

Permanente Creek Flood Protection Project

Sixth Addendum to the Final Subsequent Environmental Impact Report State Clearinghouse No. 2007052074

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1. Background

The Santa Clara Valley Water District (Valley Water) has proposed the Hale Creek Enhancement Pilot Project to convert 650 feet of an existing Hale Creek concrete channel with an earthen, vegetated bottom. The Valley Water Board of Directors approved a planning and design budget for the Hale Creek Enhancement Pilot Project as part of its Fiscal Year 2016-20 Five-Year Capital Improvement Program (District Board Resolution No. 15-30, May 12, 2015). Valley Water considers the Hale Creek Enhancement Pilot Project to be a separate project from an earlier larger project that included the same creek, the Permanente Creek Flood Protection Project.

Because a prior EIR was prepared for the larger Permanent Creek Project, to provide efficient CEQA review, CEQA case law¹ authorizes preparation of this Addendum to determine whether a Subsequent or Supplemental EIR would be required to address proposed modifications to improvements for the affected 650-foot section of Hale Creek. To provide context, the history of the Permanente Creek Project and EIR is discussed below.

Valley Water, lead agency for the Permanente Creek Flood Protection Project (Project), is proposing improvements along the Permanente Creek corridor to provide 1% flood protection for residents, businesses, and infrastructure within the cities of Cupertino, Los Altos, and Mountain View. The Project includes construction of a 15-acre flood detention basin at Rancho San Antonio County Park, a 5-acre flood detention basin at McKelvey Park, wider and deeper concrete channels in select portions of Permanente and Hale Creeks, a floodwall along Permanente Creek from United States Highway 101 (US 101) to Charleston Road, an embankment along Permanente Creek from Charleston Road to Amphitheatre Parkway, and a raised levee from Amphitheatre Parkway to Shoreline Golf Course. The proposed Project elements were included in a Final Environmental Impact Report (EIR), certified in June 2010 (Santa Clara Valley Water District 2010).

After certification of the June 2010 EIR and Valley Water approval of the Project, it was determined during design development that modifications would be necessary. A Subsequent EIR was prepared to analyze the environmental effects of the modified Project. The Final Subsequent EIR was certified in November 2012, hereby referred to as the “2012 EIR” (Santa Clara Valley Water District 2012b).

In May 2013, a first Addendum was prepared to evaluate minor changes and additions to the Project design (SCVWD 2013). Modifications included changes in playing field orientation, acquisition and incorporation of a residential property adjacent to the proposed McKelvey Park Detention Facility, and revised tree impact estimates.

In September 2016, a second Addendum was prepared to evaluate minor changes and additions to the Project design and amend the 2012 EIR (SCVWD 2016). Modifications included adjustments to construction and mitigation at the Rancho San Antonio County Park Flood Detention Facility

In May 2017, a third Addendum was prepared to address changes to the proposed activities associated with the improvements along Permanente Creek downstream of US 101 and amend the 2012 EIR (SCVWD 2017). This third Addendum documented proposed minor changes to

¹ *Friends of San Mateo Gardens v. San Mateo County Community College District* (2016) 1 Cal. 5th 937.

the Project design, provided updated information about construction, and evaluated the potential environmental impacts of those changes.

In June 2018, a fourth Addendum was prepared to evaluate a minor change to the Project design and amend the 2012 EIR (SCVWD 2018). The modification involved raising the existing floodwall on the eastern side of Permanente Creek between US 101 and Charleston Road, built by the City of Mountain View in 2011.

In February 2020, a fifth Addendum was prepared to address a minor change to the Project design at the McKelvey Pak Detention Facility and amend the 2012 EIR (SCVWD 2020). The change involved addition of an approximately 200-foot long pedestrian/bicycle pathway within McKelvey Park.

This document is a sixth Addendum to Valley Water's 2012 EIR. It includes analysis of the environmental impacts associated with the proposed design changes for a 650-foot segment of Hale Creek. The segment would be widened and deepened consistent with the 2012 EIR, but instead of a concrete-lined channel as originally designed, an earthen, vegetated channel is proposed in order to enhance habitat value and rehabilitate creek geomorphology. Details about the environmental setting can be found in the 2012 EIR.

2. CEQA Considerations

When there are changes to a project and the lead agency will be taking discretionary action, the California Environmental Quality Act (CEQA) (Public Resources Code §21000 *et seq.* and 14 California Code of Regulations §15000 *et seq.*) provides various levels of documentation to indicate that the lead agency has adequately considered the changes in making its decision. Under CEQA Guidelines § 15162(a), the appropriate level of review is based, among other factors, on whether the changes to the project or project circumstances, or new information of substantial importance that was not known at the time of approval of the original project, create new significant effects or result in a substantial increase in the severity of previously identified significant effects.

CEQA Guidelines §15164(a) provides for the use of an Addendum to document the basis for a lead agency's decision not to require a Subsequent EIR for a project that is already evaluated under a previously certified EIR. The lead agency's decision to use an Addendum must be supported by substantial evidence that the conditions that would trigger preparation of a Subsequent EIR, as provided in CEQA Guidelines §15162, are not present.

An Addendum need not be circulated for public review, but CEQA requires the decision-making body to consider the Addendum, together with the certified 2012 EIR, prior to making a decision on approval of the Hale Creek Enhancement Pilot Project.

3. Description of Proposed Changes to the Project

The 2012 EIR described channel improvements on Hale Creek that would involve replacing the existing concrete channel, from the confluence of Permanente Creek upstream to Rosita Avenue, with a vertical-walled concrete channel that would be wider and deeper. While Valley Water intends to maintain the channel enlargement element, the Project would be modified to enhance the channel with natural substrates and vegetation (rather than a concrete bottom) in an approximately 650-foot long reach (herein referred to as the "enhancement area") located

between North Sunshine Drive and Marilyn Drive in Mountain View and Los Altos (**Figure 1**). The purpose of this change is to restore geomorphic and habitat functions to the reach while providing improved flood protection. The details of the work in this area are included below.

The 2012 EIR did not include the details of the originally proposed channel improvements on Hale Creek relative to site preparation, access, and staging; dewatering; and channel construction methods. Information on these elements for the proposed Project changes are included here to support the environmental analysis in Section 4. The Project changes outlined in this Addendum do not require modification of existing Mitigation Measures, adopted by Valley Water's Board.

Site Preparation, Access, and Staging

The 2012 EIR stated that access for channel improvements would occur via easements from City and private entities, which is consistent with the proposed Project changes. The enhancement area where Project changes would occur is bound by Marilyn Drive on the north and Sunshine Drive on the south. The segment of Hale Creek to be enhanced is bordered by paved asphaltic concrete parking lots on both sides (owned by the Seventh Day Adventist Church), with a total of seven residential properties located to the north and south of the parking lots. The work area would be accessed using existing access ramps at Marilyn Drive and Sunshine Drive (for dewatering, construction personnel, and hand tools only), as well as from the parking lots in the middle section of the enhancement area. Temporary chain-link fencing with privacy screens would be installed around the enhancement area perimeter to secure the work area from public access and maintain privacy in the residents' backyards. While the 2012 EIR envisioned a total of 30 trees being removed along both Permanente and Hale Creek (including "minimal" removal on Hale Creek), the Project changes would result in removal of a total of 36 landscape trees and ornamental shrubs (non-riparian² and all but three are non-native) located along the concrete channel. The trees would be removed to accommodate channel widening and tree protection zones would be established around remaining trees. An approximately 8,100 square foot staging area would be established in the church parking lot adjacent to the west bank of the creek. This staging area would occur up to 60 feet outside the Project area established in Figure 2-2d of the 2012 EIR.

² The 2012 EIR did not consider trees along concrete-lined channels to be riparian. The vegetation that borders and occasionally overhangs the channel in the enhancement area is not considered riparian as it is residential landscaping that is not hydrologically connected to Hale Creek. Creek flows do not influence the vegetation or its growing substrate; the concrete channel precludes subsurface flow into the rooting zone of the vegetation; and most of the areas where vegetation is growing drain away from the channel. The vegetation is not characteristic of native riparian species and does not stabilize the creek banks or help filter runoff into the creek.

Dewatering

The 2012 EIR did not describe dewatering methods for the channel improvement work, though dewatering was referenced in Project BMPs. While the work will be constructed during the dry season and the creek is expected to be dry during construction of the Project changes, a dewatering system would be installed to ensure the enhancement area is isolated from creek flows, should any unanticipated flows occur. To protect the work area from flows, a cofferdam would be installed just upstream (south) of Sunshine Drive and flows would be diverted to approximately 750 linear feet downstream of the cofferdam, just downstream of the work area. The cofferdam would either be constructed with gravel bags or an inflatable dam. Pumps would be installed on the upstream side of the cofferdam where water would back up and to be pumped through appropriately sized pipes around the work area. BMPs described in the 2012 EIR and measures included in the Projects permits (e.g., turbidity monitoring, non-erosive discharge, etc.) would protect water quality during dewatering.

Channel Construction

After the dewatering system has been installed, existing fences would be removed on both sides of the creek to create adequate space for the work area. Rather than the concrete walls described in the 2012 EIR, under the proposed Project changes, steel sheet piles would be installed using a hydraulic piling system that reduces noise and vibration by pressing the piles into the ground. The sheet piles would be installed roughly 1-foot inside the Valley Water right-of-way to form the retaining walls of the new channel. Up to five feet of temporary construction easements would be required on both of sides of the creek to operate the equipment.

Of the approximately 1,300-linear feet of pile walls to be installed (both sides of the 650-linear foot creek segment), site constraints such as overhead electric lines preclude the use of the hydraulic piling system along approximately 515 linear feet. In these areas, steel soldier piles (with precast concrete lagging spanning the piles) would be installed. Thirty-inch diameter holes for the steel soldier piles would be drilled adjacent to the right-of-way line and spaced approximately 8 feet apart. After the steel soldier piles are placed in the holes, the holes would be backfilled with concrete to the new bottom of channel elevation. The steel soldier pile walls would either be spliced on-site or installed as one piece into the drilled hole, depending on vertical clearance and other site conditions. As the existing channel is excavated using a top-down construction method, precast concrete lagging would be placed between the soldier piles from the top of the creek banks to retain the exposed sides.

Due to overhead utility constraints, two generators would be placed at the north end of the church parking lot to continuously power the four single-family residential homes for an up to eight-week period. One 100-kilowatt generator would be located on the east side of the creek and would power three homes; one 20-kilowatt generator would be located on the west side of the creek and power one home. The generators would be surrounded by a fence lined with noise reduction panels in an up to 12-foot by 24-foot area.

After retaining walls are constructed, the work crew would excavate the concrete channel to the appropriate grade using concrete saws, jack hammers, backhoes, and haul trucks. The enhanced earthen-bottom channel would be up to 4 feet deeper and/or 16 feet wider than the existing concrete channel, depending on location. All removed material would be loaded directly into dump trucks and hauled away for off-site disposal.

With the concrete channel removed and the creek bed excavated to the designed grade, an earthen-bottomed and vegetated channel would be constructed in the creek. This area would include a 9-foot wide and 2-foot deep trapezoidal bankfull channel³ with natural riffles (Newbury riffles) that are approximately 10-feet long and 9-feet wide, located after each turn of the sinusoidal bankfull channel. The bankfull channel would meander from one bank to the other based on a sinuosity factor of 1.25 to facilitate development of natural geomorphology. The riffles would be composed of a mix of small rocks (up to 12-inches diameter) to simulate natural conditions. Outside of the bankfull channel, the flood benches would slope gently up to the retaining walls and would be planted with appropriate native vegetation including a mixture of herbaceous and shrub species, depending on the planting zone, and two valley oak (*Quercus lobata*) trees.

The most upstream 15 feet of the enhancement area would consist of ¼-ton rip-rap to reduce flow velocity and prevent scouring given the initial steep slopes at the transition zone. The bottom of the new channel would slope down at 9.6% over the first 13 feet, then flatten for the remainder of the enhancement area. For the most downstream 150 feet of enhancement area, the channel bottom would consist of a layer of Backing No. 1 rock (approximately 12-inch diameter rock) until it conforms to the invert at Marilyn Drive. Placing rock in this area is intended to prevent disturbance from equipment during on-going operations and maintenance.

Concurrent with the retaining wall installation, the existing 15-foot-wide by 30-foot-long private pedestrian/vehicular bridge in the church parking lot would be removed and replaced with a new prefabricated single lane bridge adjacent to the existing bridge location. Access across the creek to the back parking lot of the church would be maintained at all times; therefore, the construction of the new bridge and removal of the existing bridge would be staged. The existing concrete abutments would be demolished and removed using concrete saws, jack hammers, and backhoes. Removed material would be loaded directly to dump trucks and hauled away for off-site disposal. Work crews would construct new abutments and the new prefabricated bridge would be secured on top of the new abutments.

Planting Plan

The 2012 EIR did not include plants in the channel, as the channel was intended to retain a concrete bottom. The Project changes propose installing native vegetation on natural substrates in the channel bottom to restore the creek to a natural habitat with improved environmental functions (e.g., wildlife and aquatic invertebrate habitat, water quality protection, groundwater recharge, etc.). The planting plan for the proposed Project changes was developed to maximize the potential for successful wetland habitat creation while maintaining the necessary flow conveyance capacity of the channel and minimizing maintenance. The planting plan is based on the creation of wetland habitat on the floodplain benches adjacent to the restored channel. These areas would be seeded with native herbaceous species—mugwort (*Artemisia douglasiana*), tall flatsedge (*Cyperus eragrostis*), beardless wildrye (*Elymus triticoides*), western goldenrod (*Euthamia occidentalis*), meadow barley (*Hordeum brachyantherum*), Santa Barbara sedge (*Carex barbarae*), and Pacific aster (*Symphyotrichum chilense*)—with alternating shrub benches planted with linear, relatively flexible stemmed mulefat (*Baccharis salicifolia*) and dogwood species (*Cornus glabrata* and *C. sericea*). On most benches the bankfull channel

³ The bankfull channel is the portion of the channel that generally supports the flows which mobilize the most sediment, typically a 1- to 2-year flow event. Floodplain benches occur outside the bankfull channel.

margin would be planted with streamside spreading rush (*Juncus patens*). On two of the herbaceous wetland benches, where the channel is widest, a single valley oak (*Quercus lobata*) tree would be planted. Additional trees would not be planted due to the need to maintain flow conveyance and to minimize maintenance within the sensitive channel area. The species and planting zones were selected based on vegetation conditions along Hale Creek upstream of the concrete sections, input from the San Francisco Bay Regional Water Quality Control Board, and to achieve key planting plan objectives.

Site Restoration

Upon completion of construction of the enhanced channel, public safety and access features would be installed in the enhancement area, consistent with the existing condition. New fences and railings would be installed near the top of the retaining walls, replacing fencing/railings removed during construction. The existing concrete ramp at Marilyn Drive would be replaced with a new concrete ramp. As described in the 2012 EIR, post-construction storm water best management practices (BMPs) would be installed in compliance with the approved stormwater pollution prevention plan. Construction BMPs would be removed and all construction material would be removed from site.

Equipment

The following equipment would be utilized during construction of the Project changes: auger drill rig, backhoe, skid-steer loader, concrete pump, hydraulic piling system, crane, concrete saws, jackhammers, dump trucks, pick-up trucks, and generators. Aside from the hydraulic piling system and generators, this equipment was envisioned for use in the Project described in the 2012 EIR.

Schedule

The enhancement work is proposed to be constructed during the dry season from April to November. Work activities in the creek would be limited to April 15 to October 15. Work would occur on non-holiday weekdays from 8:00 AM to 5:30PM.

Operations and Maintenance

Following construction of the enhanced channel, Valley Water would monitor the enhancement area to ensure the objectives of the enhancement are being met. Should installed vegetation fail to establish, Valley Water could elect to replace the plantings, including with different species suitable for the habitat, or install temporary irrigation to help plantings establish. Operations and maintenance (O&M) activities for the enhanced channel would be similar to the O&M activities proposed in the 2012 EIR, such as debris removal and maintenance of channel infrastructure; however, due to the nature of the proposed Project changes, minor vegetation management may be required to ensure the channel maintains its flood protection capacity. Post-Project maintenance within Hale Creek would be conducted as part of Valley Water's existing Stream Maintenance Program (SMP). The impacts of these maintenance activities were evaluated in the SMP EIR and subsequent addenda (Santa Clara Valley Water District 2012a). The extent and nature of post-Project activities under the SMP would be similar to what is currently taking place, with the exception of additional vegetation management, which is within the scope of activities covered by the SMP. No new or additional O&M activities beyond the scope of the SMP and the SMP EIR would be required due to the proposed Project modifications. Therefore, O&M activities are not analyzed in this addendum.

Figure 1. Enhancement Area Overview



4. Environmental Analysis

The following analysis summarizes changes in the Project or the surrounding environment that are relevant to the assessment of environmental impacts. It discusses the impact of the proposed 650-foot long channel enhancement relative to the impacts identified in the 2012 EIR and subsequent Addendums. These prior evaluations considered enlarging the channel within the footprint of the proposed Project changes; therefore, this analysis primarily considers changes associated with the enhancement actions: restoration of a natural streambed, Newbury riffles, and vegetated floodplain benches. Only those resource areas that have the potential to be affected by Project changes are discussed below. The proposed changes to the Project are not anticipated to affect aesthetics, agricultural resources, cultural resources, geology and soils, energy, land use and planning, population and housing, public services, hazardous materials and public health, utilities, mineral resources, tribal cultural resources, wildfire, or growth inducement and related impacts. These resource analyses remain unchanged from the 2012 EIR and Addendums.

Potential impacts to air quality, biological resources, greenhouse gas emissions, hydrology and water quality, noise and vibration, and transportation and traffic have been identified. Based on these analyses, implementation of the proposed Project modifications would not create new significant environmental impacts or substantially increase the severity of significant impacts beyond those identified in the 2012 EIR, as discussed in detail below.

AIR QUALITY

The 2012 EIR determined that the Hale Creek channel improvements, when not occurring concurrent with other Project elements (i.e., McKelvey Park Flood Detention Facility), would result in less than significant impacts to air quality with applicable mitigation applied. The 2012 EIR found that the Project could exceed the daily construction emissions threshold for significance for nitrous oxide (NO_x) in years when the Hale Creek Channel Improvements would overlap with construction of the McKelvey Park Flood Detention Facility. However, the Hale Creek channel improvements (including the enhancement area) would no longer overlap with construction of the McKelvey Park Flood Detention Facility, as that project element was completed in February 2020.

Table 1 details the anticipated daily emissions for the Hale Creek channel improvements work, as described in the 2012 EIR. The daily emissions from the Hale Creek channel improvements work alone would be well below the thresholds for significance for criteria air pollutants (aside from fugitive dust, which does not have established thresholds).⁴ Modification of the Project to include a natural/vegetated bottom rather than a concrete bottom in a 650-foot long section of the creek would not increase the construction intensity or materially change the construction methods/equipment, and therefore the daily emissions are not expected to increase such that a significant impact would occur. The 2012 EIR estimated construction of the Hale Creek channel improvements would generate a maximum of approximately 30 vehicle roundtrips⁵ per day. With the proposed modifications, work in the enhancement area would require a similar amount of material to be hauled on-site/off-site, as the channel geometry would be the same as in the

⁴ Thresholds of significance are based on Bay Area Air Quality Management District guidelines.

⁵ Roundtrips are defined as vehicle travel from the place of origin to the Project site and back to the place of origin following the same route.

2012 EIR (with the exception that a small amount of rock for portions of the channel bottom would be imported, rather than concrete). The number of workers and deliveries to support the enhancement work is also expected to remain the same or similar as the Project evaluated in the 2012 EIR. As such, the total number of vehicle roundtrips per day for the channel enhancement is not expected to exceed the 30 roundtrips per day evaluated in the 2012 EIR, thus vehicle emissions would remain unchanged. Furthermore, as with the adopted Project, implementation of Mitigation Measure AQ2.1 (Implement Tailpipe Emissions Reductions for Project) would reduce NO_x and particulate matter (PM) emissions such that they remain less than significant.

The proposed modifications would require use of two diesel generators (one 100-kilowatt generator and one 20-kilowatt generator) to power four residential properties for a period of up to eight weeks, though closer to four weeks operation is expected. **Table 1** from the 2012 EIR has been updated to include the operation of these generators (24 hours per day, seven days per week for eight weeks). With use of these generators, the construction emissions increase is small to negligible, and air quality impacts would remain less than significant.

Table 1. Construction Emissions from the Hale Creek Channel Improvements

Mitigated/Unmitigated	Construction Emissions (pounds/day)						
	ROGs ^a	NO _x ^a	CO	PM10 Fugitive Dust	PM10 Exhaust	PM2.5 Fugitive Dust	PM2.5 Exhaust
Unmitigated	2.2	21.2	10.4	0.5	0.9	0.1	0.8
Mitigated	2.2	18.1	10.4	0.3	0.6	0.1	0.5
Mitigated Emissions with Use of Generators Included	2.6	21.9	14.8	0.4	0.8	0.1	0.7
Significance Thresholds	54	54	N/A^b	BMPs	82	BMPs	54
Exceed Thresholds?	No	No	-	-	No	-	No

^a Reactive organic gases (ROG) and NO_x are ozone precursors.

^b The Bay Area Air Quality Management District does not establish significance thresholds for CO emissions during construction.

Similar to the adopted Project, the modified Project would result in generation of fugitive dust during demolition, excavation, and grading activities. Fugitive dust emissions are not expected materially to increase under the modified Project. While there are no established thresholds of significance for fugitive dust, Mitigation Measure AQ2.2 (Implement Bay Area Air Quality Management District [BAAQMD] Basic Construction Mitigation Measures to Reduce Construction-Related Dust) would be applied to ensure impacts from dust remain less than significant. Furthermore, Mitigation Measures NV1.1 (Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents) and NV1.3 (Designate Noise and Air Quality Disturbance Coordinator to Address Resident Concerns) would provide mechanisms for addressing concerns from nearby residents. Therefore, the modified Project would not result in any new significant air quality impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

BIOLOGICAL RESOURCES

Impacts on special-status species from the channel improvement work identified in the 2012 EIR were limited to special-status bats, which could be impacted if roosting habitat was

determined to be present. Based on an assessment by Valley Water biologists, the enhancement area does not support bat roosting and therefore impacts to special -status bats would not occur from proposed Project changes. No other special-status species are expected to occur in the enhancement area; therefore, there would be no impact on special-status species from the Project modifications. Mitigation Measure BIO 5.1 (Establish Buffer Zones for Nesting Raptors and Migratory Birds) would still be applied with the proposed modifications, and the impact on nesting birds would remain less than significant with mitigation.

The Project modifications would enhance and expand the instream habitat in Hale Creek, by changing the bottom from concrete to natural substrates/vegetation and widening the channel, resulting in over 0.1 acre of new channel area (waters of the United States/State). As with the Project evaluated in the 2012 EIR, there would be a temporary degradation of instream habitat during construction, but this impact would remain less than significant. However, the Project modifications would result in long-term beneficial impacts to the habitat in the enhancement area, as there would be an expansion of the instream habitat, creek habitat functions and services would be improved, and an ecosystem that promotes riparian diversity would be established (i.e., the Project objectives).

The Project modifications would result in removal of approximately 36 landscape trees and ornamental shrubs along the channel and in residential back yards, including an estimated 12 trees protected under local tree ordinances. Given these trees are not considered riparian (see rationale in Section 3, above), do not constitute a sensitive natural community, and do not support special-status species, impacts to this landscape/ornamental vegetation is only considered relative to the impact on local tree ordinances. The 2012 EIR estimated a total of 131 tree removals, with 30 of those trees occurring along the Permanente and Hale Creek channel improvements (including “minimal” removal on Hale Creek). With application of Mitigation Measure BIO 15.1 (Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations), protected trees would be compensated at a ratio of 1:1, or as determined by the City of Mountain View or Los Altos, with minimum 24-inch box stock. Newly planted trees would be monitored for a minimum of 3 years to ensure survival. Furthermore, Mitigation Measure BIO 15.2 (Protect Remaining Trees from Construction Impacts) would be implemented to protect any trees that are not identified for removal from incidental damage and impacts from the loss or damage of protected trees would remain less than significant with mitigation.

Therefore, the modified Project would not result in any new significant biological impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

GREENHOUSE GAS EMISSIONS

As discussed in the 2012 EIR, greenhouse gases (GHGs) that contribute to climate change have global impacts and are therefore considered cumulative in nature. The BAAQMD does not recommend a GHG emissions threshold for construction-related emissions. Rather, it recommends incorporation of BMPs to reduce GHG emissions during construction. Accordingly, the project’s construction emissions were not found to result in a significant and unavoidable cumulative impact with implementation of Mitigation Measure CU2 (Implement BMPs to Reduce GHG Emissions), consistent with BAAQMD guidance.

As discussed in the Air Quality section, construction haul trips would not increase from what was evaluated in the 2012 EIR. The use of two generators for eight weeks to power four single-family residential homes would not contribute significant GHG emissions during operation, and the GHG emissions that did occur would be short in duration. Therefore, emissions relative to what was analyzed in the 2012 EIR would only minimally increase and the construction-related impact would remain less than significant with mitigation. Construction of the modified Project would not result in any new significant impacts on GHG or climate change beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

HYDROLOGY AND WATER QUALITY

As discussed in the 2012 EIR, activities required to construct the larger concrete channel, including removal of the existing channel, excavation, and associated demolition may have the potential to contribute increased input of fine sediments into Hale Creek and downstream receiving waters. Hazardous materials such as gasoline, oils, grease, and lubricants from construction equipment could be accidentally released during construction. Accidental discharge of these materials to Hale Creek could adversely affect water quality, endanger aquatic life, and/or result in violation of water quality standards. As with the Project evaluated in the 2012 EIR, these impacts are expected to remain less than significant with the proposed modifications. Furthermore, the Project modifications would maintain the beneficial impact of improved flood conveyance capacity, as discussed in the 2012 EIR.

Post construction, high flows within the reconstructed natural channel could mobilize fine sediments. To minimize the potential for scour and downstream sedimentation, the Project modifications include installation of riprap to attenuate flows at the upstream transition from concrete to natural substrates, as well as Newbury riffles in the channel to provide grade control. These grade control structures reduce erosion potential by reducing stream slope and flow velocity, and stabilizing the bed and banks of the channel. With this channel protection in place, downstream impacts on water quality due to erosion and sedimentation are expected to be minor. This impact would be less than significant.

The 2012 EIR did not identify impacts on groundwater supply and recharge from channel improvement work. Modification of the Project to remove the concrete creek bottom and replace it with natural substrates would result in approximately 0.4 acre less impervious surface than the Project as analyzed in the EIR. The restored natural channel has the potential to contribute to groundwater recharge and improve groundwater supply; therefore, the Project modifications would result in a beneficial impact on groundwater.

The work area for the Project changes would not require a storm water pollution prevention plan (SWPPP), as the total area is under one acre, and would include storm water Best Management Practices, as discussed in Chapter 2 of the 2012 EIR (Project Description). Therefore, the modified Project would not result in any new significant hydrology or water quality impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

NOISE AND VIBRATION

While the proposed modifications from channel enhancement would result in changes to the construction methods (i.e., installation of sheet pile walls rather than concrete channels, use of generators), these changes are not expected to increase the severity of the impact from noise and vibration. The 2012 EIR identified a significant and unavoidable impact from construction noise with mitigation applied, and a less than significant impact with mitigation from groundborne vibration.

The enhancement area occurs in a channelized creek corridor adjacent to a church parking lot and seven residences with backyards facing the Project. The 2012 EIR determined that construction noise would exceed the applicable construction noise limit of 75 dBA for single-family residential areas, largely due to pile driving to install the new channel walls (94 dBA at 50 feet). The construction methods with the proposed modifications would eliminate the use of pile drivers and instead use a combination of a hydraulic pressed piling system (63 dBA at 50 feet) and drilled auger piles (84 dBA at 50 feet), which is less severe than the noise impact evaluated in the 2012 EIR. Other construction-related noise (e.g., jackhammer, excavator) would remain the same as evaluated in the 2012 EIR. Nonetheless, the following mitigation measures would be implemented to minimize the impact to the maximum extent practicable: NV1.1 (Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents), NV1.2 (Implement Work Site Noise Control Measures), and NV1.3 (Designate Noise and Air Quality Disturbance Coordinator to Address Resident Concerns).

The modified Project would require the use of diesel generators, which would operate continuously for an up to eight-week period, including during night hours. The generators (58 dBA at 50 feet) would be placed at the north end of the parking lot, located over 30 feet from the nearest residential structure, over 75 feet from the next nearest structure, and over 100 feet from all other structures. The generators would be surrounded by a fence lined with noise reduction panels, capable of reducing the noise by 40 dBA. Without the use of noise reduction panels, the anticipated noise would be approximately 63 dBA at residential structures located 30 feet away, 55 dBA at 75 feet away, and 52 dBA at 100 feet away; however, the use of the noise reduction panels and fencing is anticipated to reduce noise below the 50 dBA limit for nighttime noise in single-family residential areas required by local noise ordinances. Implementation of mitigation measures NV1.1, NV1.2, and NV1.3 would further mitigate this potential impact on nearby residential properties.

The 2012 EIR determined that the impact from groundborne vibration was less than significant, after implementation of mitigation measures NV2.3 (Conduct Construction Vibration Assessment and Implement Recommended Vibration Control Approach[es] for Shoring Installation) and NV2.4 (Conduct Construction Vibration Monitoring for Shoring Installation). Mitigation Measure NV2.3 calls for an assessment of the vibration level at adjacent homes to ensure the vibration level does not exceed 80 VdB. This measure explicitly calls out replacing impact pile driving with drilled piles as a potential means of reducing the vibration impact, which would occur under the proposed project modifications. According to the geotechnical report developed for the enhancement area (Cal Engineering and Geology 2016), the use of drilled piles and the hydraulically pressed piling system were determined to result in negligible vibration, and the proposed modifications are not expected to increase the severity of the vibration impact. Nevertheless, Mitigation Measures NV2.3 and NV2.4 would be applied to

ensure the impact remains less than significant.

As described under *Air Quality* above, the number of truck haul trips for the channel enhancement is not expected to exceed the number evaluated in the 2012 EIR as the amount of material hauling to and from the site would remain similar or less than what was evaluated in the 2012 EIR, and therefore noise and vibration impacts from haul traffic would remain less than significant.

Therefore, the Project modifications would not result in any new significant noise or vibration impacts beyond those identified in the 2012 EIR, or cause a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

TRANSPORTATION AND TRAFFIC

The 2012 EIR estimated construction along the approximately 650-foot long reach of Hale Creek would generate a maximum of approximately 30 vehicle roundtrips per day. With the proposed modifications, the work in the enhancement area would require a similar amount of material to be hauled on-site/off-site, as the channel geometry would be the same as in the 2012 EIR, except with a natural bottom comprised of existing soils and limited imported rock/rip-rap and concrete (only used for replacement of the bridge abutments and access ramp, but not the entire channel walls and bottom as evaluated under the 2012 EIR). The number of workers and deliveries to support the enhancement work is also expected to remain the same or similar as the Project evaluated in the 2012 EIR. As such, the total number of vehicle roundtrips per day for the channel enhancement is not expected to exceed the 30 roundtrips per day for the Hale Creek channel improvements element of the Project evaluated in the 2012 EIR.

The enhancement area on Hale Creek would be accessed from the same routes as previously evaluated, namely from CA-82 (El Camino Real) and Foothill Expressway to local roadways including Springer Road, Marilyn Drive, and Sunshine Drive (among others considered in the 2012 EIR). Furthermore, the 2012 EIR envisioned that the first year of channel work on Hale Creek would overlap with the large-scale excavation work at the nearby McKelvey Park, which estimated a maximum of 228 roundtrips per day; however, work at McKelvey Park was completed in February 2020 and will not overlap with the Hale Creek channel improvements work. Therefore, the enhancement work would lessen the severity of impact on transportation and surrounding traffic circulation during construction of the Hale Creek enhancements.

As with the adopted Project, mitigation measures would be applied to ensure impacts remain less than significant, including TT1.1 (Require a Site Specific Traffic Control Plan) and TT1.2 (Require All Construction Traffic to Avoid Spring Road/El Monte Avenue and Springer Road/Fremont Avenue Intersections at Peak Traffic Hours). With these mitigation measures in place, the modified Project is not expected to significantly degrade the operation of regional highways or conflict with any applicable Congestion Management Plan. The modified Project would not result in any new significant traffic impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

5. Conclusion

Based on the analysis above, none of the situations described in CEQA Guidelines §15162, which describe circumstances under which a subsequent EIR would be prepared, apply to the

proposed Project changes. Activities associated with the Hale Creek enhancement work would not create new significant environmental impacts or substantially increase the severity of significant impacts beyond those identified in the Permanente Creek Project 2012 EIR. The modifications represent an improved environmental condition in the enhancement area from those evaluated in the 2012 EIR. There are no significant changes to the Project circumstances, and no new information is anticipated that will alter the previous CEQA findings. The proposed Project modifications meet the criteria of minor changes or additions for an Addendum under CEQA Guidelines §15164.

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