Initial Study and
Mitigated Negative Declaration

Seasonal Irrigation Reuse (SIR) /
Recycled Water System Modifications
Healdsburg, California

Date	July 26, 2010 (original document) Additional analysis added September 2, 2010
Lead Agency	City of Healdsburg Public Works Department
Prepared by	Robert Jones, AICP - Earthcraft Planning Services

Initial Study

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063 to determine if this proposed project may have a significant impact upon the environment.

Project title	Seasonal Irrigation Reuse (SIR) / Recycled Water System Modifications
Lead agency name and address	City of Healdsburg Public Works Department 401 Grove Street Healdsburg, CA 95448-4723
Contact person and phone number	Jim Flugum, Deputy Public Works Director (707) 431-3346
Project location	See Figure 1 on Page 4
Project sponsor	City of Healdsburg 401 Grove Street Healdsburg, California 95448-4723
General Plan designations	Tayman Park recycled water tank site: City of Healdsburg / *Public and Quasi-Public (PQP*) Dry Creek crossing site: County of Sonoma / *Land Intensive Agriculture (LIA)*
Zoning	Tayman Park recycled water tank site: City of Healdsburg / *Public (P*) Dry Creek crossing site: County of Sonoma / *Land Intensive Agriculture (LIA)*

Introduction and Background

On July 11, 2005, the City of Healdsburg (City) certified an Environmental Impact Report (2005 EIR) for the City's Wastewater Treatment Plant (WWTP) Upgrade Project ("2005 EIR"). The primary purpose of this project was to upgrade the WWTP from secondary treatment to a process that produces advanced treated wastewater (as defined by Title 22 of the California Code of Regulations) and is capable of meeting foreseeable future discharge permit requirements. Subsequently, the City completed construction of an upgraded WWTP, which went into operation in April 2008.

The City's WWTP upgrade project is also intended to enable reclamation and beneficial use of recycled advanced treated wastewater produced by the WWTP for urban irrigation (golf course, parks, and athletic fields) within the Healdsburg city limits, as well as for seasonal agricultural irrigation outside city limits in Sonoma County. At present, all advanced treated wastewater from the City's WWTP continues to be discharged into the Basalt Pond, a former gravel mining pit owned by Syar Industries, Inc. and located just south of the WWTP and adjacent to the west bank of the Russian River. Under the City's current National Pollution Discharge Elimination System (NPDES) permit (January 2008) from the North Coast Regional Water Quality Control Board (RWQCB), discharge to the Basalt Pond is prohibited during the period from May 15 through September 30 of each year. An accompanying Cease and Desist Order (CDO) allows the City until October 2009 to comply with this seasonal discharge prohibition. Since discharge will continue to be allowed to the Basalt Pond on October 1, this effectively moves the compliance date for using seasonal irrigation as an alternative means of disposing of treated wastewater to May 15, 2010.

To comply with this provision, the City has now nearly completed detailed design of the reclamation project described in the 2005 EIR. However, the project will be not completed and operational in time to fully comply by May 2010. In addition, the City's sewer system funding is constrained after completion of the WWTP, and the City is pursuing other state and federal sources to fund construction of the reclamation system. The City has therefore requested a 5-year extension of this compliance date from the RWQCB. A draft NPDES permit and accompanying CDO released by the RWQCB in March 2010 would extend this date to 2014.

The 2005 EIR addressed a seasonal irrigation alternative ("SIR") and the piping necessary to convey recycled water from the new WWTP to the City for urban and agricultural recycled water irrigation. Included in the SIR was seasonal irrigation of several properties owned by Syar Industries, Inc ("Syar"). Because Syar has acquired and planted additional properties since then, in December, 2008, the City issued for public review an initial study and mitigated negative declaration (MND) of environmental impact regarding irrigation of these additional properties. The project is referred to as the Syar Property Recycled Wastewater Agricultural Irrigation Project ("Syar Irrigation Project"). The Syar Irrigation Project MND evaluated irrigation of 214 additional acres of Syar vineyards adjacent to the WWTP property to the south, west, and north. This added acreage would replace, but does not increase the total acreage proposed for irrigation in the 2005 EIR SIR disposal alternative. In response to public comments on the Syar Irrigation Project MND, in 2009, the City reissued and recirculated a modified MND, and is presently evaluating the second round of public comment. The Syar Irrigation Project MND is expected to be presented for City Council consideration in the near future.

The pipeline needed to convey recycled water from the WWTP to areas of the CIty for recycled water irrigation was studied in the 2005 EIR. The main portion of this pipeline will extend north from the WWTP, cross under Dry Creek and Highway 101, and connect to a storage tank near the Tayman Park Golf Course, as shown in Figure 1. As design of the system progressed, it became apparent that modifications to the delivery infrastructure for the SIR component of the WWTP Upgrade Project are needed, as described in the following section.

Description of WWTP Upgrade Project Modifications

Dry Creek Crossing: The 2005 EIR described an underground pipeline crossing under Dry Creek that was to be constructed by directional drilling. As shown in Figure 1, the location of the crossing is in Sonoma County jurisdiction to the north of the City's WWTP property and south of Magnolia Drive. However, during the course of the detailed design work, the geotechnical investigation revealed that, due to the depth of the alluvial gravel layer beneath Dry Creek, directional drilling will be infeasible. Directional drilling requires a consolidated and cohesive material to confine the pressurized drilling "mud" used in the drilling process. Without this confinement, drilling mud can escape and possibly surface. The alluvial gravels at the crossing are highly permeable and not capable of confining the drilling mud. To overcome that problem in this location, the drilled crossing would need to reach down to the clay material that underlies the alluvial gravel. A steel "conductor" casing tube would be driven through the alluvial gravel to reach the clay material and confine the drilling mud in the alluvial gravel layer. The casings are pushed through the alluvial gravel using hydraulic jacking rams, and longer casing lengths require greater jacking pressure as friction increases. In this location, because of the depth of the gravels, the conductor casing would be longer than the jacking methods are capable of pushing. The geotechnical investigation therefore found the directional drilling method to be infeasible.

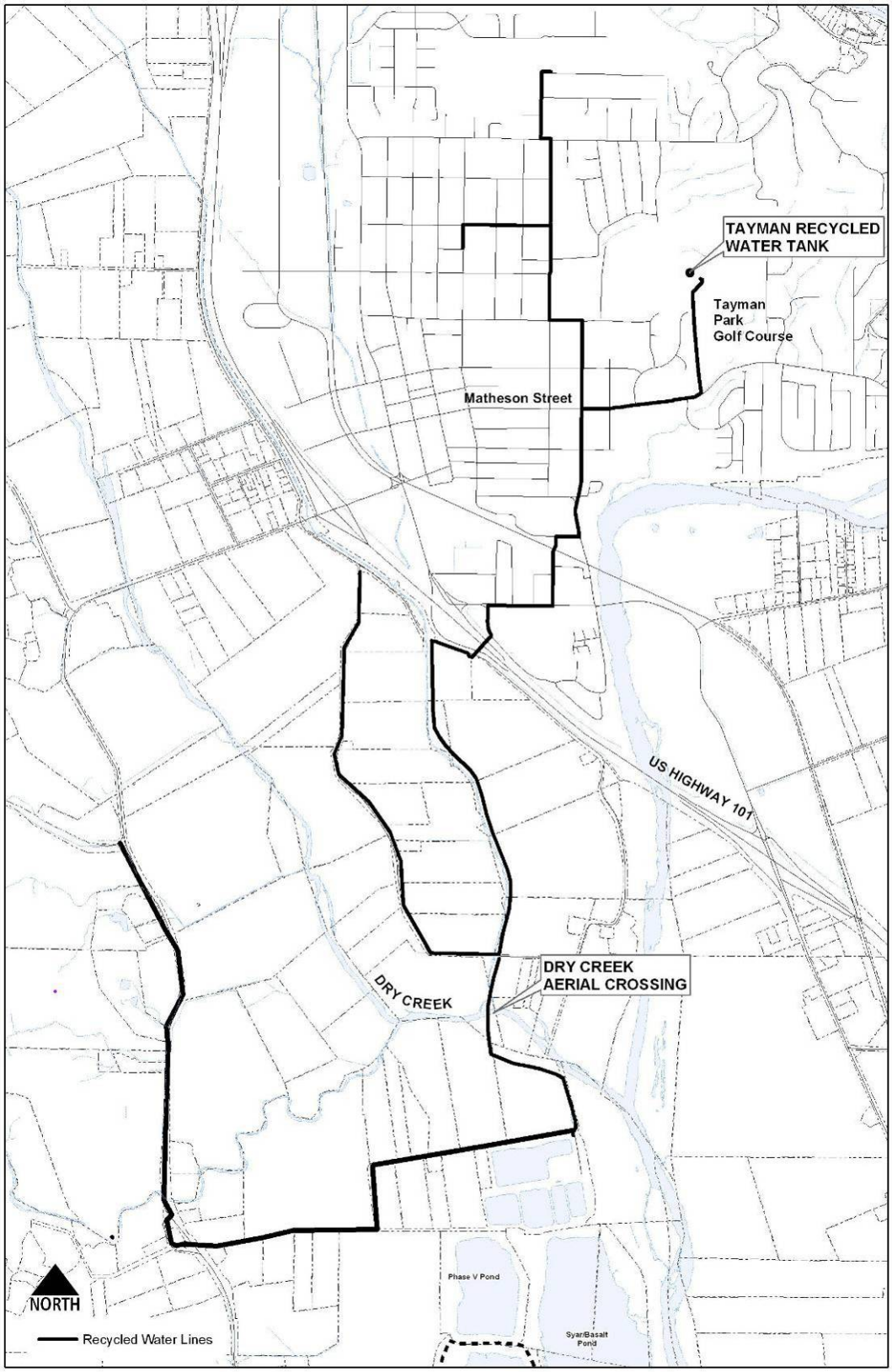

Figure 1 – Location Map

The proposed alternative crossing is an aerial crossing that will cross Dry Creek in a single span. The aerial crossing will be a cable-stayed suspension bridge, with the 12" pipeline suspended below two parallel tension cables, as shown in Figures 2 and 3. The 510-foot long cable span will be supported by steel frame towers located on either side of Dry Creek, constructed on rectangular footings that will be 27 by 6 feet in size, constructed at grade. Since the north bank of Dry Creek is lower than the south bank at this location, the north tower will be 31 feet in height and the south tower will be 41 feet in height (with both tops at elevation 118.5 feet above sea level). The 2.25-inch cables will extend over the tower tops and approximately 60 feet behind each tower, where they will be anchored in two concrete anchor blocks poured at grade. The pipeline will be suspended at an elevation 3 feet above the 100-year flood elevation. The alignment of the crossing will be parallel to and about 45 feet east of an existing power line crossing over Dry Creek. The tops of the towers will be approximately10 feet below the tops of the existing power poles at the Dry Creek crossing.

Access to this site is by private road from Foreman Lane. The site is located close to where Dry Creek has its confluence with the Russian River, approximately 0.4 mile to the southeast. The crossing site and surrounding area, is designated and zoned by Sonoma County as LIA (Light Intensive Agriculture).

Tayman Recycled Water Tank: In the 2005 EIR project description, the recycled water pipeline was to connect to the two existing Tayman Park tanks, which have a total storage capacity of approximately 0.7 million gallons (MG). As shown in Figure 1, these tanks are located at the top of a prominent hill overlooking the Tayman Park golf course and Oak Mound Cemetery on property is owned by the City and zoned P (Public). The existing tanks are partially below grade and covered by two wooden "barn" roofs with a combined footprint of approximately 180 feet x 70 feet, with a height of about 15 feet. This site is accessed through the golf course via South Fitch Mountain Road, or through the cemetery via the entrance on Piper Street. The tanks are surrounded and well-screened by mature live oak, redwood, deodar cedar, bay, and madrone trees. These in-ground tanks were originally constructed in 1898 and were part of the City's potable water system until April 2001, when two new steel tanks at the Tayman Park Golf Course were completed and put into service. The old Tayman Park water tanks were drained and disconnected from the water system at the time, but were considered to be functional for recycled water storage. In the 2005 EIR, these tanks were to be converted to recycled water storage, serving as terminal storage for water pumped through the recycled water line, keeping the line pressurized to serve agricultural users and public areas connected to the system.

Although the existing tanks are functional, the wood roof structures covering the two in-ground tanks are dilapidated and structurally questionable, and would need to be replaced if the tanks are to be used again. In the course of detailed design, the least costly alternative was initially determined to be a single metal roof structure over both tanks, supported by a new 9-foot high masonry block wall on a new perimeter foundation. The footprint of the new foundation and supporting wall, which would be set back approximately 10 feet from the existing tank perimeter, would leave little or no room at the hilltop site for construction access. Providing adequate construction access would require removing approximately 28 mature trees, whereas constructing a new tank on the same site will only require limited tree removal. In addition, the estimated cost of the roof structure approached or exceeded the cost of constructing a new above-grade tank on the site.

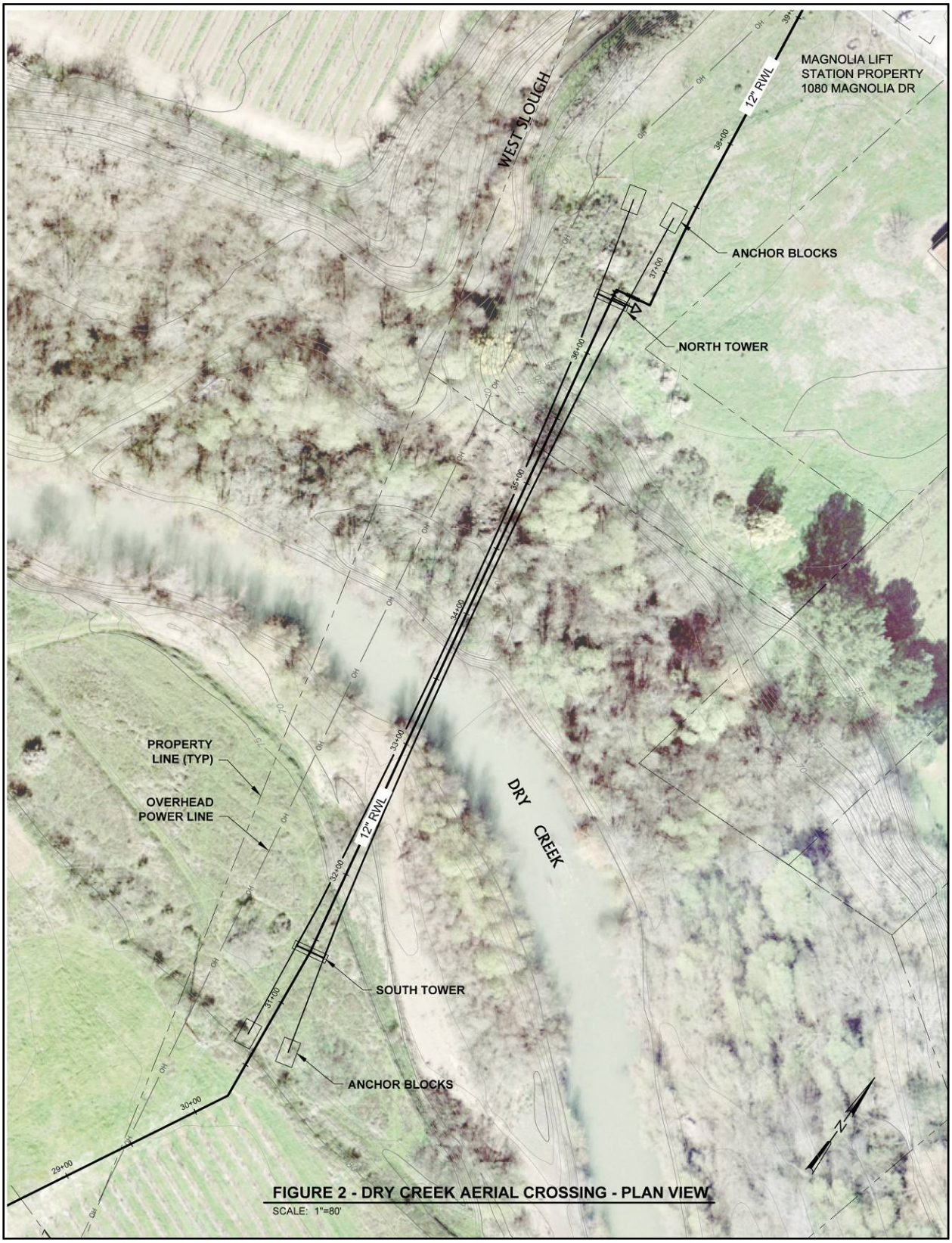

FIGURE 2 - DRY CREEK AERIAL CROSSING - PLAN VIEW
SCALE: 1"=80'

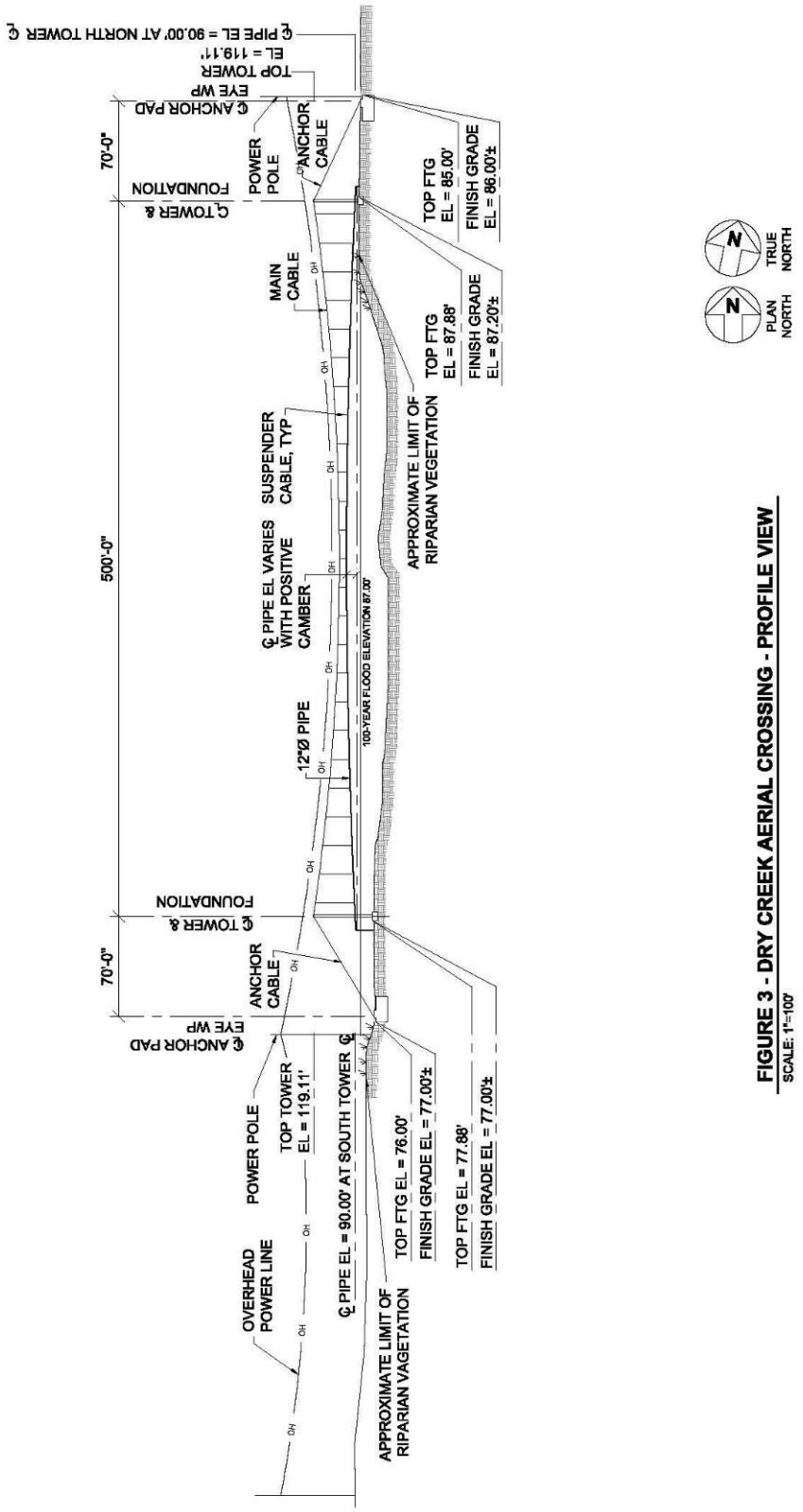

FIGURE 3 - DRY CREEK AERIAL CROSSING - PROFILE VIEW
SCALE: 1"=100'

Therefore, instead of using and upgrading the existing Tayman water storage tanks, the proposed modification to the project will be to demolish the old tanks and construct a single new above-ground tank with approximately the same capacity (0.7 MG), as shown in Figures 4 and 5. The area affected by the demolition of the existing 0.40 and 0.32 MG tanks is approximately 0.5 acres. The old Tayman tanks will be demolished and removed; including the wood roof structures, walls and any above grade concrete. The below grade portions of the tanks will be backfilled with crushed concrete and engineered fill material. Engineered fill material may originate from trench excavation from the recycled water pipeline construction, provided the material meets engineered fill specifications. The total volume of fill material will be approximately 3,500 cubic yards.

Following demolition, one new 0.7 MG glass-coated and lined bolted steel tank will be constructed on the western portion of the hilltop site at the location of the old Tayman tanks. The new tank will be smaller but otherwise identical in design to the new Tayman tanks constructed at the ninth tee area of the golf course in 2001, with "forest green" sidewalls and roof to blend in with the surrounding trees. The new tank will have a maximum diameter of 67 feet, and an overall height of 34 feet, 2 ¼ inches (including a 28-foot and 5 1/8-inch high bolted steel sidewall and a 5-foot and 9-inch high aluminum dome roof). A 15-foot-wide paved access road will be constructed around the new tank for maintenance access, connecting to an existing road to the west of the storage tank through the Oak Mound Cemetery. It will also shed water away from the tank foundation.

The connecting piping alignment will be slightly altered from that shown in the 2005 EIR, instead connecting to the new tank from the eastern side of the hilltop site, as shown in Figure 4. In addition, at this same location, a second piping connection to the new tank will provide a back-up water supply connection from the City's Fitch well field. This connection will be used if water is needed to supplement the recycled water supply, or if the recycled water supply is temporarily out of service.

The connection in the tanks will have the air-gap separation required by State Title 22 requirements. This connection consists of 270 feet of 6-inch line extending from an existing 16-inch water line that passes by the tank site. This existing 16-inch line connects the Fitch Well Field at Badger Park to the new water storage tanks located near the ninth tee area at the Tayman Park Golf Course.

Construction access to the site will be from the east end, through the golf course and the open area created when the existing sub-grade storage tank is filled in. Demolishing and filling in the old tanks will create an open area for construction access and staging, and significantly reduce the need to remove any mature trees. Construction traffic will use an existing unimproved dirt access road adjacent to the 3rd hole tee area of the Tayman Park golf course. Following the completion of construction, long-term access for operation and maintenance will utilize an existing road to the west of the storage tank site through the Oak Mound Cemetery.

The recycled tank site is located on land owned by the City of Healdsburg. Consistent with both its current and proposed use, the site is zoned *Public (P)* and designated *Public and Quasi-Public (PQP)* by the Healdsburg General Plan.

Pipeline Alignment Modification: In addition to the two modifications as described above, the alignment of the proposed recycled water system pipelines has also been modified somewhat from the alignment shown and described in the 2005 EIR. Figure 2-8 showed the proposed pipeline alignment connecting the Tayman tanks via a connection from the south straight up the hill along the east boundary of the Oak Mound cemetery.

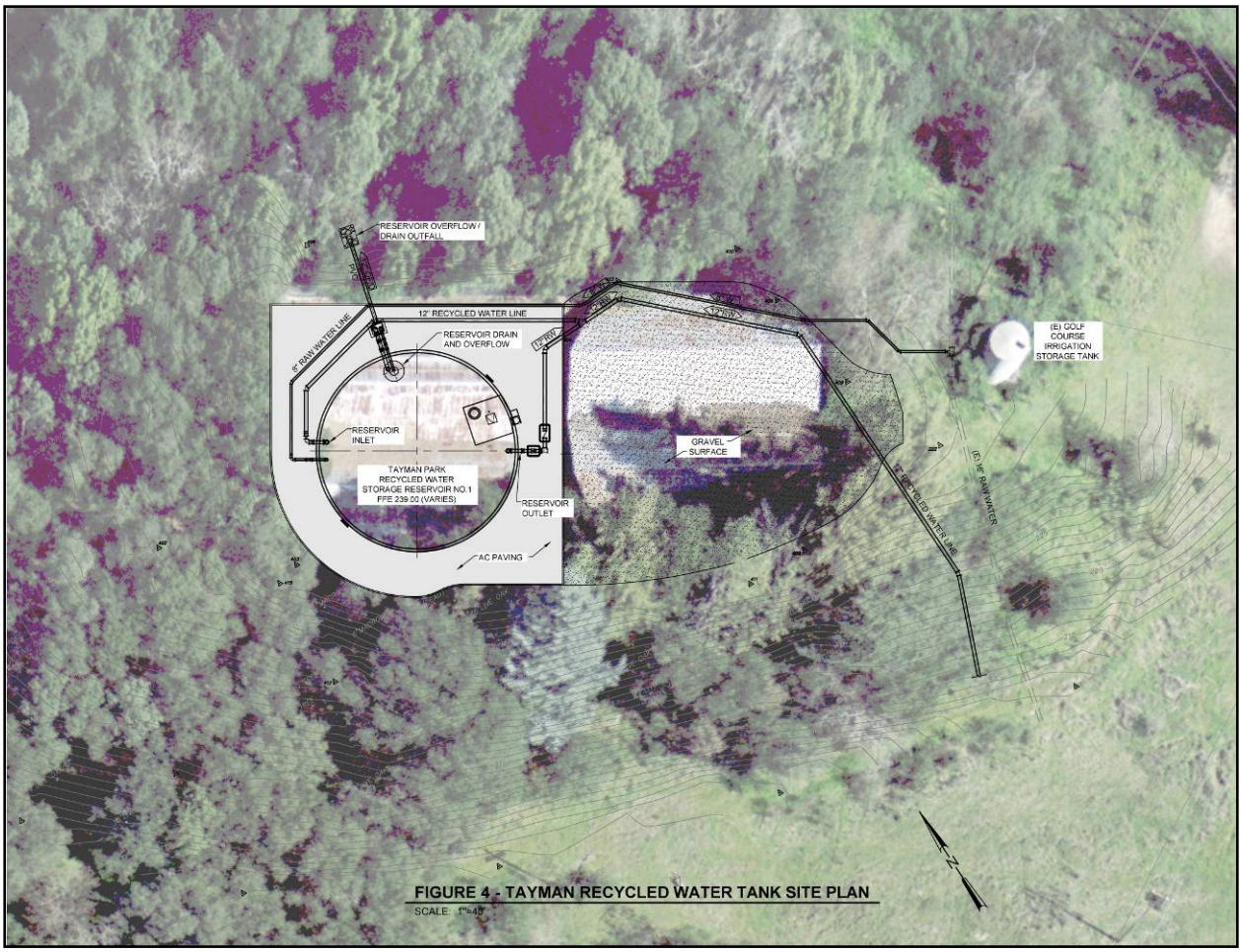

FIGURE 4 - TAYMAN RECYCLED WATER TANK SITE PLAN
SCALE: 1"=40'

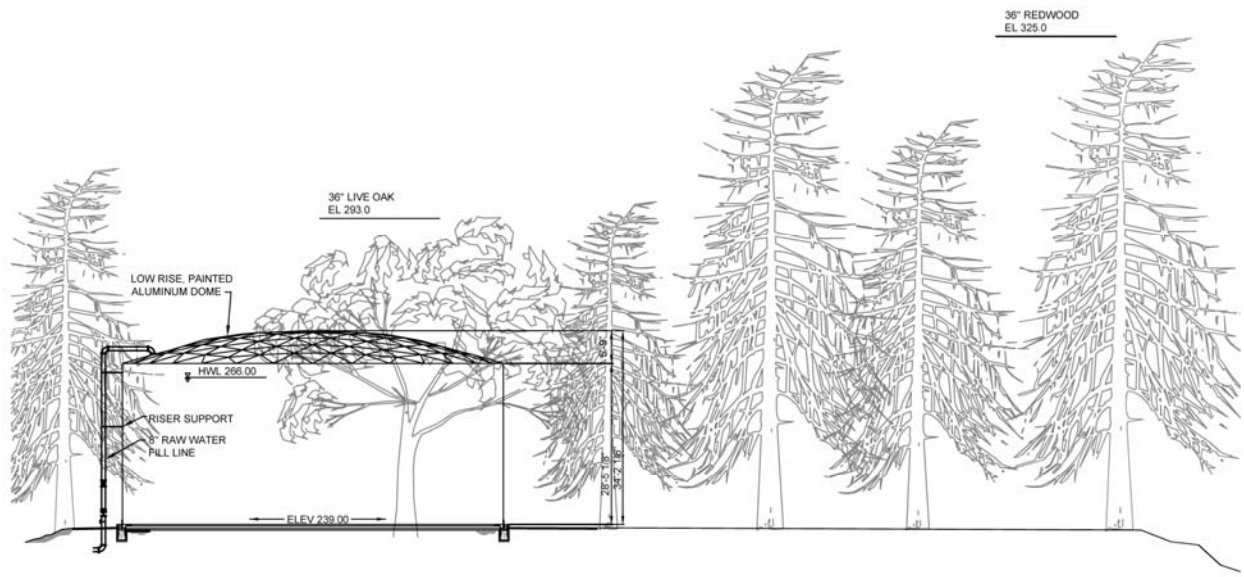

FIGURE 5 - TAYMAN RECYCLED WATER TANK SITE PROFILE
SCALE: 1" = 20'

Current design plans now propose to place the connecting pipeline alignment solely through the golf course (within an existing access road) rather than along an access road through the cemetery. The proposed new alignment also includes a new connecting segment along a two block section of University Street (between Matheson Street and Piper Street). Since both the originally proposed alignment and the currently proposed alignment are within City streets, impacts will be unchanged, and this modification is considered minor. Since this modification will result in no change in impacts from those identified in the 2005 EIR, this minor project modification is not addressed further in this Initial Study.

Approvals Requested or Required

The proposed Dry Creek aerial pipeline crossing has been designed so that it will not result in fill to wetlands or waters of the U.S. subject to the jurisdiction US Army Corps of Engineers. The footings and cables will be located above the ordinary high water mark, and therefore outside the Corps jurisdiction and no permit is expected to be required. A 401 Water Quality Certification would not be required if wetlands or waters are not affected; however, the Regional Board may issue a permit if installation of the aerial crossing requires removal of riparian vegetation along Dry Creek.

The California Department of Fish and Game may require a 1602 Streambed Alteration Agreement for removal of riparian vegetation where required for project construction and for long-term clearance as needed for protection of the suspended pipeline and cables.

The project modifications described in this Initial Study are part of the larger project that was is described as the seasonal irrigation reuse (SIR) component and recycled water system in the 2005 EIR. This entire project will require agency approvals as described in the 2005 EIR.[1] Although the construction area affected by these project modifications will be less than one acre, the contractor will need to obtain a NPDES Stormwater Permit from the Regional Water Quality Control Board that covers the construction of the entire project.

Since the City is seeking a loan from the U.S, Department of Agriculture Rural Utilities Service program to fund construction of the project, including the modifications as described in this Initial Study, this project will be subject to that agency's approval under the requirements of the National Environmental Policy Act (NEPA). A separate environmental document has been prepared to meet that requirement.

Finally, the Tayman Park recycled water tank will require design review approval by the City of Healdsburg Planning Commission.

Environmental Determination

On the basis of the attached Initial Study, I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures have been identified in this Initial Study and agreed to by the project proponent that would render all impacts to a less than significant level, and therefore a MITIGATED NEGATIVE DECLARATION will be prepared.

Robert Jones, AICP ~~July 26, 2010~~September 2, 2010

for the City of Healdsburg

[1] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, pages 2-26 and 2-27.

Environmental Checklist

Note: In order to assist in understanding and distinguishing site specific impacts and mitigation, separate responses to questions in the checklist address each of the two components of the proposed WWTP Upgrade Project modifications, (i.e., "Dry Creek Crossing" and "Tayman Park Recycled Water Tank").

I. AESTHETICS

***Impact Significance Criteria*:** A significant impact would occur if a project results in a substantial reduction of visual quality, or if it results in the creation of substantial light or glare adversely affecting views in the area.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Have a substantial effect on a scenic vista?	☐	☒	☐	☐	1
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within the viewshed of a designated scenic highway?	☐	☒	☐	☐	1
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐	1
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	☒	

Discussion of Impacts

a-c) Dry Creek Crossing: A new aerial pipeline crossing at this location will introduce a new structural element in the rural landscape of the existing Dry Creek corridor, which in the project vicinity is characterized by the creek lined with lush riparian vegetation (primarily willow trees) and surrounded by vineyards. The site is not within the viewshed of Westside Road, designated a scenic road by Sonoma County, nor is it visible from Highway 101, designated as a scenic road by the City of Healdsburg and located about 0.7 mile to the north. ~~The site is also not visible from any nearby homes due to intervening vegetation.~~ A new aerial pipeline crossing would involve two steel frame towers, 31 and 41 feet high on the north and south of the creek, respectively, that would suspend the pipeline above the creek. As shown in photo-simulations of the Dry Creek aerial crossing in Appendix A, the north tower will likely be visible from one or two residences located on Magnolia Drive, and from the Foss Creek Bridge on Magnolia Drive. Most views along this section of Magnolia Drive will be screened by intervening vegetation and will be lower than the adjacent power line pole. Both the towers and the pipeline will need to be painted, although a color has not been selected to date. The cables will be galvanized and not painted. The towers and suspended pipeline crossing will be adjacent to an existing power line crossing, with power line poles and cables higher than the proposed suspension support towers and pipeline crossing. Therefore,

the project will not introduce a new element to the landscape that would be out of character with existing elements at this location. The project will be within the context of the existing utility crossing of Dry Creek at this location. The project will not result in any change in land use of properties visible from Westside Road or other offsite locations. While the proposed Dry Creek aerial pipeline crossing will not impact any existing scenic vista, nor degrade the existing visual character or quality of the site and its surroundings, the following mitigation measure will ensure that the proposed Dry Creek crossing blends with the surrounding landscape:

Mitigation Measure #1: Paint Aerial Pipeline Crossing to Visually Harmonize with Surroundings

Utilize a solid earth-tone color (e.g., tan, terra cotta, brown, green and gray) for painting the steel towers supporting the pipeline span as well as the exposed pipeline, with emphasis on darker shades and avoidance of any reflective surfaces.

Timing/Implementation: Before completion of new aerial pipeline crossing of Dry Creek.

Enforcement/Monitoring: City of Healdsburg

Tayman Park Recycled Water Tank: The proposed new Tayman Park recycled water storage tank will be located on a hilltop which is identified as a scenic ridgeline in the General Plan (Figure 8, General Plan Policy Document). Policy NR-C-5 of the Natural Resources Element of the General Plan (adopted July 6, 2009) states the following:

Major scenic ridgelines designated on General Plan Figure 8 and highly visible hillsides shall be protected from visually obtrusive development.

The following implementation measure (NR-10) is also included in the General Plan:

Require a visibility analysis for the creation of new lots, new structures or significant additions and other projects over which the City exercises discretionary authority located within 200 feet on either side (based on a horizontal projection) of the center line of major scenic ridgelines as shown on General Plan Figure 8, Major Scenic Ridgelines. Only developments that are shown to be unobtrusive based on this analysis may be approved. Structural projections above the ridgeline shall not be allowed unless it can be demonstrated that existing natural features will screen the projection.

The hilltop site of the proposed new Tayman Park recycled water tank is visible to the south from a section of South Fitch Mountain Road, a street designated as a scenic road in the City of Healdsburg General Plan (Figure 9, General Plan Policy Document). Due to distance and the relative low elevation of this hilltop, however, the site is not readily visible from any other designated scenic highways, roads, or streets, including Highway 101.

The existing tree cover surrounding the project site includes many large native oaks and bay trees as well as planted redwood and deodar cedar trees, the latter particularly on the south side. The existing trees on this hilltop provide a scenic background to residential neighborhoods, the cemetery, and the golf course located in the vicinity. These trees currently hide the above ground portions of the existing tanks (wood sided, metal roofed structures) that will be demolished and removed.

As noted previously in the project description section of this Initial Study, the new tank will be smaller but otherwise identical in design to the new Tayman tanks constructed at the ninth tee area of the golf course in 2001. The new tank will have a diameter of 67

feet, and an overall height of 34 feet and 2 ¼ inches (including a 28-foot and 5 1/8-inch high bolted steel sidewall and a 5-foot and 9-inch high aluminum dome roof). Both the sidewalls and dome roof will be painted "forest green" to blend in with the surrounding trees. The height of the new tank will remain well below the screening provided by the existing trees that surround the site.

Construction access to the site will be from the east end, through the golf course and the open area created when the existing eastern sub-grade storage tank is filled in. Demolishing and filling in the old tanks will create an open area for construction access and staging, preserving the existing mature trees which screen the site from any distant views.

The project has been planned to minimize the need to remove existing, mature trees. An earlier version of the design had plans to leave the existing tanks in place and construct a new clear-span roof structure over both tanks. However, further investigation determined that construction of new footings to support the new roof structure would require removal of approximately 28 mature screening trees. Only three small trees are now proposed to be removed. None of these trees are needed to screen the proposed tank, and none of these trees meet heritage tree status (as defined in the Healdsburg zoning ordinance). The following is a table summarizing tree removal that is proposed in conjunction with this construction:

Tree Removal Summary

Species	Size (diameter)	Quantity
Madrone	6 inches	2
Oak	6 inches	1
	Total	3

As required by implementation measure NR-10 (see above), City staff has conducted a visibility analysis for the Tayman Park tank replacement project by providing the exhibits shown in Figures 6, 7, 8 and 9. Figure ~~2~~ 6 indicates the location of viewpoints for views of the Tayman Park recycled water tank site as shown in Figures ~~3, 4 and 5~~7, 8 and 9.

Figure 10 shows another view of the proposed new tank location from a private driveway at 1009 Sunset Drive. This location was selected by observing, from the golf course, which homes would have the clearest view of the tank location from the higher elevations on Fitch Mountain. The corrugated metal roofs on the existing tanks are somewhat visible in Figure 10 behind the tree screening.

This visibility analysis provided in Figures 7-10 indicates that the location and height of the proposed tank, together with the preservation of existing trees surrounding the proposed new recycled water tank, will be sufficient to provide adequate screening and prevent visually obtrusive development on a General Plan-designated scenic ridgeline. In Figure 10, although the elevation is higher, the view angle is such that the trees to the north would still screen the new tank from view. In addition, the new tank would likely be less obtrusive than these existing tanks, since the proposed new tank will have a smaller footprint, with a domed roof painted green to blend with the existing tree screening, rather than the bare metallic roof on the existing tanks. The new tank will not have a structural projection that would be visible above the ridgeline. Therefore, the project will be consistent with Policy NR-C-5, which requires protection of major scenic ridgelines from visually obtrusive development.

Construction injury to trees slated for preservation could cause short-term and long-term loss of trees that would otherwise provide screening of the new replacement tank. This

is considered a potentially significant visual impact. The following mitigation measure will be incorporated as part of the project, and will reduce this potential impact to less than significant:

Mitigation Measure #2: Implement Tree Protection Measures

The City Arborist, or another qualified arborist, shall work with the City and its contractors to avoid significant impacts to mature native trees during all stages of construction. Trees will be protected with orange barrier fencing. Exact location of the tree protection fencing shall be determined in the field with the Project Arborist. No grading or construction shall be permitted until the approved fencing has been installed. Any activity within the tree protection fencing shall be supervised by the Project Arborist.

Any roots 1" in diameter or greater encountered during construction shall be cut clean with a pruning saw. All root pruning wounds shall be immediately backfilled or covered with wet burlap until such time they have been backfilled.

Any necessary clearance pruning to accommodate construction equipment shall be performed prior to grading operations. Pruning shall conform with industry standard specifications, subject to approval of the City Arborist or other qualified arborist.

Timing/Implementation: During all stages of construction.

Enforcement/Monitoring: City of Healdsburg

d) Dry Creek Crossing and Tayman Park Recycled Water Tank: No new outdoor lighting is being proposed with either the Dry Creek crossing or the new Tayman Park recycled water tank. Therefore, neither of these two proposed facilities will provide a source of light or glare that would adversely affect day or nighttime views in the area.


New Tank
1
2
3
TEE
GREENS
FAIRWAY
TEE
SOUTH FITCH MOUNTAIN
SOUTH FITCH MOUNTAIN
HERON
FALCON (PRIVATE)
RAVEN (PRIVATE)
ALMOND

FIGURE 6 – LOCATION OF VIEWPOINTS USED IN VISIBILITY ANALYSIS

FIGURE 7 – VIEW OF TAYMAN RECYCLED WATER TANK SITE FROM VIEWPOINT #1 (LOOKING WEST FROM PARKING LOT AT TAYMAN PARK GOLF COURSE)

FIGURE 8 – VIEW OF TAYMAN PARK TANK SITE FROM VIEWPOINT #2, (NORTH END OF GREENS DRIVE, LOOKING NORTH THROUGH TAYMAN PARK GOLF COURSE)

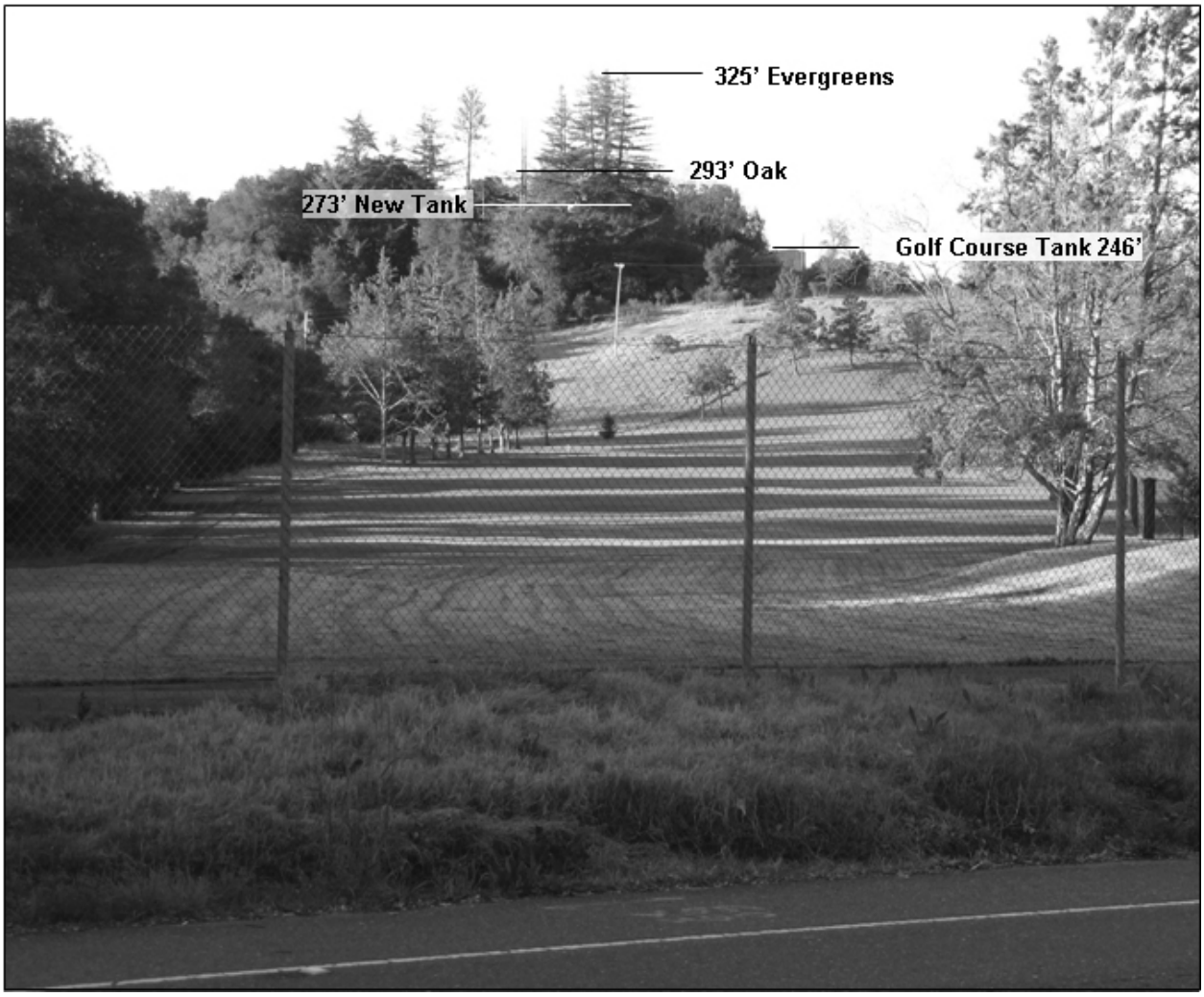

FIGURE 9 – VIEW OF TAYMAN PARK RECYCLED WATER TANK FROM VIEWPOINT #3 (LOOKING NORTH THROUGH THE GOLF COURSE FROM SOUTH FITCH MOUNTAIN ROAD)

FIGURE 10 – RECYCLED WATER TANK LOCATION
VIEW FROM NORTHEAST (1009 SUNSET DRIVE)

II. AGRICULTURE RESOURCES

Impact Significance Criteria: A significant impact would occur if a project results in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to non-agricultural land, or conflict with existing zoning for agricultural use, or a Williamson Act contract.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒	

Discussion of Impacts

a-b-c) Dry Creek Crossing: The site of the proposed Dry Creek crossing is located in an area used for agricultural purposes (i.e., vineyards). However, none of the area to be impacted by construction of the aerial pipeline crossing, including the north and south tower footings, is used for agriculture. The site of the footing on the north side of Dry Creek is located on property owned by the City of Healdsburg and used for a pump station. The footing site on the opposite or south side of Dry Creek is located in a vacant field adjacent to an unpaved private road and vineyard. An aerial pipeline crossing of a creek at this location would not result in the conversion of farmland or land under a Williamson Act contract to non-agricultural use on the project site or in the project site vicinity.

Tayman Park Recycled Water Tank: The new tank will be located within the City of Healdsburg on a City-owned property which has already been developed as a water storage facility. Neither this site nor the surrounding area (i.e., residential, cemetery and golf course) is used for agricultural purposes. Therefore, the proposed Tayman Park recycled water tank will not involve any conversion of any important farmland or land under a Williamson Act contract to non-agricultural use.

III. AIR QUALITY

Impact Significance Criteria: A significant impact would occur if the project would a) conflict with or obstruct implementation of any applicable air quality plan, b) violate any air quality standard or contribute substantially to an existing or projected air quality violation, c) result in a cumulative considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors), d) expose sensitive receptors to substantial pollutant concentrations, or e) create objectionable odors affecting a substantial number of people.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒	2,3
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒	3
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐	3
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒	3
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒	3

Discussion of Impacts

a-b-c) Dry Creek Crossing and Tayman Park Recycled Water Tank: Pursuant to federal Clean Air Act requirements, all areas of California have been classified by attainment status under National Ambient Air Quality standards. Northern Sonoma County is currently designated by the federal EPA as an attainment area for all federal standards. With regard to State Ambient Air Quality Standards, northern Sonoma County is designated by the California Air Resources Board (ARB) as an attainment area for all State standards, with the exception of the $PM_{2.5}$ (fine particulate matter less than 2.5 microns in size), for which it is designated as "unclassified".[2]

The proposed modifications to the WWTP Upgrade Project as described in this Initial Study will involve construction activities and equipment that will temporarily generate emissions of reactive organic gases (ROG), nitrogen oxides (NOX), and particulates less than 10 microns in size (PM-10). The 2005 EIR addressed the temporary construction-related air quality impacts of this project as follows:

Impact 3.6-1: Generation of Temporary Emissions from Construction Activities

[2] A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.

Implementation of a seasonal irrigation reuse system would involve construction activities associated with the extensive trenching required for pipeline installation to transport treated wastewater to irrigation locations offsite. Construction of the Foreman Lane to Tayman Park, Foreman Lane/Mill Creek Road, and Syar property portions would require approximately 12,100, 14,000, and 6,500 feet of trenching, respectively. Pipeline installation and trenching would temporarily generate emissions of ROG, NOX, and PM10 from excavation, stockpiling of materials, drilling and tunneling in the case of the Foremen Lane to Tayman Park portion, motor vehicle exhaust associated with construction equipment (backhoes), employee commute trips, and material transport (especially on unpaved surfaces), and other construction operations. Construction activities would result in unmitigated daily emissions at the same rate described above for ED options, and would be equivalent to those presented in Table 3.6-4. Because the required control measures are not currently incorporated into the proposed project, the short-tem construction emissions could result in or contribute to a violation of the air quality standards. As a result, this impact would be considered ***potentially significant.***

Table 3.6-4
Summary of Short-Term Construction Emissions Associated with WWTP Upgrade

Source	ROG (ppd)	NOX (ppd)	PM10 (ppd)
WWTP Upgrade Construction Emissions-Syar Industries Disposal Scenario			
Mobile equipment exhaust	22.13	189.26	8.27
Fugitive dust	-	-	567.20
Employee trips	0.28	0.71	0.03
Total unmitigated	22.41	189.97	575.51
Total mitigated	21.30	152.12	146.38
WWTP Upgrade Construction Emissions-County Landfill Disposal Scenario			
Total mitigated	34.49	338.83	602.70
Total unmitigated	32.77	271.21	154.54

See Appendix C for modeling results and detailed assumptions.

Source: EDAW 2004

Mitigation Measure 3.6-1: Implement Air Quality Emission Control Measures

In accordance with BAAQMD CEQA Guidelines (Bay Area Air Quality Management District 1999), as recommended for use by the NSCAPCD, the following mitigation, which includes BAAQMD-recommended Basic, Enhanced, and Optional Control Measures, shall be implemented as necessary to reduce construction generated emissions. Construction activities are also required to comply with all applicable NSCAPCD rules and regulations, specifically Rule 485 regarding architectural coatings, Rule 430 regarding fugitive dust, and Rule 410 regarding visible emissions.

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) if necessary to prevent dust emissions.

- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.) if necessary to prevent dust emissions.
- Limit traffic speeds on unpaved roads to 15 mph if necessary to prevent dust emissions.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- Limit the area subject to excavation, grading, and other construction activity at any one time.
- Minimize idling time.
- Maintain properly tuned equipment.
- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.

The following additional mitigation measures shall be implemented due to the mass excavation activities to reduce NOX and visible emissions from heavy-duty diesel equipment. Although not formally adopted on a statewide basis, these additional mitigation measures have been adopted by numerous air districts to address current concerns associated with NOX and visible emissions.

- Provide a plan for approval by the NSCAPCD demonstrating that the heavy-duty (> 50 horsepower [hp]), off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles will achieve a project-wide fleet-average 20% NOX reduction and 45% particulate matter reduction compared to the most recent ARB fleet average at the time of construction.
- Submit a comprehensive inventory of all off-road construction equipment to NSCAPCD, equal to or greater than 50 hp, that will be used an aggregate of 40 or more hours during any portion of the project. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction operations occur. At least 48 hours before subject heavy-duty off-road equipment is used, the project representative shall provide the NSCAPCD with the anticipated construction timeline including start date, and the name and phone number of the project manager and onsite foreman. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, particulate matter traps, engine retrofit technology, after-treatment products, and/or such other options as become available.
- Ensure that emissions from off-road, diesel-powered equipment used on the project site do not exceed 40% opacity for more than 3 minutes in any 1 hour. Any equipment found to exceed 40% opacity (or Ringlemann 2.0) shall be repaired immediately, and the NSCAPCD shall be notified of noncompliant equipment within 48 hours of identification. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of visual survey results shall be submitted throughout the duration of the construction project, except that the monthly summary shall not be required for any 30-day period in which no construction operations occur. The monthly summary shall include the quantity and type of vehicles surveyed, as well as the dates of each survey. The NSCAPCD and/or other officials may conduct periodic site inspections to determine compliance. The above recommendations shall not supersede other NSCAPCD or state rules and regulations.

Timing/Implementation: Before and during all construction activities, as necessary.

Enforcement/Monitoring: City's general contractor and NSCAPCD Implementation of all the above mitigation measures would reduce air pollutant emissions from construction activities. However, the northern portion of Sonoma County is designated as a non-attainment area for PM10 and thus project-generated emissions could contribute to further violations of the CAAQS. As a result, this impact would remain ***significant and unavoidable***.[3]

It should be noted that the mitigation measure shown above would now be considered adequate to render the impact to ***less than significant***. At the time the 2005 EIR was

[3] Ibid, pages 3.16-18 through

prepared, the northern portion of Sonoma County (including the project site) was designated as a non-attainment area for PM-10 of the State standard. Based on this non-attainment area designation, the 2005 EIR determined that the cumulative impact associated project-generated emissions in conjunction with the implementation of all components of the WWTP Upgrade Project as originally described in the 2005 EIR (including the seasonal irrigation reuse/recycled water system component,) even with implementation of mitigation, could contribute to further violations of this State standard, and as a result, this impact would remain significant and unavoidable to render the impact to less than significant.

Based on current conditions, the cumulative impact associated with the implementation of all components of the WWTP Upgrade Project as originally described and mitigated in the 2005 EIR, including the seasonal irrigation reuse/recycled water system component, is no longer be considered significant since project emissions would no longer contribute to further violations of this State standard. In 2006, the northern portion of Sonoma County was re-designated as an attainment area for PM-10 under the State standard.[4] In addition, since 2005, the City of Healdsburg has certified an EIR for its updated General Plan (2009) which addresses the construction-related air quality of all subsequent projects in the City and includes mitigation to reduce impacts to less than significant. The General Plan EIR states the following in regard to mitigation of air quality impacts due to temporary construction activities.

> NSCAPCD has not established explicit numerical standards of significance for construction activities. Instead, the District suggests that best management practices and other management methods be used to reduce construction-related project emissions. District representatives have indicated that the use of the Bay Area Air Quality Management District's (BAAQMD) mitigation measures for construction would fulfill this requirement to implement best management practices (BMPs) to control construction-related emissions and result in less-than-significant construction impacts on air quality.[5]

Therefore, based on the change in the attainment status of the air district which includes the project site and the above cited analysis, the mitigation shown above (*Mitigation Measure 3.6-1: Implement Air Quality Emission Control Measures*) is deemed to be adequate for reducing construction-related air quality impacts to less than significant.

In regard to potential operational air quality impacts, the 2005 EIR stated the following:

> **Impact 3.6-2: Generation of Long-Term Regional (Operational) Emissions of ROG, NOX, and PM10.**
> The seasonal irrigation reuse system would not require additional employees or include the long-term operation of any major stationary or area sources. Thus, with respect to long-term regional emissions of ROG, NOX, and PM10, implementation of the irrigation reuse options would have ***no impact***. No mitigation is required.
>
> **Impact 3.6-3: Generation of Local Mobile-Source CO Emissions.**
>
> Implementation of the effluent disposal and seasonal irrigation reuse options would not require additional employees and thus would not generate additional traffic at nearby intersections or associated vehicular emission sources. Thus, with respect to the generation of local mobile-source CO

[4] Source: http://www.arb.ca.gov/desig/adm/adm.htm
[5] Christopher Joseph & Associates, Healdsburg 2030 General Plan Update, Revised Draft Environmental Impact Report, January 2009, page IV.D-26.

emissions of ROG, NOX, and PM10, implementation of ED and SIR would have ***no impact***. No mitigation is required.[6]

The impacts associated with project modifications as described in this Initial Study would not change this assessment nor require any additional mitigation.

d) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to the issue of potential exposure of sensitive receptors to substantial pollutant concentrations, the 2005 EIR (page 3.6-27 through 3.6-29) remains adequate for addressing the impacts of the proposed project modifications as described in this Initial Study:

Impact 3.6-4: Exposure of Sensitive Receptors to Toxic Air Emissions

Implementation of a seasonal irrigation reuse system would involve construction activities associated with the extensive trenching required for pipeline installation to transport treated wastewater to irrigation locations offsite. Implementation of these options does not include the operation of any stationary sources of toxic air emissions. Construction activities would result in the generation of diesel PM emissions from site grading and excavation, paving, and other construction. Diesel PM from construction would not be anticipated to result in the exposure of sensitive receptors to levels that exceed the NSCAPCD standards due to the fact that mobile diesel equipment would only be present onsite temporarily during construction activities. As a result, this impact would be considered ***less than significant***. No mitigation is required.[7]

The impacts associated with project modifications as described in this Initial Study would not change this assessment nor require any additional mitigation.

e) Dry Creek Crossing and Tayman Park Recycled Water Tank:

Additionally, the 2005 EIR stated the following in regard to this issue:

Impact 3.6-5: Exposure of Sensitive Receptors to Odorous Emissions

Storage and percolation ponds for tertiary treated effluent would tend to generate fewer odors than those generated by the treatment processes at the WWTP, because the effluent would be fully oxidized with greatly reduced content of remaining organic content susceptible to odor creation compared to existing conditions. Consequently, implementation of the ED and SIR (i.e. Seasonal Irrigation Reuse) options would not cause substantial adverse odors. As a result, this impact would be ***less than significant.*** No mitigation is required.[8]

The impacts associated with project modifications as described in this Initial Study would not change this assessment nor require any additional mitigation. No sensitive receptors (e.g., dwellings) are located in close proximity to either the Dry Creek crossing site or the Tayman Park recycled water tank site. In any case, advanced treated wastewater does not emit or create objectionable odors.

[6] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, pages 3.6-24 through 3.6-27.
[7] Ibid, pages 3.6-27 through 3.6-29
[8] Ibid, pages 3.6-29 and 3.6-30

IV. BIOLOGICAL RESOURCES

Impact Significance Criteria: Impacts upon biological resources would be significant if the proposed project substantially affected a rare or endangered plant or animal species (as defined and determined by the State Department of Fish and Game (DFG), the U.S. Fish and Wildlife Service (USFWS), and the U.S. Army Corps of Engineers (ACE) or the habitat of the species. Wetland losses can be considered significant depending upon significance or quality of habitat, presence of vernal pool features, and acreage. A substantial loss of riparian vegetation or habitat acreage or value resulting from development would be a significant impact. A substantial loss of acreage of other types of habitat identified as biologically unique and of limited distribution on a regional basis (e.g., serpentine chaparral, serpentine grassland, native grassland) may also be a significant impact.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	3, 13
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐	3, 12
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption or other means?	☐	☐	☐	☒	3
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒	3
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	3
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	3

Discussion of Impacts

a) Dry Creek Crossing: The 2005 EIR assumed that the pipeline crossing would utilize a trenchless, directional drill installation method to place the pipeline under the creek. Potential environmental impacts of the Dry Creek under crossing were identified at that time, and were associated with the bore staging areas and the drilling rig and drilling equipment on the City's Magnolia Lift Station property of the north side of Dry Creek, as well as the bore exit area on the south side of the creek. Impacts involving special-status species included the potential for loss of endangered, threatened or rare species of fish; impacts to special-status plants; loss of habitat for the northern red-legged frog, the foothill yellow-legged frog, and the western pond turtle; and impacts to nesting raptors. Mitigation measures were identified to reduce the potential impacts associated with pipeline construction to less than significant. Relevant excerpts from the 2005 EIR are shown below:

> **Impact 3.3-1: Potential for Loss of Individuals, or Loss of Critical Habitat, or Loss of Occupied Habitat of Endangered, Threatened, or Rare Species of Fish**
>
> **Construction**. Potential stormwater runoff or spills of hazardous materials during the construction of pipelines at stream crossings associated with the irrigation reuse areas has the potential to cause loss of special-status species or habitat. The Foreman Lane to Tayman Park portion of the seasonal irrigation reuse system involves construction of a Dry Creek crossing, and the Foreman Lane/Mill Creek Road portion of the system involves construction of a Mill Creek crossing. Dry Creek would be crossed using directional drilling, and Mill Creek would be crossed by attaching the pipe to an existing bridge.
>
> Pipeline alignments and construction work areas would be generally be sited and constructed to avoid sensitive resources to the extent feasible. The following elements of the project would ensure that construction impacts would be ***less than significant***:
>
> - consultation with DFG on appropriate habitat protection and construction practices for construction work and acquisition of a Section 1600 streambed alteration agreement, as necessary;
> - implementation of erosion control, sedimentation control, and hazardous material spill control and response best management practices (BMPs) under authorization for the National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (refer to Section 3.2, Hydrology and Water Quality);
> - avoidance of sensitive resources – design avoids impacts;
> - river/stream/drainage crossings crossed during the dry season or tunneled beneath with directional drilling;
> - directional drilling for stream crossings conducted with appropriate control practices and spill response measures to minimize risks of drilling fluid (i.e., bentonite slurry) contamination;
> - work zones – restricted contractor access to sensitive areas;
> - equipment staging and fueling – setbacks from drainages;
> - site restoration and use – revegetation of disturbed areas as necessary; and
> - environmental training and awareness – emphasis on avoidance and mitigation measures.
>
> The pollution prevention elements described above and BMPs described in the project description would be applied during construction of the crossings, reducing the impact to ***less than significant***.
>
> **Operation and Maintenance.** A pipeline failure may potentially result in the loss of individuals or habitat for all the irrigation approaches by introducing sediment to waterways. However, facilities would be constructed to existing construction-industry standards and codes, so failure attributable to a seismic or other event is considered remote and speculative, thus reducing the impact to ***less than significant***. No mitigation is required.[9]

[9] Ibid. pages 3.3-18 through 3.3-21.

While the fifth bulleted element above is not longer relevant to the recycled water system component of the WWTP Upgrade Project since directional drilling at the Dry Creek crossing has been eliminated, all the all other elements listed above remain part of the project and would be sufficient to reduce the potential impact to less than significant. The following excerpts that remain relevant to the project, with the modifications to the analysis described below:

Impact 3.3-2: Potential for Ecological Risk to Fish Populations

Construction. Construction of new pipelines and structures for the proposed seasonal irrigation reuse system has the potential to result in ecological risk to fish populations through stormwater runoff or a hazardous materials spill. However, implementation of construction-related pollution prevention elements of the project description would ensure that impacts associated with ecological risk to fisheries resources would be ***less than significant***.

Operation and Maintenance. Aquatic life could be exposed to undiluted effluent applied directly to land that might run off into waterways. Based on comparison of predicted effluent concentrations to water-based toxicity benchmarks, there are no compounds identified as chemicals of concern in recycled water applied as agricultural irrigation. All ecological risk quotient values are well below the significance threshold of 10; therefore, the impact on fisheries resources is ***less than significant***. No mitigation is required.

Impact 3.3-3: Potential to Substantially Block or Disrupt Major Migration or Travel Corridors between Essential Resource Areas for Native Fish

Construction. Construction activities at stream crossings or near streams could affect migration movements of anadromous fish species, including chinook salmon, coho salmon, steelhead, river lamprey, Pacific lamprey, and western brook lamprey. Depending on the season, both adult and juvenile fish could be affected during construction near these streams. The pollution prevention elements described above and BMPs described in the project description (including methods to prevent bentonite contamination during drilling) would be applied during construction of the crossings, reducing the impact to ***less than significant***.

Operation and Maintenance. As discussed for the effluent discharge options, a wastewater concentration of up to 70% had no deleterious impact on anadromous fish migration. The amount of effluent that might reach surface waters through irrigation is expected to be small. Therefore, the impact of effluent runoff from seasonal irrigation reuse on fisheries migration or travel would be ***less than significant***. No mitigation is required.[10]

Impact 3.4-1: Impacts on Special-Status Plants

Extensive trenching would be required to install pipeline for the seasonal irrigation reuse system and allow the transportation of recycled water to irrigate up to 570 acres of existing vineyard and 70 acres in the city. The pipeline would be placed in existing roadway for most of its length. Construction of the Foreman Lane to Tayman Park portion of the seasonal irrigation reuse system would require approximately 12,100 feet of trenching for the 12- to 16-inch-diameter recycled water line that would carry water from the WWTP to the City's old Tayman Park tanks adjacent to the Tayman Park Golf Course and to vineyards located between Dry Creek and U.S. 101. Although most of the ground disturbance would be confined to roadways, construction for this portion of the system also would involve directional drilling under Dry Creek, a bridge crossing on Foss Creek, and bore-and-jack tunneling under U.S. 101. The setup area for the directional drilling under Dry Creek would be located outside of the ordinary high-water mark of Dry Creek. Although the bore entrance and exit setup locations are in areas dominated by nonnative grasses, there is potential for special-status plant species to occur. The pipeline would be attached to an existing bridge to cross Foss Creek. Riparian trees and shrubs might need to be trimmed to complete the bridge attachment. Because the installation of the pipeline would be done from the existing bridge, no plants would be removed. No special-status plants are expected to occur in the roads, vineyard areas, or urban areas that would be disturbed by trenching.

[10] Ibid, pages 3.3-21 and 3.3-23.

Because these construction activities could potentially lead to the removal of special-status species, this impact would be ***potentially significant***.[11]

Mitigation Measure 3.4-1: Avoid Significant Impacts on Special-Status Plants

Before project implementation, surveys for the special-status plants listed in Table 3.4.1 shall be conducted by a qualified botanist, in accordance with USFWS and DFG guidelines and at the appropriate time of year when the target species would be in flower or otherwise clearly identifiable.

If no special-status plants are found during focused surveys, the findings shall be documented in a letter report to the regulatory agencies, and no further mitigation shall be required.

If special-status plants are found during focused surveys but impacts would be completely avoided, the findings shall be documented in a letter report to the regulatory agencies, and locations of special-status plant populations shall be clearly identified in the field by staking or flagging before construction. No project activity shall occur in the marked areas.

If special-status plants found during focused surveys cannot be completely avoided, consultation with DFG, USFWS, or both shall be initiated, depending on the listing status of the plant. During this consultation, an appropriate mitigation plan shall be developed and approved by the relevant agencies. This plan may include one or more of the following measures: erecting protective fencing (for indirect impact), providing worker education, locating and enhancing another offsite population of the species, or transplanting the population to suitable nearby habitat.

Timing/Implementation: Before construction begins. Surveys would be conducted during the flowering periods for target plant species.

Enforcement/Monitoring: City of Healdsburg

Implementation of this mitigation measure would reduce these potential impacts on special-status plants to a ***less-than-significant*** level.[12]

Based on a review of plans for the aerial pipeline crossing and comparison with the details shown in Figure 2-9 of the 2005 EIR (Location of Recycled Water Pipeline Crossing at Dry Creek), the proposed tower footing locations will be approximately in the same area as the bore entrance and exit set locations shown in this figure.[13] Therefore, in order to determine whether special-status plants would be impacted by the project at these locations, and as required by the above mitigation measure, the site of the Dry Creek crossing was surveyed on April 7, 2010 during the flowering periods for target plant species by a qualified botanist. The survey also updated the list of potentially occurring species using the most recent listing of the Natural Diversity Data Base, maintained by the California Department of Fish and Game. A letter report by this botanist includes the following results and findings from this site review:

A total of 28 special-status plants have the potential to occur in the area based on a four-quadrangle search of the CNDDB (Attachment A). Three of these species have potential to occur based on the presence of potential habitat. These are: Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*), seaside tarplant (*Hemizonia congesta* ssp. *congesta*), and marsh microseris (*Microseris paludosa*). Sonoma alopecurus, if present, would be within the bed and bank of Dry Creek. Since this area will not receive any direct impacts, this species would not be affected. The April 7, 2010 site visit was within the flowering period for seaside tarplant and marsh microseris and neither of these species was observed. Given that the grasslands are dominated by non-natives, have been previously disturbed by past land management activities and are very dense, the grassland habitats within the study

[11] Ibid, pages 3.4-30 through 3.4-33.
[12] Ibid, page 3.4-30.
[13] Ibid, page 3-24.

are not likely to provide habitat for any special status plants. Therefore ~~it is unlikely that any special-status plants occur within the study area~~the project will not impact any special status species.[14]

Additionally, the 2005 EIR also addressed potential impacts to special-status animal species at the site of the Dry Creek crossing as follows:

> **Impact 3.4-2: Loss of Habitat for Northern Red-Legged Frog, Foothill Yellow-Legged Frog, and Western Pond Turtle**
>
> Most of the pipeline associated with the Foreman Lane to Tayman Park portion of the seasonal irrigation reuse system would be confined to roadways. Construction also would involve directional drilling under Dry Creek and crossing Foss Creek. Irrigation regimes with recycled water are expected to stay the same as current conditions using municipal sources.
>
> Although the riparian vegetation and open water associated with the creeks provides habitat for the foothill yellow-legged frog and western pond turtle, the construction would be done so as to avoid impacts on the creeks and the riparian vegetation. A minimum 25-foot setback from the riparian vegetation at Dry Creek would be maintained, and minor trimming may occur at Foss Creek. Habitat for the northern red-legged frog does not exist on the site because this species requires deep and still or slow-moving water.
>
> Because these construction activities would not lead to the removal of habitat for the northern red-legged frog, foothill yellow-legged frog, or western pond turtle, there would be ***no impact***. No mitigation is required.[15]

While directional drilling of the Dry Creek pipeline crossing has been eliminated and is no longer proposed, the tower footings supporting the aerial pipeline crossing have been located to avoid existing riparian vegetation, the open water habitat of the creek and adjoining creek banks. The footing locations for the two towers are proposed in approximately the same location as the bore and exit setup areas for the previously proposed directionally drilled undercrossing of the creek. Therefore, this project modification will not lead to the removal of habitat for the northern red-legged frog, foothill yellow-legged frog, or western pond turtle, and there will continue to be no impact and no need for mitigation at this location.

Tayman Park Recycled Water Tank: The site for the new storage tank on a hilltop surrounded by a mix of both native and non-native trees is already developed and subject to decades of disturbance. The City adopted a Mitigated Negative Declaration and Initial Study for a proposed 2001 project to demolish and replace the existing tanks at this site (2001 Tayman Tank Project). Although the demolition portion was ultimately not implemented, the Biological Resources Report[16] prepared for this project remains relevant. For this report, the consultant biologist reviewed records for plants and animal species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the DFG, the USFWS, or the ACE with the potential of occurring in or near the project site. A survey was conducted on May 1, 2000. The results of both the records search and the field survey indicate that no candidate, sensitive, or special status plant species, or habitat for any candidate, sensitive, or special status animal species, exist within the proposed project area. The area to be impacted by demolition of existing storage tanks and construction of a new replacement

[14] Letter report by Jane Valerius, Botanist/Wetland Specialist, dated August 23, 2010~~April 22, 2010~~.
[15] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, pages 3.4-33 through 3.4-35.
[16] Valerius, Jane, Tayman Park Tank Replacement, City of Healdsburg, Biological Resources Report, June 12, 2000.

tank is at the same site, and that area is within the footprint of the existing tanks. For this reason, the site does not provide suitable habitat for special status plant or animal species, and this proposed modification to the WWTP Upgrade Project will not result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Dry Creek Crossing and Tayman Park Recycled Water Tank: Raptors (i.e., hawks, owls, eagles, falcons) are considered sensitive species by DFG, and removal or destruction of active raptor nests is a violation of Section 3503.5 of the Fish and Game Code. The project area, including both the Tayman tank site and the Dry Creek crossing site, may provide open space for foraging and mature trees for nesting for several species of raptors. The 2005 EIR stated the following in regard to nesting raptors:

> **Impact 3.4-3: Impacts on Nesting Raptors**
>
> Construction of the seasonal irrigation reuse system pipelines generally would be confined to existing roadways and would not be expected to result in the removal of any trees. However, several trees exist along the pipeline route, and portions of the pipeline would be located in annual grassland and in mixed woodland. A 30-foot-wide corridor would be necessary to construct the pipeline through annual grassland and mixed woodland. A small portion of mixed woodland and annual grassland that provide nesting habitat for raptors would be removed. In addition, noise from construction might cause active nests to fail. Because these construction activities could potentially lead to the failure of raptor nests, this impact would be ***potentially significant***.
>
> **Mitigation Measure 3.4-3: Protect Nesting Raptors**
>
> The following measures shall be implemented by the project applicant:
>
> To the extent feasible, all grading and tree removal shall occur outside the raptor nesting season (September through January). If grading or tree removal is avoided during the raptor nesting season, no further mitigation shall be necessary. This measure applies to any heavy equipment activities that would occur within 500 feet of heritage trees in or adjacent to the project area.
>
> If grading within 500 feet of heritage trees or tree removal is proposed to take place during the raptor nesting season, a focused survey for raptor nests shall be conducted by a qualified biologist during the nesting season to identify active nests in the project area. The survey would be conducted no more than 30 days before the beginning of grading or tree removal. The results of the survey would be summarized in a written report to be submitted to DFG and the City of Healdsburg before the beginning of grading.
>
> If active nests are found, no remediation or other construction activity shall take place within 300 feet of the nest until the young have fledged (as determined by a qualified biologist). If no active nests are found during the focused survey, no further mitigation will be required.
>
> **Timing/Implementation:** If construction occurs during the raptor nesting season (February through August), conduct surveys no more than 30 days before construction. See description above for additional information on timing.
>
> **Enforcement/Monitoring:** DFG, City of Healdsburg Implementation of this mitigation measure would reduce potential impacts on nesting raptors to a ***less-than-significant*** level.[17]

The potential for construction-related impacts to nesting raptors would not change with the new Dry Creek aerial crossing design, or with replacement of the Tayman Park tanks at the same location. Therefore, the above mitigation measure remains adequate for mitigating this potential impact.

[17] Ibid, pages 3.4-37 and 3.4-38.

b) Dry Creek Crossing: In regard to the issue of potential impacts to riparian habitat or other sensitive natural community, some tree trimming may be needed to install the aerial pipeline where it will cross through riparian vegetation adjoining the creek. Some long-term tree trimming may also be necessary to maintain clearances on both sides of the crossing to protect the suspended pipeline and cables. The clearing requirements around the pipeline and cables are expected to be similar to those around power lines. City staff estimates that approximately five feet of clearance would be adequate. In addition, the footing for the suspension tower on the south side of Dry Creek (where the pipe will exit the ground for the aerial crossing) is an area characterized as annual grassland and devoid of riparian vegetation. The footing site on the north side is part of a dense thicket of non-native shrubs, including Himalaya blackberry and giant reed (*Arundo donax*), as well as coyote brush, a native species but not typically considered a riparian habitat species. Therefore, implementation of an aerial crossing of Dry Creek at this location will not result in any loss of riparian habitat acreage, but may require trimming of trees which is considered a less than significant impact. No mitigation is needed, other than any measures or requirements that may be specified under a 1602 Streambed Alteration Agreement from the California Department of Fish and Game (DFG), in the event a permit is required to trim vegetation along the creek.

Tayman Park Recycled Water Tank: The site for the new tank is located on a hilltop and was previously developed for water storage tanks. Therefore, the site does not include any riparian habitat. Since the area to be impacted by the proposed demolition of existing storage tanks and construction of a new replacement tank is within the footprint of the existing tanks and access road, this site does not include any other sensitive natural community identified in local or regional plans, policies, or regulations, or by the DFG or US Fish and Wildlife Service.

c) Dry Creek Crossing: In regard to the issue of potential impacts to federally protected wetlands, the 2005 EIR noted the possibility that wetlands could occur at the Dry Creek crossing site:

> **Impact 3.4-5: Impacts on Jurisdictional Waters of the United States, Wetlands, and Riparian Habitat**
>
> Constructing the Foreman Lane to Tayman Park and the Foreman Lane/Mill Creek portions of the seasonal irrigation reuse system would involve directional drilling under Dry Creek and crossings for Mill Creek and Foss Creek using existing bridges for attachments. All work would occur outside of the ordinary high-water mark; therefore, a Section 404 permit would not be required. Although the staging areas for the directional drill would be placed outside of the riparian vegetation, DFG would likely require a streambed alteration agreement for directional drilling under a jurisdictional stream/creek and removal or trimming of vegetation near creeks.
>
> Because the construction activities associated with the Foreman Lane to Tayman Park and the Foreman Lane/Mill Creek Road portions of the system could potentially affect jurisdictional waters of the United States, including wetlands and riparian habitat, this impact would be ***potentially significant***.[18]

The proposed location of the two suspension tower footings for the aerial pipeline crossing is approximately in the same area of the bore entry and exit areas for a directionally drilled under crossing as previously proposed. Therefore, in order to determine whether jurisdictional wetlands could be affected at this location, a qualified botanist and wetland specialist visited the site on April 7, 2010 to determine whether wetland conditions exist in the area that would be impacted by project construction. A

[18] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, page 3.4-41

letter report by this botanist/wetland specialist includes the following results and findings from this site review:

> Dry Creek qualifies as a relatively permanent water (RPW) of the U.S., and it flows into the Russian River, which is a navigable waters of the U.S. This qualifies Dry Creek as a USACE jurisdictional stream and well as a water of the state. Within the study area the top of bank of the creek on the south side is at the approximate 75-foot elevation and on the north side it is at the approximate 85-foot elevation. The ordinary high water mark is approximately at the 67-foot elevation on the south and north sides of the creek. Dry Creek also has a rather wide terrace that would qualify as wetlands. The terrace wetland area is between the OHWM and the toe of slope of the bank. On the south side this would be from approximately the 67-foot elevation to approximately 71-foot elevation. On the north side the terrace wetland area is from approximately 67-foot elevation to the 70-foot elevation.
>
> A formal delineation was not conducted for the study area but based on the proposed project plans and designs the pipeline will not directly impact the creek or any wetlands. The footings for the above-ground pipeline will be placed outside of any wetland or creek bed and bank and this will avoid any impacts to USACE jurisdiction.[19]

The summary of this letter report states the following:

> Based on the information provided and the site survey the project as proposed and described will not impact any special status plant species or impact any USACE jurisdictional wetlands or waters of the U.S.[20]

Therefore, the additional information in the evaluation conducted by the botanist/wetland specialist on April 7, 2010 therefore modifies the impact statement cited from the 2005 EIR, since site-specific information now demonstrates that there will be no impact on any special status plant species or and impact on any USACE jurisdictional wetlands or waters of the U.S.

Tayman Park Recycled Water Tank: The site for the new storage tank is in an upland area on a hilltop, and has already been developed for existing water storage tanks, and therefore does not include any federally protected wetlands, as defined by Section 404 of the Clean Water Act.

d) Dry Creek Crossing: In regard to the issue of potential impacts to movement of any native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or use of native wildlife nursery sites, the 2005 EIR stated the following:

> The proposed project would not result in the construction of any permanent features that would substantially interfere with the movement of migratory fish or their nursery areas. No habitat conservation plan or natural community conservation plan have been adopted for the project site or the vicinity. Therefore, these issues are not discussed further in this section.[21]
>
> The proposed project would not result in the construction of any permanent features that would substantially interfere with the movement of migratory wildlife or nursery areas. No habitat

[19] Valerius, Jane, Botanist/Wetland Specialist, Letter report regarding: Healdsburg Wastewater Treatment Plant (WWTP) Upgrade Project Site Assessment for Special Status Plants and Waters of the U.S., including Wetlands, ~~April 26~~August 23, 2010.
[20] Ibid.
[21] Ibid, page 3.3-11.

> conservation plan or natural community conservation plan have been adopted for the project site or the vicinity. Therefore, these issues are not discussed further in this section.[22]

The proposed crossing of Dry Creek using an aerial pipeline would be suspended above the creek, using support towers located outside the riparian habitat, and thus will not interfere with migration of fish or wildlife along the Dry Creek corridor. Therefore, the impacts associated with project modifications as described in this Initial Study would not change this assessment nor require any additional mitigation.

Tayman Park Recycled Water Tank: The site for the new storage tank on a hilltop surrounded by a mix of both native and non-native trees is already developed and therefore would not adversely impact any habitat for native resident and migratory fish, or any areas that are used as an established native resident or migratory wildlife corridor, or as a native wildlife nursery.

e) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to the issue of potential impacts to local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, the 2005 EIR noted that the seasonal irrigation reuse component of the project is under Sonoma County jurisdiction and subject to the Sonoma County Zoning Ordinance (Article 67, Valley Oak Habitat Combining District) To protect and enhance valley oaks and valley oak woodland in the Valley Oak Habitat (VOH) Combining District, Sonoma County requires mitigation to address the cutting down or removal of large valley oaks or small valley oaks with a cumulative diameter at breast height greater than 60 inches. In addition, it requires that any development project in the VOH District be subject to design review. It also adopt measures to protect and enhance valley oaks in the project area. Based on a field inspection of the alignment of the pipeline in the vicinity of the Dry Creek aerial pipeline crossing on April 7, 2010 in conjunction with a visit by the wetland specialist and botanist, no valley oaks are located in this vicinity that would be adversely affected by pipeline construction. Trees in this area are primarily willows within riparian zone bands Dry Creek, along with some non-native Tree-of-Heaven trees on the north bank of Dry Creek close to its confluence with West Slough to the east.

The Tayman Park recycled water tank site is located within City of Healdsburg jurisdiction and subject to the City's heritage tree ordinance. Under the City's Zoning Ordinance, heritage trees are defined as any tree with a diameter of 30 inches or more, measured two feet above ground level. As noted in response to question 1. a-c) (see page 10), only three trees will need to be removed for the demolition of existing tanks and construction of a replacement tank at Tayman Park, with none larger than six inches in diameter. Therefore, no heritage trees would be removed. *Mitigation Measure #2*, as shown on page 15 of this Initial Study, will mitigate potential construction impacts to heritage trees surrounding the proposed new tank site to less than significant.

f) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to the issue of potential impacts involving a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, the 2005 DEIR stated the following in regard to this issue:

> The proposed project would not result in the construction of any permanent features that would substantially interfere with the movement of migratory wildlife or nursery areas. *No habitat conservation plan or natural community conservation plan have been adopted for the project site or*

[22] Ibid, page 3.4-29

the vicinity (italics added for emphasis)**.** Therefore, these issues are not discussed further in this section.[23]

It is still the case that no adopted habitat conservation plan or natural community conservation plan has been adopted that would affect any portion of the WWTP Upgrade Project, including the proposed recycled water system and project modifications as described in this Initial Study.

The Sonoma County Water Agency (SCWA), under the requirements of a Biological Opinion issued by the National Marine Fisheries Service (NMFS), will be preparing a habitat enhancement plan for Dry Creek for the purpose of eliminating impediments to fish migration and improving habitat for endangered populations of coho salmon and threatened populations of steelhead. This plan will include habitat improvement projects along 3 miles of Dry Creek by 2017, and along an additional 3 miles by 2030. While this plan has not yet been completed, an aerial pipeline crossing of Dry Creek would not be expected to conflict or impede any of SCWA's habitat improvement projects.

V. CULTURAL RESOURCES

Impact Significance Criteria: A significant impact would occur if a project would adversely affect the significance of a historical or archaeological resource (defined by CEQA Guidelines Sec. 15064.5), destroy a unique paleontological resource, or disturb any human remains.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒	3, 15
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐	3, 8, 15
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒	3, 15
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒	3

Discussion of Impacts

a-b) Dry Creek Crossing and Tayman Park Recycled Water Tank: The 2005 EIR evaluated the potential for impacts on documented and undocumented cultural resources in the area of and in the vicinity of the proposed pipeline alignments for the seasonal irrigation reuse component of the project, including the site of the proposed Dry Creek crossing. This evaluation included a record search conducted by the Northwest Information Center at Sonoma State University in 2003 and a mixed reconnaissance and intensive cultural resources inventory of all the proposed alternative routes and facility locations. In regard

[23] Ibid, page 3.4-29.

to potential impacts to documented and undocumented cultural resources, the WWTP Upgrade Project EIR stated the following:

> **Impact 3.8-1: Potential Impacts on Documented Cultural Resources**
>
> Extensive trenching would be required to install pipeline for the seasonal irrigation reuse system and allow the transportation of treated wastewater to irrigation locations up to several miles from the WWTP. The pipeline would be placed in existing roadway for most of its length. The Foreman Lane to Tayman Park portion would require approximately 12,100 feet of trenching for 12- to 16-inch-diameter recycled water line that would carry water from the WWTP to the City's old Tayman Park tanks adjacent to the Tayman Park Golf Course. The documented cultural resources in this area are all related to the A.F. Stevens Mill & Lumber Company Historic District. Although not formally recorded as a historic resource, portions of the option are designed to go through and immediately alongside a historic cemetery. As currently designed, this proposed option would not affect any element of this district. Because these construction activities would not disturb documented cultural resources, implementing this option would have ***no impact***. No mitigation is required.
>
> **Impact 3.8-2: Potential Impacts on Undocumented Cultural Resources**
>
> Extensive trenching would be required to install pipeline for the seasonal irrigation reuse system and allow the transportation of treated wastewater to irrigation locations up to several miles from the WWTP. The pipeline would be placed in existing roadway for most of its length. The Foreman Lane to Tayman Park portion extends through Healdsburg and in areas where numerous historic-era structures and buildings, including portions of the A.F. Stevens Mill & Lumber Company Historic District, and a historic cemetery are present. (See the discussion for Impact 3.8-1 for trenching details.)
>
> **Mitigation Measure 3.8-2: Reduce Potential Impacts on Cultural Resources through Archaeological Monitoring Where Necessary**
>
> The Foreman Lane to Tayman Park portion crosses many potentially sensitive areas in the city of Healdsburg, including an established historic district and a historic cemetery. (See the discussion of Impact 3.8-1 for trenching details.) To ensure that no potentially significant cultural resources are adversely affected by the implementation of this option, a qualified archaeologist must monitor all ground-disturbing activities in the vicinity of the designated historic district and in and along the outside edges of the cemetery. If cultural resources are documented on the property, they may need to be assessed further through additional documentary research and/or subsurface testing and excavation.
>
> Implementation of this mitigation measure would reduce potential impacts on cultural resources to a ***less-than-significant*** level.[24]

In addition to the cultural resource evaluation conducted for the 2005 EIR, the Initial Study and Mitigated Negative Declaration adopted by the City in 2000 for the 2001 Tayman Park Project included an evaluation of potential impacts to cultural resources. Tis evaluation is still relevant for evaluating potential effects from the currently proposed project activity at this site because the site surface remains unchanged from conditions in May, 2000. Relevant excerpts from this document are repeated below:

> A Cultural Resources Survey was conducted for the project that included a records review and field survey.[25] The Cultural Resources Survey report noted that examination of the study area identified no prehistoric or historic-period archaeological sites. No buildings or structures other than the existing water tanks proposed to be removed are within the project site. The northern tank is an above ground concrete tank. The southern tanks are also concrete tanks but are constructed partially below grade and area enclosed by wood frame buildings with corrugated metals roofing. The Cultural Resources Survey determined that none of these structures meet the National Register criteria, as set forth in 36CRR60, as significant historical properties.

[24] Ibid, pages 3.8-9 through 3.8-14.
[25] Vicki R. Beard, M. A, Tom Origer & Associates, Cultural Resources Survey, May 8, 2000.

As with any project, however, the archaeologist noted the possibility exists that presently unknown, buried cultural resources may be uncovered during project construction.

The State of California Native American Heritage Commission was contacted by letter for a record search of the commission's sacred lands file. A response letter dated June 28, 2000 indicates that the commission failed to find any record of the presence of Native American cultural resources in the immediate project vicinity.

A list of Native American individuals or organizations which might have knowledge of cultural resources in the project area was obtained from the Native American Heritage Commission. These individuals or organizations were subsequently also contacted by letter. No response to date has yet been received.[26]

c) Dry Creek Crossing and Tayman Park Recycled Water Tank: No known paleontological resources or unique geological features were identified in the 2005 EIR for the seasonal irrigation reuse component of this project, including the Dry Creek pipeline crossing site and the Tayman storage tank site. In addition, a Cultural Resources Survey report[27] prepared in 2000 for the 2001 Tayman Tank Project at this site.

d) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to the issue of potential impacts to unknown or undocumented prehistoric Native American burials and historic-era interments, the 2005 EIR stated the following:

Impact 3.8-3: Potential to Affect Unrecorded Human Interments

Although no evidence of prehistoric or early historic interments was found in the project area in surface contexts (with the exception of the previously mentioned cemetery), unmarked and undocumented subsurface human remains could still be present in the area. Undocumented human remains may be encountered in an otherwise well-marked, seemingly orderly cemetery. Very early interments and indigent sections, for example, may not have been adequately marked and may have since been covered over or simply forgotten. Similarly, prehistoric Native American internments usually do not possess markers, and their discovery is often accidental. In light of the potential to uncover unknown or undocumented prehistoric Native American burials and historic-era interments, this impact is potentially significant.

Mitigation Measure 3.8-3: Stop Potentially Damaging Work if Human Remains Are Uncovered during Construction, Assess the Significance of the Find, and Pursue Appropriate Management

California law recognizes the need to protect historic era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097.

In accordance with the California Health and Safety Code, if human remains are uncovered during construction at the project site, the construction contractor shall immediately halt potentially damaging excavation and notify the City's designated representative. The agency/client shall immediately notify the Sonoma County coroner of the find. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). After a Most Likely Descendent (MLD) has been designated by the NAHC, the MLD, in consultation with the City's representative, will determine the ultimate disposition of the remains. The responsibilities of the agency/client for acting upon notification of a discovery of Native American human remains are outlined in detail in the California Public Resources Code Section 5097.9.

[26] Earthcraft Planning Services, Initial Study, Tayman Park Reservoirs Replacement Project, Healdsburg, California, December 2000.

[27] Vicki R. Beard, M. A, Tom Origer & Associates, Cultural Resources Survey, May 8, 2000.

Timing/Implementation: During all ground-disturbing activities

Enforcement/Monitoring: The general contractor and its supervisory staff would be primarily responsible for monitoring the construction project for disturbance of cultural resources. If any resources are encountered, they would notify the City's Public Works Director.

Implementation of this measure would reduce this impact to a ***less-than significant*** level.[28]

The impacts associated with project modifications as described in this Initial Study are adequately addressed in the above assessment, and will not require any new or revised mitigation.

VI. GEOLOGY AND SOILS

Impact Significance Criteria: A significant geologic impact would occur if a project exposes people or structures to major geologic hazards such as seismic damage, slope and/or foundation instability, erosion or sedimentation, land subsidence, and/or other problems of a geologic nature as set forth in the City of Healdsburg General Plan. A significant impact would also occur if a project results in substantial increases in erosion and sedimentation rates.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault?	☐	☐	☐	☒	2, 3
ii) Strong seismic ground shaking?	☐	☐	☒	☐	2, 3
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒	2, 3
iv) Landslides?	☐	☐	☐	☒	3
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	3
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒	3
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐	3

[28] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005.Ibid, pages 3.8-14 and 3.8-15.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	

Discussion of Impacts

a.i) Dry Creek Crossing and Tayman Park Recycled Water Tank: Based on a review of geology maps included in the Healdsburg 2030 General Plan Update Revised Draft EIR (January 2009), there are no faults known to be active within or close to either site. Therefore, the likelihood of ground rupture due to faulting affecting either the Dry Creek crossing or the Tayman Park storage tank site is considered to be nil.

a.ii-iii) Dry Creek Crossing and Tayman Park Recycled Water Tank: The potential impact of earthquake-induced ground shaking and seismic-related ground failure, including liquefaction, at the project site, including the sites of the Dry Creek Crossing and Tayman Park Recycled Water Tank was addressed in the 2005 EIR as follows:

> **Impact 3.5-1: Potential to Expose Structures to Seismic Activity and Related Ground Failure**
>
> The project site is located in the vicinity of several potentially active faults. Seismic activity in Sonoma County or the San Francisco Bay region could cause structural damage to proposed water retention structures, pipelines, and facility buildings. Although strong seismic ground shaking and seismically related ground failure is likely to occur at the project site, the City of Healdsburg would be required to design project site structures in accordance with standards of the current CBC. Site structure design also would comply with applicable city and county policies regarding seismic and geologic hazards and public safety. This impact would be ***less than significant***. No mitigation is required.[29]

The impacts associated with project modifications as described in this Initial Study are adequately addressed in the above assessment, and will not require any new or revised mitigation.

a.iv) Dry Creek Crossing: The site of this aerial pipeline crossing is relatively flat, and therefore, the risk of landslides is considered nil.

Tayman Park Recycled Water Tank: The new tank will be constructed on the hilltop site of an existing, partially subsurface water storage tanks. The existing tanks will be demolished and filled in, consistent with recommendations included in a design-level geotechnical engineering investigation report prepared for this project.[30] No landslide hazard at this site is noted in this geotechnical report and addendum.

b) Dry Creek Crossing and Tayman Park Recycled Water Tank: Potential construction-related impacts involving soil erosion or the loss of topsoil was addressed in the 2005 EIR as follows:

> **Impact 3.5-2: Construction-Related Erosion**
>
> Implementing the proposed options would require trenching, grading, and placement of fill materials during project construction. Soil disturbance associated with construction activities would increase the potential for ground instability and erosion, and the placement of fill could result in unstable soil

[29] Ibid, page 3.5-6.

[30] DCM / GeoEngineers, Geotechnical Engineering Investigation Report, City of Healdsburg Recycled Water System Project, Healdsburg, California, September 2009, and DCM / GeoEngineers, Addendum No. 1, Grading Recommendations for Tayman Park Recycled Water System, City of Healdsburg, January 13, 2010.

conditions associated with loose or uncompacted fill materials. This impact would be ***potentially significant***.

Mitigation Measure 3.5-2: Develop and Implement an Erosion Control Plan

The City of Healdsburg shall develop and implement an erosion control plan that specifies BMPs, such as use of sandbags and the covering of exposed soils, that would prevent construction pollutants from coming in contact with receiving waters and would minimize on-site erosion.

Timing/Implementation: During project design and construction

Enforcement/Monitoring: City of Healdsburg[31]

The impacts associated with project modifications as described in this Initial Study are adequately addressed in the above assessment, and will not require any new or revised mitigation.

c) Dry Creek Crossing and Tayman Park Recycled Water Tank: A Geotechnical Investigation Engineering Report[32] was prepared for the project, including modifications as described in this Initial Study. The report addressed factors such as unstable soil units and susceptibility to landslides, and included recommendations for project design. Since these recommendations are incorporated into project plans and specifications, implementing the above mitigation from the 2005 EIR, potential impacts will be reduced to less than significant.

d) Dry Creek Crossing and Tayman Park Recycled Water Tank: Potential impacts due to the presence of expansive soils along all proposed alignments of the seasonal irrigation reuse component of the WWTP Upgrade Project were addressed in the 2005 EIR as follows:

Impact 3.5-4: Location of the Project on Expansive Soil

Soils in most of the project area have a relatively low shrink-swell potential. However, some project area soils, including those associated with the Foreman Lane/Mill Creek Road portion of the proposed seasonal irrigation reuse system, have moderate to high shrink-swell potential. Although the proposed seasonal irrigation reuse system would be constructed in conformance with the CBC, including building and grading standards for soils with expansive properties, the shrinking and swelling of these soils could result in damage to project structures during operation. This impact would be ***potentially significant***.

Mitigation Measure 3.5-4: Prepare Design-Level Geotechnical Study to Address Expansive Soils

A design-level geotechnical study shall be completed for the project area before construction permits are issued. The study shall specifically address whether expansive soils are present in the project area and shall identify measures, such as use of artificial/imported fill, to address these soils where they occur. Measures included in the report would be implemented as appropriate, based on the specific soil conditions.

Timing/Implementation: Before construction permits are issued

Enforcement/Monitoring: City of Healdsburg[33]

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[31] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, pages 3.5-6 and 3.5-7.

[32] DCM / GeoEngineers, Geotechnical Engineering Investigation Report, City of Healdsburg Recycled Water System Project, Healdsburg, California, September 2009, and DCM / GeoEngineers, Addendum No. 1, Grading Recommendations for Tayman Park Recycled Water System, City of Healdsburg, January 13, 2010. ~~Ibid.~~

[33] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, page 3.5-8.

The above mitigation has subsequently been implemented by the City in conjunction with the preparation of design plans for the proposed City-funded recycled water system component of the WWTP Upgrade Project. A Geotechnical Investigation Engineering Report has been prepared for the project in 2009 by DCM/GeoEngineers (DCM Report). The DCM Report included the modifications described in this Initial Study, addressing such factors as expansive soils, and included recommendations for project design.[34] Since these recommendations are incorporated into project plans and specifications, implementing the above mitigation from the EIR, impacts will be reduced to less than significant.

Furthermore, the location for the proposed Tayman Park Recycled Water Tank is on a hilltop not subject to expansive soil, as confirmed in the DCM Report, as well as a separate geotechnical Investigation report prepared for the 2001 Tayman Tank Project. This report concluded that, "Laboratory tests indicate soils and bedrock at this site have a low expansion potential."[35]

e) Dry Creek Crossing and Tayman Park Recycled Water Tank: Neither the project modifications described in this Initial Study nor any other component of the WWTP Upgrade Project addressed in the 2005 EIR will require or involve the use of septic tanks or alternative wastewater disposal systems.

VII. GREENHOUSE GAS EMISSIONS

Impact Significance Criteria: A significant impact would occur if the project would generate greenhouse gas emissions, either directly or indirectly, that have a significant impact on the environment, or if it would conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	

a) Dry Creek Crossing and Tayman Park Recycled Water Tank: Vehicles and equipment to be used to construct the project will generate greenhouse gases. However, due to the size and nature of the project, it will not generate a substantial increase in greenhouse gas emissions relative to existing conditions. The operation of infrastructure necessary to convey recycled water (e.g., pumps, back-up systems, etc.) requires a small amount

[34] DCM / GeoEngineers, Geotechnical Engineering Investigation Report, City of Healdsburg Recycled Water System Project, Healdsburg, California, September 2009, and DCM / GeoEngineers, Addendum No. 1, Grading Recommendations for Tayman Park Recycled Water System, City of Healdsburg, January 13, 2010. ~~Ibid.~~

[35] Harlan Tait Associates, Geotechnical Investigation, Tayman Park and Panorama Reservoirs, Healdsburg, California, September 11, 2000

of additional power (approximately 31,000 kilowatt-hours/year), which will be provided by the City's Electric Utility. However, the City is a member of the Northern California Power Agency's (NCPA), and its available sources through NCPA include a substantial portion of renewable power, as defined by the State's Renewable Portfolio Standards (RPS). In 2007, the sources of power delivered in the City were 48% RPS, which is significantly higher than the State-adopted standard of 20% RPS by 2010, and higher than the proposed standard of 30% RPS by 2020. Therefore, the proposed project's contribution to climate change is expected to be less than significant.

b) Dry Creek Crossing and Tayman Park Recycled Water Tank: The City of Healdsburg has adopted numerous policies in the City's General Plan supporting the reduction of greenhouse gas emissions. This project will not be in conflict with any of these policies nor will it conflict with AB32 or its governing regulations.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Impact Significance Criteria: A significant impact would occur if the proposed project creates a potential health or safety hazard, or involves the use, production, or disposal of materials that pose a hazard to people or animal or plant populations in the project area, or interferes with emergency response plans or emergency evacuation plans.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☒	☐	3
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒	3
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	3
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	3
e) Be located within two miles of the Healdsburg Municipal Airport and result in any safety hazard or noise problem for persons using the airport or for persons residing or working in the project area?	☐	☐	☐	☒	3

f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	3
g) Be located in an area designated as having a high, extreme or severe fire hazard, or otherwise expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	3

Discussion of Impacts

a-g) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to potential impacts involving hazards and hazardous materials, airports, adopted emergency response plan or emergency evacuation plans, and wildland fire hazards, the 2005 EIR stated the following:

> Hazards and hazardous materials are not addressed in this EIR because the handling and storage of hazardous materials associated with construction activities would be strictly controlled by applicable state and local regulations. Portions of the pipelines required for the agricultural and urban recycled water irrigation systems would cross properties listed under Section 65962.5 of the Government Code, which relates to the disclosure of sites containing hazardous wastes. However, the construction activities for the proposed project would not result any substantial risk of hazardous waste exposure to people, and the project would not generate hazardous wastes. In addition, none of the construction activities would occur in areas identified as hazardous materials sites, and none would be located within … 2 miles of an airport. The construction activities also would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan or increase the risk of wildland fires. Therefore, no significant impact related to hazards and hazardous materials would be expected to occur under any of the proposed options.[36]

The Tayman Park recycled water tank site is in the same location assumed in the 2005 EIR. The only difference is that a single new replacement tank will be constructed on the site of the two existing tanks. This location is surrounded by dense vegetation with large, mature trees that are subject to wildfire hazard. However, the new storage tank will be constructed using non-combustible materials, will be readily accessible by two roads, from the east and west, in case of emergency, and will have a 15-foot wide clear access road separating the tank from adjoining vegetation. Replacing the existing, wood-framed and sided tanks with a new tank constructed entirely of non-combustible materials will significantly reduce the potential fire hazard.

The Dry Creek crossing is located in an area that includes grassland and riparian vegetation that could potentially combust. However, this site is not in an area that is designated as having a high, extreme or severe fire hazard. Furthermore, this facility will be constructed of non-combustible materials. Therefore, no new or revised mitigation is required.

[36] EDAW, *City of Healdsburg Wastewater Treatment Plant Upgrade Project Draft Environmental Impact Report*, February 4, 2005, page 1-8.

IX. **HYDROLOGY AND WATER QUALITY**

Impact Significance Criteria: A significant impact would occur where a project results in an increased exposure of persons or property to substantial flooding or erosion, or would result in adverse effects to surface or groundwater quality or quantity.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality?	☐	☒	☐	☐	3
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?	☐	☐	☐	☒	3
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?	☐	☐	☒	☐	3
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff, in a manner that would result in flooding on- or offsite?	☐	☐	☒	☐	3
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	3
f) Place housing within a 100-year flood as mapped on a federal Flood Hazard Boundary, or otherwise expose people or structures to a significant risk of loss, injury or death involving flooding?	☐	☐	☐	☒	3

Discussion of Impacts

a) Dry Creek Crossing and Tayman Park Recycled Water Tank: As relevant to the infrastructure construction considered in this Initial Study, regarding the issue of potential violation of any water quality standards or degradation of water quality, the 2005 EIR stated the following:

Impact 3.2-1: Construction Water Quality Effects

> The seasonal irrigation reuse system options would all involve long linear pipeline construction operations and would likely involve ground disturbance to a variety of land surfaces including level and steep topography, variety of soil types, exposure to drainage channels, construction within riparian zones to achieve minor drainage and stream channel crossings, and directional drilling under Dry Creek to install a pipeline. Directional drilling operations utilize liquid slurries of drilling fluids to lubricate the drilling operation, and produce drilling bore-hole cuttings, that require specialized waste management and monitoring to ensure that wastes do not get discharged to the stream environment. Depending on the time of year and site-specific conditions, pipeline route trenching operations may also require dewatering of drainage containing turbidity to eliminate excess water within the excavations. All of the construction activities have the potential to result in contaminated stormwater runoff from construction sites or accidental direct non-stormwater discharges of wastes which are a particular concern when working near or in drainage channels. Consequently, the potential surface and groundwater quality effects are considered **potentially significant**.[37]

While "directional drilling under Dry Creek to install a pipeline" (as noted above) will no longer present an impact potential, the mitigation measure shown below in response to potential construction-related water quality impacts remains relevant to the recycled water system as a whole, including the project modifications, described in this Initial Study:

> **Mitigation Measure 3.2-1: Implement Construction Water Quality Pollution Prevention Measures.**
>
> In accordance with the SWRCB guidelines for the statewide NPDES stormwater permit for general construction activity, the City (or its designated general contractor) shall prepare a SWPPP and seek authorization from the RWQCB for construction-related activities for the entire set of selected options and obtain appropriate WDRs. Pollution prevention measures shall be incorporated into all final design and construction plans. The SWPPP would describe the proposed construction activities, pollution prevention BMPs that will be implemented to prevent discharge of pollutants, and include a description of BMP inspection and monitoring activities that will be conducted. The SWPPP will be kept updated in the event modifications to any of the compliance measures become necessary, and amended for the RWQCB as necessary. All water quality, erosion, and sediment control measures included in the SWPPP will be implemented in accordance with the guidelines set forth in the SWPPP. The SWPPP will identify responsibilities of all parties, contingency measures, agency contacts, and training requirements and documentation for those personnel responsible for installation, inspection, maintenance, and repair of BMPs. Key categories of BMPs that will be used will be described in the SWPPP including:
>
> - Pollution Prevention BMPs: The SWPPP will identify all construction sites and staging activities; work schedules; temporary storage and borrow areas; construction materials handling and disposal; dewatering and treatment and disposal of groundwater removed from excavations; discharge locations and methods; and final stabilization and clean-up measures.
> - Erosion Control: BMPs will be included to stabilize exposed soils; minimize offsite runoff; remove sediment from onsite runoff before it leaves the site; slow runoff rates across construction sites; and, identify post-construction soil stabilization BMPs. Appropriate temporary and long-term seeding, mulching, and other erosion control measures will be identified.
> - Good Housekeeping Measures: BMPs to reduce exposure of construction sites and materials storage to stormwater runoff will be identified including tracking control facilities; equipment washing; litter and construction debris; designated refueling and equipment Inspection/maintenance practices; and, hazardous material spill control and response measures. BMP Inspection and Monitoring: Clear objectives will be described in the SWPPP for evaluating environmental compliance. Inspection and monitoring protocols, environmental awareness training, contractor and agency roles and responsibilities, reporting procedures, and communication protocols will be identified.

[37] Ibid, pages 3.2-31 and 3.2-32.

- Specific Pond Fill Measures: The City and contractor shall develop specific site inspection, monitoring, and response protocols for the SWPPP to address potential water quality effects from the proposed soil placement operations in the Syar ponds. Specific water quality protection elements to be addressed in the SWPPP include:
  1. Routine inspection procedures to observe turbidity levels in the ponds and ensure that dispersion of suspended sediment is not increasing considerably above background levels and dispersion throughout the pond is minimized.
  2. Observations should also include visual inspection of the shorelines to ensure that fish kills are not occurring that may indicate low DO levels or adverse effects from the turbidity.
  3. Response action protocols should include specified contractors practices and guidelines for placement of containment curtains upon findings that dispersion is exceeding objective thresholds.

Timing/Implementation: SWPPP prepared for construction contractor and submitted to RWQCB prior to beginning applicable ground-disturbing activities. Implementation of BMPs during all construction activities.

Enforcement/Monitoring: City's general contractor and RWQCB Implementation of all the above mitigation measures would reduce stormwater and non-stormwater discharges from construction activities. Following implementation, this impact would be considered ***less than significant***.

Impact 3.2-2: Industrial Stormwater Water Quality Effects of the WWTP

Although associated with the WTPU upgrades, the ED and SIR options would not involve substantially revised operations of existing facilities or construction of new facilities subject to the NPDES stormwater permit for general industrial activity. Consequently, the potential water quality effects associated with operations of these incidental facilities are considered minor. This impact would be **less than significant**. No mitigation is required.[38]

The impacts associated with project modifications as described in this Initial Study are adequately addressed in the above assessment, and will not require any new or revised mitigation.

(b) Dry Creek Crossing and Tayman Park Recycled Water Tank: Construction and operation of the infrastructure modifications evaluated in this Initial Study will not change the 2005 EIR's conclusions that the SIR alternative will not deplete groundwater supplies, interfere substantially with groundwater recharge, substantially alter the existing drainage pattern of the affected site or area, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system, or provide substantial additional source of polluted runoff. Therefore, these issues are not discussed further in this section.[39]

The initial study and mitigated negative declaration presently under review for the Syar Irrigation Project also provides further evaluation of these issues. A copy of the Syar Irrigation Project initial study and mitigated negative declaration is available online at http://www.ci.healdsburg.ca.us by entering "Syar Irrigation Final Initial Study" in the site search window; or at Healdsburg City Hall, 401 Grove St., Healdsburg, CA.

c-e) Dry Creek Crossing: Footings of the towers supporting the aerial crossing of Dry Creek, which will be constructed at grade and have no adverse impacts on floodplain capacity. The concrete will create a minor and insignificant amount of new impervious surface (approximately 648 square feet), but will not alter the existing drainage pattern of the site or area, nor substantially increase the rate or amount of surface runoff.

[38] Ibid, pages 3.2-29 through 3.2-34
[39] Ibid, pages 3.2-27, 3.2-42; pages 1-8

Tayman Park Recycled Water Tank: New impermeable surfaces created by the new recycled water storage tank, to be located within the footprint of one of the two existing water storage tanks, will be more than offset by the loss of impermeable surfaces when these two existing water storage tank roofs are demolished and removed at this same location. Therefore, a new water storage tank at this location will not affect the existing drainage pattern of the site or area, nor substantially increase the rate or amount of surface runoff.

f) Dry Creek Crossing: While the footings and towers for the suspended aerial pipeline crossing will be located within the 100-year flood as mapped on a federal Flood Hazard Boundary, the crossing will not involve any housing or habitable structures. Therefore, it would not place any housing within the 100-year flood as mapped on a federal Flood Hazard Boundary or otherwise expose people or structures to a significant risk of loss, injury or death involving flooding

Tayman Park Recycled Water Tank: The new storage tank will be located on a hilltop well away from any 100-year flood as mapped on a federal Flood Hazard Boundary. Furthermore, since the facility is for recycled water storage, it will not involve any housing or habitable structures or otherwise expose people or structures to a significant risk of loss, injury or death involving flooding.

X. LAND USE AND PLANNING

Impact Significance Criteria: Significant land use impacts would occur if the project would substantially conflict with established uses in the project area, disrupt or divide established land use configurations, or result in a conflict with any applicable land use plan or policy (including but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Physically divide an established community?	☐	☐	☐	☒	
b) Conflict with any applicable land use plan policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	1, 3
c) Substantially conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	3

Discussion of Impacts

a) Dry Creek Crossing and Tayman Park Recycled Water Tank: The Dry Creek crossing site is not located in an established community but rather at a site adjoining a waterway in an area primarily used for agriculture. The proposed new Tayman Park recycled water tank will be located on the site of an existing water storage tank. Therefore, neither will physically divide an established community.

b) Dry Creek Crossing: In regard to the issue of potential conflicts with any applicable land use plan policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect, the 2005 EIR noted that this area is subject to the Sonoma County Zoning Ordinance (Article 67, Valley Oak Habitat Combining District). To protect and enhance valley oaks and valley oak woodland in the Valley Oak Habitat (VOH) Combining District, Sonoma County requires mitigation to address the cutting down or removal of large valley oaks or small valley oaks with a cumulative diameter at breast height greater than 60 inches. In addition, it requires that any development project in the VOH District subject to design review also adopt measures to protect and enhance valley oaks in the project area. A field inspection was conducted by the author on April 7, 2010 in conjunction with a field biologist and City staff along the proposed pipeline alignment, including the site of the aerial crossing of Dry Creek. The field inspection confirmed that no valley oaks would be impacted in this area.

Tayman Park Recycled Water Tank: The City of Healdsburg requires a visibility analysis to demonstrate that a project will not be "visually obtrusive" on a designated scenic ridgeline. This requirement is a General Plan policy adopted for the purpose of avoiding or mitigating an environmental effect. As noted in response to checklist question I.a-c, a visibility analysis conducted for the proposed Tayman Park recycled water tank confirms that this new facility will be adequately screened by trees in the vicinity that will be preserved, and that it will not be visually obtrusive. Therefore, this component of the project will not conflict with this General Plan policy.

c) Dry Creek Crossing and Tayman Park Recycled Water Tank: See response to checklist question IV.f.

XI. MINERAL RESOURCES

Impact Significance Criteria: A significant impact would occur where the project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	3

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	3

Discussion of Impacts

a-b) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to the issue of potential impacts to mineral resources, the 2005 EIR stated the following:

> Mineral resources also are not addressed in this EIR. A portion of the project area is used by Syar for aggregate mining; however, neither construction nor operation of the proposed options would interfere with its ongoing or proposed operations. Construction of shallow percolation ponds would prohibit aggregate extraction of underlying deposits over the foreseeable long-term future; however, extraction of these so-called "terrace" deposits in the Russian River valley is effectively prohibited under the current County ordinances pertaining to allowable mineral resources development. Therefore, implementing the shallow percolation pond effluent disposal option would not result in the loss of availability of a known mineral resource and would not result in the loss of availability of a locally important mineral resource recovery site delineated in a local plan.[40]

Project modifications as described in this Initial Study would not change this impact assessment. The construction and operation of either the Dry Creek pipeline crossing or the Tayman Park recycled water tank will have no effect on any known mineral resource of value to the region and the residents of the state nor result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

XII. NOISE

Impact Significance Criteria: Noise impacts would be significant if a project would not conform to the Healdsburg General Plan's Land Use Compatibility for Community Noise Environments guidelines. Construction noise impacts would be significant if they would exceed limits specified in Healdsburg Ordinance 1011. A cumulative noise impact is considered significant if noise from the project substantially contributes to a condition where a normally-acceptable noise level is exceeded.

Would the project result in:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?	☐	☒	☐	☐	1, 3
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☒	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	3

[40] Ibid, pages 1-8

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	3

Discussion of Impacts

a-c-d) Dry Creek Crossing and Tayman Park Recycled Water Tank: In regard to the issue of potential noise impacts, the 2005 EIR stated the following:

Impact 3.7-1: Generation of Temporary Construction Noise Levels

Implementation of a seasonal irrigation reuse system options would involve construction activities associated with the extensive trenching required for pipeline installation to transport treated wastewater to irrigation locations offsite. Construction of the Foreman Lane to Tayman Park, Foreman Lane/Mill Creek Road, and Syar Property portions would include site grading, clearing, and excavation. The exact number and type of onsite equipment required for the construction activities is not known at this time but would be anticipated to include one backhoe and one truck at any one time. The simultaneous operation of such onsite construction equipment could potentially result in combined intermittent noise levels of approximately 91 dBA at 50 feet from the project site. Based on these equipment noise levels and assuming a noise attenuation rate of 6 dBA per doubling of distance from the source to receptor, exterior noise levels at the nearest sensitive receptors could potentially exceed the levels specified in Table 3.7-5 without noise control. As a result, this impact would be considered ***potentially significant***.

Mitigation Measure 3.7-1: Implement Noise Control Measures

The City and the general construction contractor shall implement the following measures to reduce construction-generated noise:

- Construction equipment shall be properly maintained and equipped with noise control devices, such as mufflers and shrouds, in accordance with manufacturers' specifications.
- Construction activities involved with the proposed project shall be limited to the hours between 7:30 a.m. and 6 p.m. Monday through Saturday, excluding legal holidays.
- Construction staging areas shall be located as far from noise-sensitive uses as is feasible.
- For the pond excavators, temporary berms shall be placed between construction site boundary and existing sensitive receptors, when construction would occur continuously in the same location for more than 30 days. *(Note: This portion of the mitigation is no longer needed, since pond excavation for the WWTP Upgrade Project has already been completed.)*
- Shut down construction equipment when not in use for more than 30 minutes.

Timing/Implementation: Before and during all construction activities, specifically ground disturbance

Enforcement/Monitoring: City, County, and general contractor

Implementation of all the above mitigation measures would reduce temporary construction noise to a ***less-than-significant*** level.

Impact 3.7-2: Generation of Long-Term Increases in Traffic Noise Levels

Implementation of these options would not require additional employees. WWTP employees would likely be required to make incidental trips to the facilities for the purposes of facility inspection and/or maintenance. However, the additional level of noise generated by light-duty vehicles accessing the properties would be negligible. Thus, with respect to long-term increases in traffic noise levels implementation of the Basalt Pond option would have ***no impact***. No mitigation is required.

Impact 3.7-3: Generation of Long-Term Increases in Stationary Source Noise Levels

Implementation of these options would not require any additional stationary equipment. Thus, with respect to long-term increases in noise levels from such sources, implementation of these options would have ***no impact***. No mitigation is required.[41]

The impacts associated with project modifications as described in this Initial Study are adequately addressed in the above assessment, and would not change this assessment or require any additional mitigation.

b) Dry Creek Crossing and Tayman Park Recycled Water Tank: The issue of potential exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels was not addressed in the 2005 EIR, presumably because it was not considered a potentially significant effect. While trenching and backfilling during new recycled water line installation could generate some temporary ground borne vibration in the immediate project construction zone, it would not be of sufficient magnitude to be perceptible to any nearby residents. Following completion of construction, the operation of these facilities will not involve any uses or activities that would generate ground borne vibration.

XIII. POPULATION AND HOUSING

Impact Significance Criteria: Direct or indirect significant impacts could occur if the project induces substantial population growth or if substantial numbers of existing housing or people are displaced, necessitating the construction of replacement housing elsewhere.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒	3
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	3
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	3

Discussion of Impacts

a-b-c) Dry Creek Crossing and Tayman Park Recycled Water Tank: Neither of these proposed modifications to the WWTP Upgrade Project will directly or indirectly induce population growth in the area. Both of these modifications involve components of a project to utilize a recycled water system, and neither will create or induce any new residential, commercial or industrial development. Neither of these proposed modifications to the

[41] Ibid, pages 3.7-11 through 3.7-15.

WWTP Upgrade Project will displace any existing housing or residents. The 2005 EIR stated the following in regard to this issue:

> Finally, this EIR does not include analyses on impacts on population and housing, public services, or recreation because none of the project options involves residential development or would encourage residential growth in the vicinity of the project area. Therefore, no impact on population and housing, public services, or recreation could occur.[42]

XIV. PUBLIC SERVICES AND FACILITIES

Impact Significance Criteria: A significant impact would occur if the project results in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, or the need for new or physically altered government facilities (in order to maintain acceptable service ratios, response times or other performance objectives), the construction of which could cause significant environmental impacts. A significant impact could also occur where the project results in an increase in the use of existing parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Fire protection?	☐	☐	☐	☒	3
b) Police protection?	☐	☐	☐	☒	3
c) Schools?	☐	☐	☐	☒	3
d) Parks?	☐	☐	☐	☒	3
e) Other public facilities?	☐	☐	☐	☒	3

Discussion of Impacts

a-b) Dry Creek Crossing and Tayman Park Recycled Water Tank: Since neither project modification will include any new residential, commercial or industrial development, they will not have any adverse impacts associated with fire or police protection. As a security measure, a six-foot high chain link fence topped by barbed wire will be installed at those areas around the tank where piping and control equipment will be exposed.

c-d-e) Dry Creek Crossing and Tayman Park Recycled Water Tank: Since neither project modification will include any new residential, commercial or industrial development, they will not generate a need or new school, park or other public facilities that would have any adverse impacts.

[42] EDAW, Draft Environmental Impact Report, City of Healdsburg Wastewater Treatment Plant Upgrade Project, page 1-8.

XV. RECREATION

Impact Significance Criteria: A significant impact would result if project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒	3
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	3

a-b) Dry Creek Crossing and Tayman Park Recycled Water Tank: As noted above in response to XIIV b, since neither project modification will include any new residential, commercial or industrial development, they will not have any adverse impacts associated with the need for new school, park or other public facilities.

XVI. TRANSPORTATION/TRAFFIC

Impact Significance Criteria: A significant impact would result if operation for any single traffic movement dropped to LOS E or F or if operation of an intersection as a whole fell below LOS D. For short, dead end streets, an increase in volumes of 500 vehicles per day would be considered significant. For longer streets, an increase in traffic volumes above 2,000 vehicles per day would be considered significant. A significant impact would also occur if there is inadequate emergency access or inadequate parking capacity.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian paths, and mass transit?	☐	☐	☒	☐	3

b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and highways?	☐	☐	☐	☒	3
c) Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	3
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible equipment (e.g., farm equipment)?	☐	☐	☐	☒	3
e) Result in inadequate emergency access?	☐	☐	☐	☒	3
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒	3

Discussion of Impacts

a-b) Dry Creek Crossing and Tayman Park Recycled Water Tank: Construction for the project would have a negligible traffic impact on local roads that provide access to the project site (i.e., Westside Road and Foreman Lane for construction of the Dry Creek aerial pipeline crossing, and South Fitch Mountain Road through the golf course for the Tayman Park recycled water tank)~~(i.e., Westside Road, Foreman Lane)~~ since it would involve fewer than 10 additional construction vehicle trips per day, or less than generated by one single family dwelling. Following completion of construction, the project would not generate any new traffic other than occasional trips by City staff for operation and maintenance.

The 2005 EIR stated the following in regard to the seasonal irrigation reuse (SIR) component of this project: as related to the issue of traffic and transportation:

> Potential transportation-related issues identified in Appendix G of the State CEQA Guidelines were found not to be significant impacts or applicable to the proposed options. The proposed options would only upgrade existing facilities and would not expand WWTP capacity, and only minor changes to the overall WWTP operations and maintenance would occur. Consequently, the potential long-term project-related changes to transportation effects would be negligible because no substantive changes are proposed in employee numbers, or operations-related traffic trips. The City may elect to haul excess soil generated during construction of WWTP facility upgrades to offsite county landfill sites. Up to 200 haul trips per day may occur (15–20 per hour). With this relatively low level of use, no adverse effects on transportation and circulation on local roadways would occur. Multiple routes are available for transporting the material, thereby limiting effects on any one roadway. In addition, the transport of soil during peak commute hours would be minimized, and appropriate temporary traffic controls would be put in place if needed. For these reasons, this EIR does not include a separate section to analyze the transportation impacts of implementing the proposed options.[43]

[43] Ibid, page 1-7 and 1-8.

It should be noted that the reference to 200 haul trips per day in the excerpt above ~~to up~~ applied ~~to 200 haul trips per day was for the~~ to construction of the new WWTP facility, which has been ~~subsequently~~ completed. ~~Instead, construction~~ Construction of this phase of the project will ~~only~~ involve fewer than fewer than 10 additional construction vehicle trips per day as noted above. While replacing the Tayman tanks will require haul trucks to fill the abandoned in-ground tanks to provide a suitable foundation site for the new tank, the source of this material will be excess soil generated by trenching to install the recycled water pipelines, as noted above. This traffic would involve fewer than 10 additional construction vehicle trips per day, and would not create any significant new traffic impacts. Much of the traffic would be directed through Tayman Park golf course, and would not present significant new impacts on any nearby residential streets or the Oak Mound cemetery.

c) Dry Creek Crossing and Tayman Park Recycled Water Tank: The project does not involve or affect air traffic.

d) Dry Creek Crossing and Tayman Park Recycled Water Tank: The project does not involve any new roads or driveways with potentially hazardous design features, or involve any type of incompatible equipment.

e) Dry Creek Crossing and Tayman Park Recycled Water Tank: See response to checklist question VIII. f) in this Initial Study.

f) Dry Creek Crossing and Tayman Park Recycled Water Tank: Neither of these facilities will involve the use of public transit, bicycle, or pedestrian facilities.

XVII. UTILITIES AND SERVICE SYSTEMS

Impact Significance Criteria: A significant impact would occur where utilities (i.e., water supply, fire flow, sewer capacity, electricity) are inadequate or unavailable to serve the proposed project unless needed improvements are implemented prior to or in conjunction with the project.

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	Reference(s)
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	3
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐	3
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	3

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	3
e) Result in inadequate wastewater treatment capacity to serve the project's projected demand in addition to existing commitments?	☐	☐	☐	☒	3
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	3
g) Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☐	☒	3

Discussion of Impacts

a) Dry Creek Crossing and Tayman Park Recycled Water Tank: Both proposed facilities are part of a wastewater disposal system designed to address a permit compliance issue. Wastewater treatment requirements must be met before recycled water is introduced to the piping system, which is strictly a conveyance facility. The project will therefore not exceed any wastewater treatment requirements of the Regional Water Quality Control Board.

b) Dry Creek Crossing and Tayman Park Recycled Water Tank: The City completed upgrading its wastewater treatment plant to provide advanced treatment in 2008. The project modifications as described in this Initial Study do not require expansion at the upgraded treatment plant. The proposed facilities are intended to provide the accompanying disposal capacity during part of the year. The project will not trigger or result in the need for any new facilities.

c) Dry Creek Crossing: The only new impervious surface that will be created by this crossing involves the concrete footings that will be constructed at grade for the two towers that will be used to suspend the crossing over Dry Creek. This area is extremely minor in size (i.e., less than the footprint of an average single-family dwelling) and is also located adjacent to an existing creek. Therefore, it will not require any new on-site drainage improvements or the construction of new or expanded off-site storm drain facilities that could cause significant environmental effects.

Tayman Park Recycled Water Tank: New impermeable surfaces created by the new recycled water storage tank, will be more than offset by the loss of impermeable surfaces on the two existing water storage tanks, which will be demolished and removed. Regardless, the amount of new impermeable surfaces created through implementation of this project will be relatively minor, and will be far less than would otherwise trigger the need for any new or expansion of storm drain facilities.

d) Dry Creek Crossing and Tayman Park Recycled Water Tank: Both of these facilities will have a beneficial impact on water supply since they will be used to convey and store advance treated wastewater for irrigating parks, schools, a cemetery and a golf course in the City of Healdsburg. The project would offset existing potable water uses, and therefore, significantly reduce the need for the City to pump water from the underflow of the Russian River.

e) Dry Creek Crossing and Tayman Park Recycled Water Tank: Neither of these facilities will generate wastewater, but instead will facilitate a beneficial reuse of advance treated wastewater. Therefore, the project would not result in inadequate wastewater treatment capacity.

f-g) Dry Creek Crossing and Tayman Park Recycled Water Tank: Construction of either facility will produce negligible amounts of solid waste, since most structural components will have been fabricated elsewhere, hauled to the site, and assembled. Specifications that will be imposed on the construction contractor by the City require compliance with all federal, state and local statutes and regulations related to solid waste. Once construction is completed, operation of the recycled water system, including the project modifications described in this Initial Study, would not produce any solid waste.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	Yes	No
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☒
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒

a) Dry Creek Crossing and Tayman Park Recycled Water Tank: Based on the findings of this Initial Study, and with incorporation of mitigation measures identified in this Initial Study, the project modification as described herein will not degrade the environment, reduce or eliminate the habitat for any fish and wildlife species, or impact any plant or animal communities or known cultural resources. Impacts resulting from these project modifications will not require any change to mitigation the City already committed to implement when the 2005 EIR was certified to reduce impacts to less than significant.

b) Dry Creek Crossing: Dry Creek is a major tributary of the Russian River whose confluence lies upstream of the Healdsburg WWTP. The headwaters of Dry Creek are impounded by Warm Springs Dam to form Lake Sonoma, an important source of water to the Russian River in summer. Summer water releases from Lake Sonoma are controlled by Sonoma County Water Agency's (SCWA) to match the water withdrawn near the Wohler area in the lower river for drinking water, and to meet the legal requirements of the Federal Energy Regulatory Commission license and State Water Resources Control Board Decision 1610. Dry Creek below the dam is also the site of the Don Clausen Fish Hatchery, which produces steelhead for the sport fishery in the Russian River. The hatchery now also raises coho salmon in a separate facility as part of a special program to restore depleted stocks of wild coho salmon in the watershed.

In 2008, a Biological Opinion (BO)[44] was issued by the National Marine Fisheries Service (NMFS) addressing the impacts of the SCWA's current operations on salmonid species that are listed under the Federal Endangered Species Act in the Russian River watershed. In issuing the Biological Opinion, NMFS found that some water supply and flood control activities jeopardize endangered populations of coho salmon and threatened populations of steelhead. The Biological Opinion calls on the SCWA (and the U.S. Corps of Engineers) to eliminate or reduce these impacts through a set of measures referred to as the "reasonable and prudent alternative," or RPA. The RPA includes:

- Extensive monitoring of both habitat and fish in Dry Creek, the estuary and the river;
- Eliminating impediments to fish migration and improving habitat on several streams;
- Enhancing the existing coho recovery hatchery program at Warm Springs Dam;
- Enhancing up to six miles of habitat in Dry Creek;
- Petitioning the State Water Resources Control Board for reductions in summertime flows on the mainstem Russian River, beginning in 2010;
- Petitioning the State Water Resources Control Board to permanently reduce minimum instream flows on the Russian River and Dry Creek; and
- Creating a freshwater lagoon in the estuary at the mouth of the Russian River during the summer months.

Under a draft work plan summary[45] for the SCWA Dry Creek Advisory Group in regard to implementation of these measures, the SCWA must complete habitat enhancement projects along 3 miles of Dry Creek by 2017. At that time, the success of the projects will be evaluated. If these projects are successful, enhancement projects on an additional 3 miles will be implemented by 2020. If not, the SCWA will investigate the feasibility of a pipeline bypassing Dry Creek. The SCWA has hired a private consulting firm to conduct geomorphic and physical habitat surveys in Dry Creek in order to recommend sites and conceptual designs for habitat enhancement projects that will benefit coho salmon and steelhead, and another firm to conduct a study of potential routes for a bypass pipeline. A separate consulting firm working for SCWA will study potential routes for a bypass pipeline.[46]

While a review of potential pipeline routes has been conducted, final selection of the route as well as environmental review and design will not begin until 2016, with construction estimated to begin around 2021. All these milestones will begin well beyond the expected construction date for the City's Dry Creek aerial crossing, and the impacts of any future projects to be proposed by SCWA are not foreseeable for the purposes of this cumulative impact analysis. It is unknown even if the alignment ultimately chosen for habitat enhancements and/or a Dry Creek bypass pipeline will be located in the vicinity of the Dry Creek crossing. Correspondence from the SCWA's consultants suggests that this reach of Dry Creek may be less favorable for off-channel

[44] National Marine Fisheries Service, Southwest Region NMFS, Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River Watershed, issued September 24, 2008, PCTS Tracking Number F/SWR/2006/07316.

[45] Draft Work Plan Summary for Biological Opinion Implementation, Flow Changes, Dry Creek Habitat Enhancement, Fish Monitoring in Dry Creek, and Dry Creek Bypass Pipeline**,** Prepared by: Anne Crealock, SCWA, March 18, 2009.

[46] Source: http://www.scwa.ca.gov/lower.php?url=dry-creek-advisory-group

habitat improvements because this reach of Dry Creek appears to be aggrading.[47] In addition, the aerial crossing location affects fewer than 10 yards of linear frontage along Dry Creek, while any future habitat or bypass projects would affect several miles of Dry Creek. At most, the aerial crossing might require minor adjustments in habitat improvements or the bypass pipeline alignment if and when either of those project is proposed and affects this location. Based on the analysis in this Initial Study, this project modification will not generate any impacts that are individually limited, but cumulatively considerable.

Tayman Park Recycled Water Tank: The replacement of the two existing tanks at Tayman Park with a single new recycled water storage tank will not result in any new cumulative impacts that were not addressed in the 2005 EIR completed and certified by the City of Healdsburg for this project. There are no other water storage facilities proposed in the City or project site vicinity. Based on the analysis in this Initial Study, this project modifications will not generate any impacts that are individually limited, but cumulatively considerable.

c) Dry Creek Crossing and Tayman Park Recycled Water Tank: With the incorporation of mitigation measures included in this Initial Study, the Dry Creek aerial pipeline and the Tayman Park Recycled Water Tank will not result in environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. Following completion of construction, the project will be required to comply with applicable federal, state and local laws in regard to use of recycled water that are intended to protect the environment and public health.

[47] E-mail correspondence between Michael Burke, HDR, Inc. and Erik Brown, SCWA, January 5, 2010.

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Appendix A

Photo-simulations of Dry Creek aerial crossing

Photo 1A

Photo 2