatering activities during Development Project construction are not anticipated to occur. Storm water that may infiltrate soil during construction would not be expected to affect groundwater quality because of the depth to groundwater on the Development Site and because there is not a direct path for pollutants to reach groundwater.

In conclusion, construction of the Development Project would comply with existing NPDES regulations (as specified in **RCM WQ-1** and **RCM WQ-2**), which include preparation of an SWPPP and Erosion and Sediment Control Plans and implementation of Construction BMPs to target and reduce pollutants of concern in storm water runoff. Compliance with regulatory requirements would ensure that impacts related to violation of any water quality standards or waste discharge requirements and degradation of surface or groundwater quality during construction would be *less than significant*, and no mitigation is required.

**Operation.** Expected pollutants of concern from long-term operation of the Development Project include bacteria/virus, heavy metals, toxic organic compounds, nutrients, sediment/turbidity, trash and debris, oils, and grease. Potential sources of these pollutants associated with the Development Project include the following:

- **Bacteria/Virus:** Food wastes, sediment, and landscaping areas.
- **Heavy Metals and Toxic Organic Compounds:** Automobiles, vehicle wash, commercial fueling stations, underground storage tanks, and surface parking areas.
- **Nutrients:** Fertilizers, sediment, detergents, and trash/debris.
- **Sediment/Turbidity:** Disturbed or unstabilized landscaping areas and disturbed earth surfaces.
- **Trash and Debris:** Landscaping activities, food wrappers, and food wastes.
- **Oil and Grease:** Internal streets, vehicle wash, commercial fueling stations, and parked vehicles.

For a detailed discussion regarding hazardous materials identified above, their presence on the Development Site through construction and operation, as well as regulations and mitigation measures meant to reduce potential impacts from these materials, refer to **Section 4.9** of this EIR.

The Development Project would be required to comply with the requirements of the Whitewater River Watershed MS4 Permit and associated guidance documents, such as the Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development.<sup>24</sup> The Whitewater River Watershed MS4 Permit requires that a Final WQMP be prepared for new development within its jurisdiction (specifically the City of Banning). The Final

<sup>23</sup> Leighton and Associates, Inc. 2022. Geologic and Geotechnical Review, Sunset Crossroads Specific Plan, Approximately 533.8-Acre Site, City of Banning, California. June 23.

<sup>24</sup> Riverside County Flood Control and Water Conservation District. 2014. Riverside County, Whitewater River Region, Stormwater Quality Best Management Practice Design Handbook for Low Impact Development. June.



WQMP would specify the Site Design, Source Control, LID, and Treatment Control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in storm water runoff. Design BMPs are storm water management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a site. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into storm water. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. Treatment Control BMPs are structural BMPs designed to treat and reduce pollutants in storm water runoff prior to releasing it to receiving waters.

A *Preliminary Water Quality Management Plan* prepared for the Development Project specifies the Source Control, Site Design, and LID BMPs proposed for the Development Project (no Treatment Control BMPs are proposed because the proposed infiltration basins are being sized to retain 100 percent of the 100-year, 3-hour storm event). Refer to **Figure 3-10** in **Chapter 3.0** of this EIR for locations of the infiltration basins on the Development Site. The *Preliminary Water Quality Management Plan* would be refined during final design based on the final site plans, as specified under **RCM WQ-3**. As new buildings are proposed and developed on the Development Site, prior to issuance of building permits, the City would require documentation that each specific development is consistent with the *Final Water Quality Management Plan* that was approved for the Specific Plan.

Many of the operational BMPs implemented for the Development Project would require operation and maintenance responsibilities by either the owner of the property, the property's maintenance director, or tenants of the Development Site. The following describes the operational BMPs that would require operation and maintenance:

1. **Infiltration Basins (A–M):** Maintain vegetation as needed. Use of fertilizers, pesticides, and herbicides should be strenuously avoided to ensure they do not contribute to water pollution. If appropriate native plant selections and other integrated pest management methods are used, such products should not be needed. If such projects are used:
  - a. Products shall be applied in accordance with their labeling, especially in relation to application to water, and in areas subjected to flooding.
  - b. Fertilizers should be applied within 15 days before, after, or during the rainy season.
  - c. Remove debris and litter from the entire basin to minimize clogging and improve aesthetics.
  - d. Check for obvious problems and repair as needed. Address odor, insects, and overgrowth issues associated with stagnant or standing water in the basin bottom. There should be no long-term ponding water.
  - e. Check for erosion and sediment laden areas in the basin. Repair as needed.
  - f. Revegetate side slopes where needed.



2. **Infiltration Basins (1–4):** Inspection of hydraulic and structural facilities. Examine the inlet for blockage, the embankment and spillway integrity, and damage to any structural element.
  - a. Check for erosion, slumping, and overgrowth. Repair as needed.
  - b. Check basin depth for sediment buildup and reduced total capacity. Scrape bottom as needed and remove sediment. Restore to original cross-section and infiltration rate. Replant basin vegetation.
  - c. Verify the basin bottom is allowing acceptable infiltration. Use a disc or other method to aerate basin bottom only if there is actual significant loss of infiltrative capacity, rather than on a routine basis.
  - d. No water should be present 72 hours after an event. No long-term standing water should be present at all. No algae formation should be visible. Correct problem as needed.
3. **Education for Property Owners, Operators, Tenants, Occupants, or Employees:** Practical information materials will be provided to the first occupants/tenants on general housekeeping practices that contribute to the protection of storm water quality.
4. **Activity Restrictions:** Covenants and restrictions are in place for the center.
5. **Irrigation System and Landscape Maintenance:** Check general plant health and make repairs as necessary. Check for sediment buildup on the planting surface and in the drain inlet. Check for ponding water lasting for more than 48 hours after a rain event, and unlog all drain piping.
6. **Common Area Litter Control:** The owner should be required to implement trash management and litter control procedures in the common areas aimed at reducing pollution of drainage water.
7. **Street Sweeping Private Streets and Parking Lots:** Streets and parking lots are required to be swept monthly.
8. **Drainage Facility Inspection and Maintenance:** Inspect and clean catch basins' inflow devices to eliminate any debris and clogging.
9. **Storm Drain Inlet Stenciling and Signage:** Provide stenciling or labeling of all storm drain inlets and catch basins, constructed or modified, within the Development Project area with prohibitive language (such as: "NO DUMPING – DRAINS TO OCEAN") and/or graphical icons to discourage illegal dumping. Post signs and prohibitive language and/or graphical icons that prohibit illegal dumping at public access points along channels and creeks within the Development Project area.
10. **Landscape and Irrigation System Design:** Check general plant health and make repairs as necessary. Check for sediment buildup on the planting surface and in the drain inlet. Check for ponding water lasting for more than 48 hours after a rain event, and unlog all drain piping.



11. **Protection Slopes and Channels:** Inspect slopes, channels, and infiltration basins for erosion. In the case of large-scale erosion, the slope, channel, or basin will be built up and recompact.
12. **Trash Storage Areas:** Inspect and clean trash storage areas to eliminate any debris and potential for storm water contamination. Trash and spills are to be cleaned up immediately.

The proposed BMPs would target and reduce pollutants of concern from runoff from the Development Site in compliance with the Whitewater River Watershed MS4 Permit requirements. Compliance with the requirements of the Whitewater River Watershed MS4 Permit, including incorporation of operational BMPs to target pollutants of concern, would ensure that impacts related to a violation of any water quality standards or waste discharge requirements and degradation of surface or groundwater water quality during Development Project operation would be **less than significant**, and no mitigation measures are required.

**Level of Significance Prior to Mitigation:** Less Than Significant Impact.

**Regulatory Compliance Measures and Mitigation Measures:** The following Regulatory Compliance Measures would be implemented as part of the Development Project.

**RCM WQ-1: Construction General Permit.** Prior to commencement of construction activities, the Applicant shall obtain coverage under the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit), NPDES No. CAS000002, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Storm Water Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the Development Project from the SMARTS and provided to the Director of the City of Banning Public Works Department, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Development Project construction shall comply with all applicable requirements specified in the Construction General Permit, including but not limited to, preparation of an SWPPP and implementation of construction site Best Management Practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the Development Project. The SWPPP shall identify the sources of pollutants that may affect the quality of storm water and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in storm water runoff. Upon completion of construction activities and stabilization of the Development Site, a Notice of Termination shall be submitted via SMARTS.



**RCM WQ-2** In compliance with City of Banning Ordinance No. 1388 Grading, Erosion, and Sediment Control, the Development Project Applicant shall submit a grading plan and erosion control plan to the Director of the City of Banning Public Works Department, or designee, for review and approval prior to issuance of a grading permit for each individual development that would occur on the Development Site. The Applicant shall also submit erosion and sediment control plans annually to the Director of the City of Banning Public Works Department, or designee, for review and approval.

**RCM WQ-3** Prior to issuance of a grading permit, the Applicant shall submit a Final Water Quality Management Plan (WQMP) to the Director of the City of Banning Public Works Department or designee for review and approval. The Final WQMP shall specify: 1) the BMPs to be incorporated into the Development Project design to target pollutants of concern in runoff from the Development Site and from each proposed land use; 2) the target pollutant(s) to be captured from each building/land use and treated by each BMP; 3) the metric for ensuring the BMP is addressing the target pollutant(s) of concern; 4) the necessary operation and maintenance activity for each BMP; and 5) the specific action to be taken if it is determined that the BMP is not meeting its intended goal(s). The Final WQMP shall also incorporate the results of the Final Hydrology and Hydraulic Analyses to demonstrate that the detention facilities meet the hydromodification requirements of the Whitewater River Watershed MS4 Permit. The Director of the City of Banning Public Works Department, or designee, shall ensure that the BMPs specified in the Final WQMP are incorporated into the final Development Project design.

**Level of Significance After Mitigation:** Less Than Significant Impact.

#### 4.10.6.2 Groundwater

***Threshold 4.10-2: Would the Development Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?***

The Development Site is located within the boundary of the Coachella Valley Groundwater Basin, which is divided into four subbasins: the Indio Subbasin, Mission Creek Subbasin, San Gorgonio Pass Subbasin, and Desert Hot Springs Subbasin. The Development Site is located within the boundary of the San Gorgonio Pass Subbasin.

**Construction.** According to the Geologic and Geotechnical Review prepared for the Development Project,<sup>25</sup> no groundwater was encountered during on-site boring as deep as 50 feet; however, based on historical groundwater levels, groundwater is expected 100 feet below the ground surface of the Development Site. Furthermore, past on-site well monitoring (September 2003) recorded groundwater depths between 375 and 475 feet below ground surface. Eight percolation tests were

<sup>25</sup> Leighton and Associates, Inc. 2022. Geologic and Geotechnical Review, Sunset Crossroads Specific Plan, Approximately 533.8-Acre Site, City of Banning, California. June 23.



also performed at the Development Site to determine the infiltration rates of the on-site soils. The infiltration rate of the soils on the Development Site ranged from less than 0.01 inch per hour to 5.59 inches per hour. Based on the depth to groundwater and infiltration rates on the Development Site, dewatering activities are not anticipated to occur during Development Project construction activities. Therefore, construction impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be **less than significant**, and no mitigation is required.

**Operation.** Development of the Development Project would increase impervious surface area by approximately 333.2 acres, which would decrease on-site infiltration. However, landscaped slope, parking medians, open space, and infiltration basins would be developed as part of the Development Project design to provide areas where storm water runoff can collect and infiltrate. In the current condition, some infiltration occurs throughout the Development Site. However, due to the sloped topography of the Development Site, infiltration is limited compared to runoff through the drainages that cross the Development Site. Additionally, depth of the water table below the Development Site limits the amount of infiltration reaching the water table.

The City of Banning's potable and non-potable water is supplied through groundwater sources. Therefore, it is expected that the Development Project would rely on existing groundwater entitlements to serve the Development Project's water needs. A Water Supply Assessment was prepared for the Development Project<sup>26</sup> and determined that the City had sufficient water supply to serve the Development Project (see **Tables 4.19.I through 4.19.K**) and other ongoing and projected users from groundwater sources during normal, dry year, and multiple dry year conditions. Under these various conditions, with the Development Project, the Urban Water Management Plan (UWMP) still forecasts a water supply surplus through 2045. Therefore, sufficient water supplies from existing entitlements are available to serve the Development Project. Therefore, impacts related to depletion of groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be **less than significant**, and no mitigation would be required.

**Level of Significance Prior to Mitigation:** Less Than Significant Impact.

**Regulatory Compliance Measures and Mitigation Measures:** No Regulatory Compliance Measures or Mitigation Measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

---

<sup>26</sup> Romo Planning Group, Inc. 2022. Water Supply Assessment, Sunset Crossroads Specific Plan. July 22.



#### 4.10.6.3 Drainage Patterns

**Threshold 4.10-3: Would the Development Project substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on or off site; (ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site; (iii) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) Impede or redirect flood flows?**

The Development Site is currently undeveloped and is split up into two existing Drainage Areas. Drainage Area A represents the tributary area for Smith Creek, and Drainage Area B represents the tributary area for Pershing Creek. Storm water on the Development Site, under existing conditions, either flows into Smith Creek or Pershing Creek or infiltrates into the ground.

**(i) Construction.** During Development Project construction activities, soil would be exposed and disturbed, and drainage patterns would be temporarily altered during grading and other construction activities. Therefore, there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. The CGP that would be obtained by the Development Project Applicant requires preparation of an SWPPP (**RCM WQ-1**), and City of Banning Ordinance No. 1388 requires preparation of erosion and sediment control plans (**RCM WQ-2**). The SWPPP and erosion and sediment control plans would detail Erosion Control and Sediment Control BMPs to be implemented during Development Project construction to minimize erosion and retain sediment on site. With compliance with the requirements of the CGP and City Ordinance No. 1388 and with implementation of the construction BMPs, construction impacts related to on- or off-site erosion or siltation would be **less than significant**, and no mitigation is required.

**(i) Operation.** The Development Site is currently vacant and contains no impervious surface. The Development Project would add approximately 333.2 acres (62.4 percent) of impervious surface area, which is not prone to on-site erosion or siltation because there would be no exposed soil. The remaining approximately 200.6 acres (37.6 percent) of the Development Site would consist of pervious surfaces including landscaped areas, landscaped medians, and open space areas. These areas would include vegetation and landscaping that would stabilize the soil and promote infiltration and thereby minimize on-site erosion and siltation. Therefore, on-site erosion and siltation impacts would be minimal. However, the Development Project would increase impervious area on the Development Site by approximately 333.2 acres, which would result in a net increase in storm water runoff that can lead to downstream erosion in receiving waters. However, consistent with the requirements of the City of Banning's Municipal Code, the Development Project would construct 16 infiltration basins to retain 100 percent of the 100-year, 3-hour storm event. Refer to **Figure 3-10 in Chapter 3.0** of this EIR for locations of the infiltration basins on the Development Site. Collecting, retaining, and infiltrating storm water runoff would prevent sediment from being washed off site and impacting downstream receiving waters. With implementation of **RCM WQ-3**, which requires the Development Project to comply with the hydromodification requirements of the Whitewater River Watershed MS4 Permit and reduce storm water runoff from the Development Site, and **RCM WQ-4**, which requires the preparation of a Final Hydrology and Hydraulic Analyses that provides BMPs and LIDs that are



consistent with the requirements of the Riverside County Flood Control and Water Conservation District Hydrology Manual and the Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development, operation impacts related to substantial on- or off-site erosion or siltation would be ***less than significant***, and no mitigation is required.

**(i) Sediment Transport.** Flows within alluvial channels typically carry sediment, with concentrations that tend to increase with flow rate. The ability of flow to move sediment as it passes downstream is termed its sediment transport capacity. Hydraulic properties, particularly flow velocity, and bed material properties, such as median grain size, determine the sediment transport capacity of a given river reach. The capacity of a flow to transport particles of a given diameter is exponentially related to the flow velocity (above a given incipient or threshold velocity). In channels with similar bed material composition, higher velocities result in increased sediment transport capability. The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Plan Area<sup>27</sup> lies downstream of the Development Site. The CVMSHCP was designed, in part, to conserve species which depend specifically on the preservation of their respective sand dune or sand sheet habitats in CVMSHCP Conservation Area(s).

While the city is not located within the boundaries of the CVMSHCP or a party to its requirements, much of the sand for the sand dune and sand sheet habitats in the CVMSHCP is supplied by ephemeral streams flowing out of the San Bernardino Mountains through the city and then onward to the San Gorgonio River. Strong winds in the San Gorgonio Pass pick up sand deposited along Smith Creek and the San Gorgonio River during the winter and transport it into the CVMSHCP Conservation Areas located downwind. Features within upstream drainage areas, such as detention basins, and changes in stream flow related to flood control features have the potential to diminish the amount of sediment transported downstream which is then available for aeolian transport. Over the past three decades, the sand dune and sand sheet habitats being conserved in the CVMSHCP have been diminishing steadily with the development in upper watershed areas, including the City of Banning.

Lincoln Street development would include construction of a 10-foot-by-10-foot reinforced concrete box culvert across Pershing Creek, which flows in a northwest to southeast direction through the eastern portion of the Development Site (Planning Areas 13 and 14), and Smith Creek, on the western portion of the Development Site, which flows in a north-south direction through Planning Areas 17 and 18 in the locations depicted on **Figure 3.5**.

The proposed Lincoln Street crossings of Smith and Pershing Creeks have the potential to affect the pattern, volume, velocity, and/or sediment transport capacity within these drainages, which could

---

<sup>27</sup> The Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan (CVMSHCP) is a multi-agency conservation plan that provides for the long-term conservation of ecological diversity in the Coachella Valley region of southern California. The CVMSHCP includes an area of approximately 1.1 million acres and incorporates the watersheds within the jurisdictional boundaries of the Coachella Valley Association of Governments. The CVMSHCP established a Reserve System to ensure the conservation of 27 Covered Species (five plants, two insects, one fish, one amphibian, three reptiles, 11 birds, and four mammals), 23 natural communities, and 3 Essential Ecological Processes in perpetuity. As stated, the City is not a party to the CVMSHCP and the boundaries of the City are outside of the CVMSHCP area.





have a potentially significant impact on transport to CVMSHCP Conservation Areas. **Mitigation Measures HYD-1 and HYD-2** have been identified to address this potentially significant impact.

**(ii) and (iv) Construction.** Development Project construction would comply with the requirements of the CGP and would include the preparation and implementation of an SWPPP. The SWPPP would include construction BMPs to control and direct on-site surface runoff to ensure that storm water runoff from the construction site does not exceed the capacity of the storm water drainage systems. With implementation of BMPs, construction impacts related to a substantial increase in the rate or amount of surface runoff that would result in flooding would be *less than significant*, and no mitigation is required.

**(ii) and (iv) Operation.** Implementation of the Development Project would alter the on-site drainage pattern when compared to existing conditions. In the proposed condition, the Development Site would be split into 16 different drainage management areas (DMA-A through DMA-P). The Development Site's conceptual drainage plan consists of catch basins, storm drainpipes, reinforced concrete pipes (RCPs) ranging from 12 to 42 inches, and 16 on-site infiltration basins. Refer to **Figure 3-10 in Chapter 3.0** of this EIR for locations of the infiltration basins on the Development Site.

DMA A, B, C, D, F, I, J, K, L, and N each consists of a warehouse building footprint, access drives, paved parking areas, landscaped slopes, and landscaped medians. Runoff for these areas sheet flow until intercepted by catch basins where the captured runoff is conveyed to the infiltration basin with the same letter designation as the DMA. DMA E, G, H, and O each consists of access drives, paved parking areas, landscaped slopes, and landscaped medians. Runoff for these areas sheet flow until intercepted by catch basins where the captured runoff is conveyed to the infiltration basin with the same letter designation as the DMA. DMA M consists of commercial building footprints, access drives, paved parking areas, landscaped slopes, and landscaped medians. Runoff for these areas sheet flow until intercepted by catch basins where the captured runoff is conveyed to the infiltration basin M. DMA P consists of a park site and paved parking areas. Runoff for these areas sheet flow until intercepted by catch basins where the captured runoff is conveyed to the infiltration basin P.

**Table 4.10.E: Development Project Infiltration Basins** identifies the volume of water each DMA would generate upon Development Project completion, the size of each infiltration basin that would be developed as part of the Development Project's water quality management system, and the maximum peak flow rate for each of the DMAs during 100-year, 3-hour storm event conditions after implementation of each infiltration basin.

In summary, the infiltration basins will be distributed as follows across the Development Site:

- Infiltration Basins I and M in Planning Area 2
- Infiltration Basin J in Planning Area 3
- Infiltration Basins A through D in Planning Area 4
- Infiltration Basins F through H in Planning Area 5
- Infiltration Basin L in Planning Area 6
- Infiltration Basin K in Planning Area 7
- Infiltration Basin E in Planning Area 8
- Infiltration Basin N in Planning Area 10
- Infiltration Basin O in Planning Area 9
- Infiltration Basin P in Planning Area 11



**Table 4.10.E: Development Project Infiltration Basins**

DMA/Infiltration Basin	100-Year, 3-Hour Flood Volume (ft <sup>3</sup> )	Proposed Infiltration Basin Volume (ft <sup>3</sup> )	Maximum Basin Depth (feet)	Basin Bottom Elevation (feet)	100-Year, 3-Hour Maximum Peak Flow Rate (cfs)
A	191,340	263,102	7	2,410	0
B	298,654	616,810	5	2,447	0
C	610,875	818,928	7	2,419	0
D	699,723	813,701	6	2,423	0
E	80,077	118,919	6	2,458	0
F	316,048	439,085	6	2,459	0
G	76,388	131,551	6	2,460	0
H	14,039	104,544	5	2,455	0
I	113,906	164,657	5	2,436	0
J	119,538	309,712	5	2,410	0
K	133,929	286,625	5	2,486.5	0
L	211,133	520,542	5	2,471	0
M	445,382	605,048	7	2,450	0
N	102,363	112,032	5	2,435	0
O	9,122	10,344	5	2,465	0
P	39,989	40,547	6	2,482	0

Source: Proactive Engineering West, Sunset Crossing Preliminary Hydrology and Hydraulics Study, page 5, June 2023.

ft<sup>3</sup> = cubic feet

cfs = cubic feet per second

DMA = drainage management area

The drainage system for the Development Site would route the storm water runoff from the on-site impervious surfaces to the proposed infiltration basins. Each of the basins would provide storm water treatment and peak flow mitigation for their respective downstream receiving waters. The Development Project would comply with the City of Banning Ordinance No. 1415 Stormwater Code in requiring 100 percent retention of storm water from a 100-year, 3-hour storm event through the development of the infiltration basins at required sizes as identified above in **Table 4.10.E**. Therefore, Development Project operation would not result in off-site flooding due to on-site drainage pattern improvements.

As specified in **RCM WQ-4**, a Final Hydrology Study would be required to be prepared and submitted to the City of Banning and Riverside County Flood Control and Water Conservation District for approval. The Final Hydrology Study shall confirm that the proposed drainage system of the Development Project would retain the 100-year, 3-hour storm event and would meet the hydromodification requirements of the Whitewater River Watershed MS4 Permit. With implementation of RCM WQ-3 and RCM WQ-4, impacts related to an increase in the rate or amount of surface runoff in a manner that would result in on- or off-site flooding would be **less than significant**, and no mitigation is required.

**(iii) Construction.** Construction of the Development Project has the potential to introduce pollutants to existing storm water that percolates into the ground or that flows into Smith and/or Pershing Creek on the Development Site, due to erosion, siltation, and accidental spills. However, as specified in **RCM WQ-1** and **RCM WQ-2**, the CGP requires preparation of an SWPPP, and the City of Banning requires



preparation of erosion and sediment control plans. Implementation of construction BMPs target pollutants of concern in runoff from the Development Site, and erosion and sediment control measures would prevent substantial additional sources of polluted runoff being discharged into Smith and/or Pershing Creeks. The SWPPP would include construction BMPs to control and direct surface runoff on the Development Site and would include detention measures, if required, to ensure that storm water runoff from the construction activities does not exceed the capacity of the storm water drainage systems. For these reasons, construction impacts related to creation or contribution of runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff would be **less than significant**, and no mitigation is required.

**(iii) Operation.** Storm water will surface flow to catch basins and be directed to infiltration basins, which would be appropriately sized to retain and infiltrate 100 percent of the 100-year, 3-hour storm event so that excess runoff does not exceed the capacity of the downstream receiving waters. Additionally, the Development Project would be required to implement **RCM WQ-3**, which requires implementation of operational BMPs that target and reduce pollutants of concern in storm water runoff. Therefore, operational impacts related to creation or contribution of storm water runoff that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff would be **less than significant**, and no mitigation is required.

**Level of Significance Prior to Mitigation:** For impacts not related to sediment transport, Less Than Significant Impact. For impacts related to sediment transport, impacts would be potentially significant.

**Regulatory Compliance Measures and Mitigation Measures:** The following Regulatory Compliance Measure would be implemented as part of the Development Project.

**RCM WQ-4** Prior to issuance of a grading permit, the Applicant shall submit a Final Hydrology and Hydraulic Analyses to the Director of the City of Banning Public Works Department, or designee, and the Riverside County Flood Control and Water Conservation District for review and approval. The Final Hydrology and Hydraulic Analyses shall be prepared consistent with the requirements of the *Riverside County Flood Control and Water Conservation District Hydrology Manual* and the *Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development*, and Phase I MS4 Permit R7-2013-0011. The Director of the City of Banning Public Works Department, or designee, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulic Analyses are incorporated into the final Development Project design.

To address the potentially sediment transport-related impact at the proposed Lincoln Street crossings, the following Mitigation Measures have been identified:

**MM HYD-1** Prior to the issuance of a grading permit(s) for roadway work in or adjacent to the proposed Lincoln Street creek crossings, the Applicant shall submit a sediment transport and scour analysis to the City for review and approval. As appropriate,



the submittal may include equivalent detail on alternative proposals including construction of a bridge or reinforced concrete box culvert for the proposed creek crossings. The sediment transport and scour analysis shall identify pre-project conditions associated with channel morphology, hydrologic flow patterns, existing sedimentation and scouring, sediment size, and depth at each crossing. These same attributes will be analyzed based on post-project conditions to determine if there are any substantial changes to the existing conditions. The purpose of the sediment transport and scour analysis is to compare the functions and values of the drainage features in the pre- and post-project conditions and to ensure that following construction of the Lincoln Street crossings, the functions and values of the drainages with respect to downstream sedimentation are consistent with the long-term preservation of sand dune and sand sheet habitat within the Coachella Valley under the CVMSHCP.

- MM HYD-2** Prior to City approval of roadway improvement plans for Lincoln Street, including the proposed Lincoln Street crossings, the Applicant shall submit evidence to the City that the Lincoln Street crossings of Pershing and Smith Creeks have been designed to avoid impacts to or, if impacted, to maintain the development transport capacity identified in the approved sediment transport and scour analysis required under **Mitigation Measure HYD-1**.

**Level of Significance After Mitigation:** Less Than Significant Impact.

#### 4.10.6.4 Flood, Tsunami, Seiche Zones

**Threshold 4.10-4: Would the Development Project result in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?**

**Less Than Significant Impact.** The Development Site is approximately 55 miles northeast of the Pacific Ocean. Based on the distance from the Pacific Ocean, the Development Site is not located in a tsunami hazard zone and therefore would not be susceptible to impacts associated with a tsunami.

Seiches are waves that are created in an enclosed body of water such as a bay, lake, or harbor and go up and down or oscillate and do not progress forward like standard ocean waves. Seiches are also referred to as standing waves and are triggered by strong winds, changes in atmospheric pressure, earthquakes, tsunamis, or tidal influence. The height and frequency of seiches are determined by the strength of the triggering factor(s) and the size of the basin. The Development Site is not adjacent to or near any closed bodies of water; therefore, the Development Site would not be susceptible to impacts associated with a seiche. It should be noted that there is a small pond on the Sun Lakes Country Club and Golf Course, approximately 0.33 mile from the nearest point of the Development Site boundary; however, the distance between this pond and the size of this pond would preclude the Development Site from being inundated if a seiche were to occur on this water body.



Smith Creek and Pershing Creek, located on the Development Site, are in Flood Hazard Zone A.<sup>28</sup> Flood Hazard Zone A areas are subject to inundation by the 1-percent-annual-chance flood event. The remaining portions of the Development Site are not located within a floodplain. The Development Project would not include any improvements to the banks or channel of Smith Creek or Pershing Creek as they bisect the Development Site. During construction, BMPs would be implemented to ensure that during a rain event, pollutants would be retained on site and be prevented from reaching downstream receiving waters. During operations, the Development Project would include 16 infiltration basins sized adequately to retain storm water flows from a 100-year, 3-hour storm, thereby reducing the chance of flooding that could release pollutants to downstream receiving waters. Based on Development Project design and the distance the Development Site is away from the Pacific Ocean and closed bodies of water, implementation of the Development Project would not result in a flood hazard, tsunami, or seiche, risking release of pollutants due to Development Site inundation. Impacts would be **less than significant**, and no mitigation measures are required.

**Level of Significance Prior to Mitigation:** Less Than Significant Impact.

**Regulatory Compliance Measures and Mitigation Measures:** No Regulatory Compliance Measures or Mitigation Measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

#### 4.10.6.5 Conflict with Water Quality Control Plan or Groundwater Management Plan

**Threshold 4.10-5: Would the Development Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less Than Significant Impact.** The Development Site is within the jurisdiction of the Colorado River RWQCB. The Colorado River RWQCB adopted a Basin Plan that designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. The Development Project would comply with existing Whitewater River Watershed MS4 requirements and would implement construction and operational BMPs to reduce pollutants of concern in storm water runoff (**RCM WQ-1**, **RCM WQ-2**, and **RCM WQ-3**). Compliance with these regulatory requirements would ensure that the Development Project would not degrade or alter water quality in a manner that would cause the receiving waters to exceed the water quality objectives, or impair the beneficial use of receiving waters. As such, the Development Project would not result in water quality impacts that would conflict with the Colorado River RWQCB Water Quality Control Plan for the Colorado River Basin Region (Basin Plan). Construction and operational impacts related to a conflict with the Basin Plan would be **less than significant**, and no mitigation is required.

The Development Project would increase water use over the previous land uses on the Development Site which were accounted for in the UWMP, and which would be obtained from groundwater.

<sup>28</sup> Federal Emergency Management Agency, Flood Insurance Rate Map (FIRM), Map No. 06065C0816G. Website: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-117.04267821289032,33.8542142909214,-116.71034178710954,33.99665275843608> (accessed July 19, 2021).



However, as previously discussed, the Water Supply Assessment<sup>29</sup> completed for the Development Project indicates that there are adequate water supplies from groundwater sources during normal, dry year, and multiple dry year demands to serve the Development Project's needs through 2045. Additionally, the City of Banning Public Works Department, which supplies municipal water, ensures that sufficient water supplies (from non-groundwater sources) are available so that groundwater overdraft<sup>30</sup> does not occur.<sup>31</sup> The Development Project would not require dewatering activities during construction as construction depth would not reach the current groundwater level underlying the Development Site. As previously discussed, the additional impervious surface areas that would result from Development Project construction would not substantially decrease infiltration compared to existing conditions due to the incorporation of landscaped slope, parking medians, open space, and infiltration basins. For these reasons, the Development Project would not conflict with or obstruct the implementation of a sustainable groundwater management plan. Therefore, construction and operational impacts related to conflict with, or obstruction of water quality control plans or sustainable groundwater management plans would be ***less than significant***, and no mitigation is required.

**Level of Significance Prior to Mitigation:** Less Than Significant Impact.

**Regulatory Compliance Measures and Mitigation Measures:** No Regulatory Compliance Measures or Mitigation Measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

---

<sup>29</sup> Romo Planning Group, Inc. 2022. Water Supply Assessment, Sunset Crossroads Specific Plan. July 22.

<sup>30</sup> According to the Banning General Plan, in order to avoid an overdraft condition, a maximum perennial yield that ranges from 6,500 to 10,400 acre-feet per year was calculated for the existing water sources of the City. The maximum perennial yield is defined as the maximum amount of groundwater that can be extracted on an average annual basis without causing environmental damage or adverse impacts to the groundwater supply.

<sup>31</sup> City of Banning. 2006. City of Banning General Plan Chapter IV. Environmental Resources Element, page IV-9. January 31.