

# RECLAMATION

*Managing Water in the West*

## **North Bay Water Recycling Program**

**Sonoma Valley County Sanitation District Recycled Water Project, Sonoma  
Valley, California**

## **Supplemental Environmental Assessment to the Environmental Impact Statement**



## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

**North Bay Water Recycling Program  
Supplemental Environmental Assessment to the Environmental  
Impact Statement  
Sonoma Valley County Sanitation District Recycled Water Project,  
Sonoma, California**

Lead Agency  
United States Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region  
Sacramento, California

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# CHAPTER 1

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## Purpose and Need

### 1.1 Introduction

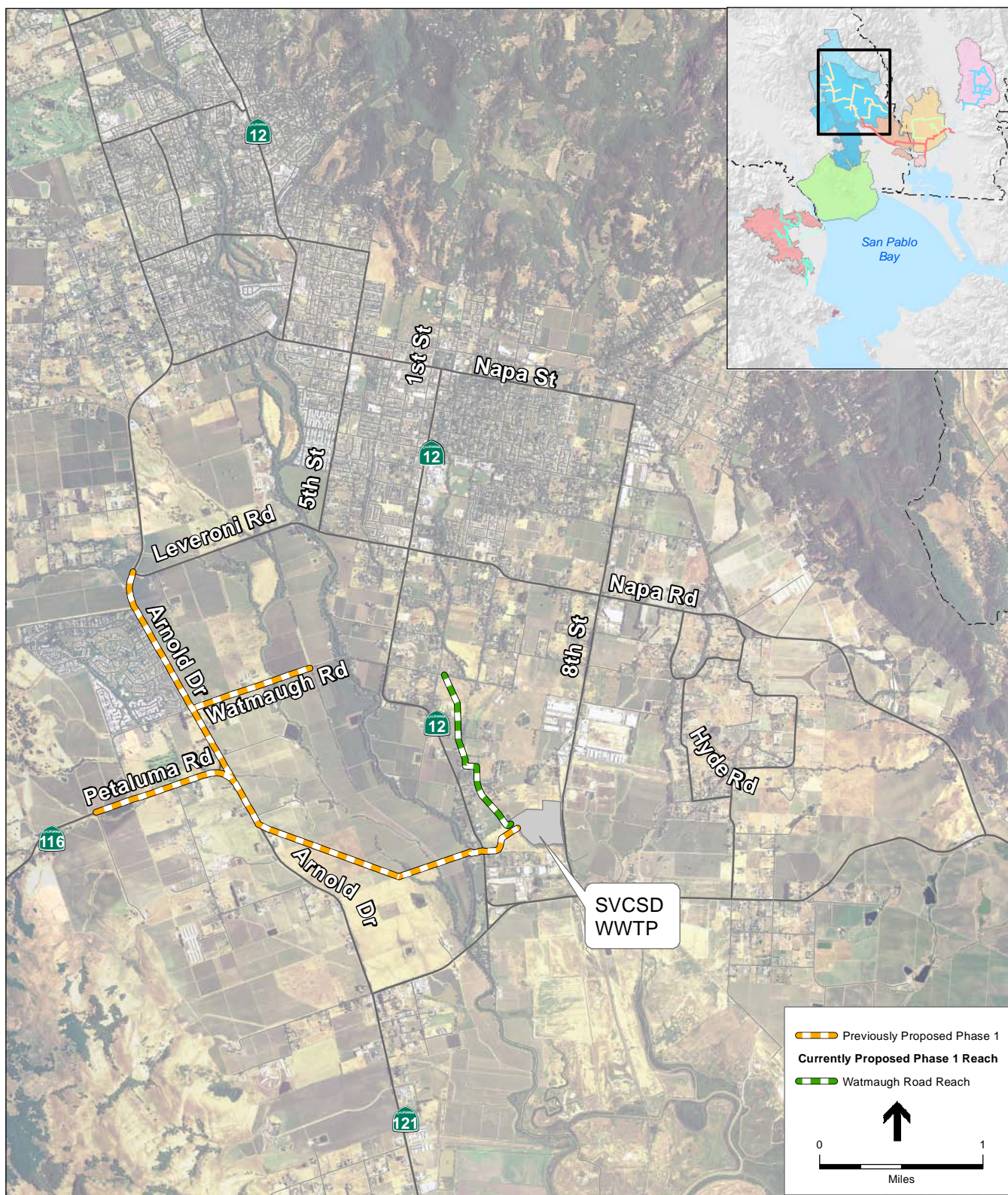
The United States Bureau of Reclamation (Reclamation), in cooperation with NBWRA Member Agency Sonoma Valley County Services District (SVCSD), has prepared this Supplemental Environmental Assessment (EA) to the North Bay Water Reuse Authority (NBWRA) North Bay Water Recycling Program EIR/EIS (SCH No. 2008072096). Reclamation signed a Record of Decision approving the Phase 1 Implementation Plan on January 28, 2011. This EA has been prepared to address proposed changes to the Phase 1 Implementation Plan within SVCSD Sonoma Valley Service Area.

### 1.2 Overview of Proposed Action

SVCSD proposes a revised recycled water pipeline alignment within its Sonoma Valley Service Area. This revised pipeline alignment is located in an overland area between Arnold Drive and Watmaugh Road, referred to herein as the Watmaugh Road Alignment. The Watmaugh Road Alignment would be within the SVCSD Sonoma Valley Service Area boundary, south of Watmaugh Road, and east of Broadway. This revised alignment is shown in green on **Figure 1**. The previously approved pipeline routes identified under the Phase 1 Implementation Plan are shown in orange. This revision is proposed in order to avoid potential cultural resources along the previously approved pipeline route. Therefore, SVCSD has prepared this Supplemental EA to review this proposed alignment modification within the context of the previous analysis provided in the North Bay Water Recycling Program (NBWRP) EIR/EIS. A full description of the proposed modification is provided in **Chapter 2**.

### 1.3 Background and Approved Projects

The following documents are incorporated by reference in this Draft Supplemental EA and are available for review to gain an understanding of previously completed Master Planning efforts and environmental documents completed by the North Bay Water Reuse Authority (NBWRA) Member Agencies and applicable to the Proposed Action:



SOURCE: USDA, 2005; CDM, 2008; and ESA, 2008

Note: Existing Facilities Not Shown

NBWRA North Bay Water Recycling Program. 206088.01

**Figure 1**  
Sonoma Valley Recycled Water Project Area  
Modified Phase 1 Projects



1. *North Bay Water Recycling Project Phase 1 Implementation Plan, Environmental Impact Report Environmental Impact Statement* (SCH No. 2008072096), certified by Sonoma County Water Agency, December 2009. Prepared by Environmental Science Associates for US Bureau of Reclamation and North Bay Water Reuse Authority, May 2009.
2. *Sonoma Valley Recycled Water Project EIR* (State Clearinghouse Number 2005092083), Certified by Sonoma Valley County Sanitation District, December, 2006. Prepared by Environmental Science Associates.
3. *SVCSD Sewer Trunk Main Replacement Project Initial Study/Mitigated Negative Declaration* (2007 MND) (SCH No. 2007072059). Certified by Sonoma Valley County Sanitation District, 2007. Prepared by Environmental Science Associates.

## **North Bay Water Recycling Program EIR/EIS**

NBWRA is a cooperative program established in the San Pablo Bay region under a Memorandum of Understanding in August 2005 that supports sustainability and environmental enhancement by expanding the use of recycled water. NBWRA is comprised of wastewater utilities and water agencies: Las Gallinas Valley Sanitary District (LGVSD), Novato Sanitary District (Novato SD), Sonoma Valley County Sanitation District (SVCSD), Napa Sanitation District (Napa SD), North Marin Water District (NMWD), and Sonoma County Water Agency (SCWA).

NBWRA developed the NBWRP in conformance with the requirements of the Reclamation's Public Law 102-575, Title XVI, which provides a mechanism for federal participation and cost-sharing in approved water reuse projects. Providing federal funding to implement the NBWRP was a Federal action, and therefore a joint EIR/EIS was prepared to comply with the National Environmental Policy Act. The Draft EIR/EIS for the NBWRP was completed in May, 2009. Sonoma County Water Agency as the CEQA lead agency certified the EIR as complete and adequate under CEQA on December 8, 2009. Reclamation issued a final EIS for the NBWRP on June 7, 2010 and signed a Record of Decision on January 28, 2011.

## **Sonoma Valley Recycled Water Project**

The SVCSD Recycled Water Master Plan EIR was certified and approved by the Sonoma County Water Agency in 2006. The proposed Watmaugh Road Alignment was included in the SVCSD Recycled Water Master Plan EIR. Since CEQA has already been completed for this pipeline project, no additional CEQA compliance is required at this time. All mitigation approved as part of the SVCSD Recycled Water Master Plan EIR is applicable and incorporated as part of this project.

## **Sewer Trunk Main Replacement Project Initial Study/Mitigated Negative Declaration**

The Watmaugh Road Alignment would be located within SVCSD's existing easement for its Sewer Trunk Main Project. SVCSD approved the Sewer Trunk Main Replacement Project Initial Study/Mitigated Negative Declaration (2007 MND) (SCH No. 2007072059) to repair and improve the existing sewer trunk main to reliably handle dry and wet weather inflows. This project is scheduled for construction from late 2011 to spring 2012 providing the opportunity for installation of both the Sewer Trunk Main Replacement Project pipeline and the NBWRP Watmaugh Road Alignment within the same easement during the same construction period, thereby minimizing construction related disturbance. The proposed NBWRP Watmaugh Road Alignment pipeline would be installed approximately 10 feet west of the Sewer Trunk Main Pipeline, within the existing 50-foot wide easement.

The purpose of the Sewer Trunk Main Replacement Project (Trunk Main Project) is to repair and improve the existing sewer trunk main to reliably handle dry and wet weather inflows. Implementation of the Trunk Main Project would reduce or eliminate sanitary system overflows, enhance system wet weather capacity and reliability, and improve surface water quality. The Trunk Main Project would abandon in place approximately 2,800 linear feet of existing pipeline, remove of approximately 2,700 linear feet of existing pipeline, and replace approximately 2,135 linear feet of new pipeline alignment, extending from Watmaugh Road East to the SVCSD wastewater treatment facility (see **Figure 2**).

The existing sewer trunk main alignment passes through or along annual grasslands, wetland swales, a vernal pool, an agricultural pond, two wetlands, oak woodlands, a riparian corridor, developed parcels, and agricultural areas. The new sewer trunk main alignment will pass through or along similar terrain, and about halfway between McGill and San Luis Roads, Sonoma, will dog-leg east to Schell Creek, where it would progress south to the SVCSD wastewater treatment facility by traveling immediately adjacent to the creek.

The trunk main pipeline would be installed using standard cut and cover trenching techniques, with the exception of a bore and jack crossing of Schell Creek. The majority of trenching would be between approximately 9 and 12 feet deep and approximately 5 feet wide. The segment within the SVCSD wastewater treatment facility would be 20 feet deep. The construction corridor, including staging areas, would be 40 feet in width. On average, the construction corridor would be 20 feet on either side of the pipeline alignment. However, the corridor would vary depending on resource and easement constraints. Following construction activities, disturbed areas would be restored by reestablishing existing topography, including repaving roadways, and reseeding with a native seed mix (hydroseed) typical of the immediate surrounding area.





## 1.4 Use of an Environmental Assessment

In accordance with the Council of Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations, an Environmental Assessment (EA) provides the federal Lead Agency, Reclamation, with evidence and analysis to determine whether a full Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) is required; and determine if a proposed action may result in significant adverse effects on the environment. Consistent with CEQ regulations, this EA describes the purpose and need for the proposed modifications to the originally approved action and probable environmental impacts. Reclamation will use this EA to supplement the previously prepared NBWRP EIR/EIS, and to support FONSI for the proposed modified action.

## 1.5 Project Objectives

The purpose of the NBWRP, including SVCSD's project, is to promote the expanded beneficial use of recycled water in the North Bay region to achieve the following objectives:

- Offset urban and agricultural demands on potable water supplies;
- Enhance local and regional ecosystems;
- Improve local and regional water supply reliability;
- Maintain and protect public health and safety;
- Promote sustainable practices;
- Give top priority to local needs for recycled water, and;
- Implement recycled water facilities in an economically viable manner.

## 1.6 Overview of NBWRA Phase 1 Implementation Plan – SVCSD Service Area Including Originally Proposed Pipeline Alignment

The NBWRP Phase 1 Implementation Plan included specific elements of the SVRWP, including construction of 5.2 miles of pipeline, additional storage at the SVCSD WWTP and construction of additional pumping capacity for distribution. The facilities proposed under the NBWRP Phase 1 Implementation Plan are shown in **Figure 1**. The SVRWP Phase 1 pipeline consisted of approximately 5.2 miles of pipeline in western Sonoma Valley. The main pipeline would have originated from the SVCSD WWTP, extended southwest and then northwest through a vineyard to Arnold Drive. The pipeline would have continued north along Arnold Drive to Orange Avenue, and extend north on Orange Avenue to Elm Avenue. The pipeline have then continued east on Elm Avenue, cross a field to Arnold Drive, extended north on Arnold Drive, and ended just north of Leveroni Road. Secondary pipelines or segments would have extended from the main pipeline on the following roadways: Highway 116, Watmaugh Road, and Leveroni Road.



Chapter 3 of the NBWRP EIR/EIS presented a discussion of impacts of the SVCSD Phase 1 alignment for the following resource areas: Land Use and Planning, Geology, Soils, and Seismicity, Hydrology, Water Quality, Biological Resources, Cultural Resources, Transportation and Traffic, Air Quality, Noise, Hazards and Hazardous Materials, Visual Resources, Recreation, Environmental Justice, and Socioeconomics. Impacts for each of the issue areas were found to be less than significant or less than significant with incorporation of identified mitigation. The mitigation measures incorporated into Reclamation's Record of Decision, dated January 26, 2011 would be applicable to the Watmaugh Road Alignment Project described in this Supplemental EA.

## 1.7 Proposed Watmaugh Road Alignment

The Watmaugh Road Alignment would extend from the western edge of the SVCSD WWTP northwest to Watmaugh Road East. This pipeline would be installed within SVCSD's existing easement acquired for the Trunk Main Project, west of Schell Creek (**Figure 2**). Implementation of the Sewer Trunk Main Replacement Project is on schedule, would be installed slightly before and simultaneous with the proposed modification, and is considered part of the environmental baseline.

Consistent with the methodology described for the approved NBWRP, trenching would include clearing of the construction site, saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and re-paving where applicable. The corridor would vary depending on resource and easement constraints. In undeveloped areas, a 50-foot wide corridor for construction will be utilized to maximize construction efficiency. In areas encumbered by environmentally sensitive areas, a narrower construction corridor of approximately 25 feet will be used. Sufficient space would be available to allow the contractor to cast the spoil to the side of the trench, install the pipe, and backfill the trench using the spoil.<sup>1</sup> Pipes will be staged along the alignment in advance of the recycled water pipeline installation. The estimated trench width is approximately 30 inches and estimated trench depth is approximately 56 inches; however the dimensions will vary with the location along the route and the diameter of the pipeline. Additional staging may be established at the SVCSD WWTP.

The pipeline would be installed under Schell Creek using a trenchless construction method (i.e. bore and jack or bridge suspension) to avoid ground surface disturbance. The bore and jack undercrossing would require a jacking pit measuring approximately 30 feet by 10 feet.<sup>2</sup> The temporary pits typically would be excavated to a maximum depth of 20 feet; excavated soils would be retained for backfill. Pipeline suspension may alternatively be used at Schell Creek via structural supports underneath or on the sides of the bridge.

Along Schell Creek, the construction corridor would extend 15 feet along the eastern side (creek side) of the pipeline alignment and 35 feet along the western side of the pipeline alignment.

<sup>1</sup> In open space areas, native excavated soils will be retained for backfill.

<sup>2</sup> Bore and jack tunneling does not use pressurized tunneling during installation, and does not have the potential for frac out to the surface associated with directional drilling or microtunneling.

Paving would be minimal; only three rural paved roads would be crossed during project construction (Watmaugh Road East, Splude Road, and San Luis Road). No road closures are anticipated. The expected installation rate for new pipeline is approximately 200 feet per day; consistent with the estimated schedule for the approved NBWRP.

Consistent with the restoration component of the NBWRP and the Sewer Trunk Main Replacement Project, following construction activities, disturbed areas would be restored by reestablishing existing topography, including repaving roadways, and revegetating with plants typical of the immediate surrounding area.

## **1.8 Agency Consultation History**

### **Other Agencies**

Other agencies beyond the NBWRA Member Agencies and cooperating agencies with authority over the Proposed Action include, but are not limited to, the following: U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS), CDFG, SWRCB, San Francisco Bay Regional Water Quality Control Board (RWQCB), California State Office of Historic Preservation (SHPO), California Department of Health Services, Bay Area Air Quality Management District, and Sonoma County Department of Public Works. The SVCSD, as the local lead agency, has acquired permits from these agencies for the installation of the Trunk Main Project (See **Appendix A**). Implementation of the Watmaugh Road Alignment would comply with requirements established by these permits.

### **Federal Regulatory Consultation Summary**

As part of the NBWRP EIR/EIS process, Reclamation, as the NEPA Lead Agency, participated in formal consultation with National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) as part of the Section 7 consultation under the Federal Endangered Species Act (ESA). Reclamation also completed consultation with the California State Historic Preservation Office (SHPO) as part of the Section 106 process under the National Historic Preservation Act. A summary of consultation status is provided below.

#### **Federal Section 7 Consultation – National Marine Fisheries Service**

A Biological Assessment/ Fisheries Biological Assessment (BA) was submitted by Reclamation to NMFS and USFWS August 25, 2009. Section 7 consultation with NMFS has been concluded in accordance with 50 CFR 402.13(a). Based on best available information, NMFS concurred with Reclamation's finding that the proposed project is not likely to adversely affect ESA-listed species under the jurisdiction of NMFS (concurrence letter dated May 6, 2010). Under the FWCA, Reclamation is required to consult with NMFS on projects that propose stream modification. NMFS has no FWCA recommendations for the project regarding conservation of fish and wildlife

resources because NMFS has found that the project contains adequate measures to protect aquatic habitat. Implementation of the Watmaugh Road alignment, which would utilize jack and bore installation under Schell Creek, would be consistent with this consultation.

## **Federal Section 7 Consultation – USFWS**

Section 7 consultation with USFWS was completed with the issuance of a Biological Opinion in July 2010. Key terms and conditions, and minimization and avoidance measures applicable to the entire Phase 1 Implementation Program include crossing of all creeks using trenchless technology, and provision of compensatory mitigation for disturbance of California red-legged frog habitat. The SVRWP pipeline routes included in the Phase 1 Implementation Plan were identified as having the potential to disturb 4.9 acres consisting of upland habitat along roadway pavement that may or may not be potentially affected by pipeline installation. A compensatory mitigation ratio of 0.1:1 was established for temporary impacts in the Biological Opinion. SVCSD is in the process of purchasing, with the other NBWRA Member Agencies, a total of 2.3 acres of habitat credits from a Service-approved conservation bank. SVCSD's share of this mitigation requirement is 0.49 acres.

The SVCSD has acquired regulatory permits from the USACOE and USFWS for implementation of the Trunk Main Project, including a USACOE Nationwide 12 Permit (SPN 2007-4008-78-N) and USFWS Biological Opinion, (No. 81420-2009-F-1437-2) (Appendix A). In the Biological Opinion issued for the Trunk Main Project, USFWS determined that the Trunk Main Project can be appended to the *Programmatic Formal Endangered Species Act Consultation on Issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog* (USFWS, 1999). No compensatory mitigation was identified as required for implementation of the Trunk Main Project.

## **National Historic Preservation Act Section 106 Consultation – State Historic Preservation Office**

Due to Federal funding, the NBWRP must comply with Section 106 of the National Historic Preservation Act, as amended. The Bureau of Reclamation (Reclamation) is the federal lead agency. Previous cultural resources documentation provided for the NBWRP include Koenig, Heidi, and Brad Brewster, *North Bay Water Reuse Authority, North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties, Cultural Resources Survey Report*. Prepared for the U.S. Department of the Interior, Bureau of Reclamation, January 25, 2011; and Koenig, Heidi, *North Bay Water Reuse Authority, North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties, Archaeological Extended Phase 1 Report*, Prepared for the U.S. Department of the Interior, Bureau of Reclamation, January 25, 2011. On March 21, 2011, the California State Historic Preservation Officer (SHPO) concurred with Reclamation's determination of "no adverse effect to historic properties" for implementation of the Phase 1 Implementation Plan.

ESA has completed an updated records search at the Northwest Information Center to supplement the 2008 records search and prepared an Addendum to the *North Bay Water Reuse Authority*,

*North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties, Cultural Resources Survey Report* (Koenig and Brewster, 2011), in order to support Reclamation's review of the proposed NBWRP Watmaugh Road Alignment with the SHPO. The Addendum Report includes: 1) a statement of the integration of the addendum APE to the greater NBWRP; 2) a revised and signed APE with accompanying maps; 3) results of the updated records search; 4) methods and results of an on-foot surface survey; and, 5) an updated geoarchaeological analysis. This document was used to support Reclamation consultation with the State Historical Preservation Officer (SHPO).



## **CHAPTER 2**

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# **Affected Environment and Environmental Consequences**

The analysis and discussion in this chapter is intended to supplement the environmental assessment provided in the approved NBWRP EIR/EIS by addressing potential effects associated with the Watmaugh Road Alignment, as described in Chapter 1. The following information is taken from the approved NBWRP EIR/EIS, and updated as appropriate. Because the proposed Watmaugh Alignment would be located within the construction easement for the Trunk Main Project, information presented in the 2007 MND for the Trunk Main Project is presented as appropriate. Applicable NBWRP EIR/EIS mitigation measures are incorporated into the modified project. These measures will continue to apply to the project, and the Mitigation Monitoring and Reporting Plan (MMRP) will be included in the Conditions of Approval for the action. Relevant measures are reiterated in their respective resource discussions. SVCSD would be responsible for implementing the mitigation measures.

### **2.1 Geology, Soils, and Seismicity**

Section 3.1 of the NBWRP EIR/EIS described the geologic, seismic, and soil conditions within the project area. The NBWRP EIR/EIS identified potentially significant impacts including susceptibility of the SVCSD Phase 1 facilities to seismic effects, subsidence, or liquefaction, the presence of expansive soils in the project area, and erosion due to project construction. The proposed SVCSD Watmaugh Road Alignment is located approximately one mile west of the approved NBWRP Phase 1 alignment. The proposed Watmaugh Road Alignment, a reduced length of pipeline compared to the Phase 1 project, would be located in the same proximity to active fault zones, and overlay similar soil and geologic features as those described in the NBWRP EIR/EIS. As stated in the NBWRP EIR/EIS, none of the proposed Phase 1 pipeline routes in the SVCSD area are located within or in the immediate vicinity of an Alquist-Priolo Earthquake Hazards Zones or any active fault zone, therefore the potential for surface fault rupture to affect these pipelines is considered very low. Although surface fault rupture is not necessarily limited to an Alquist-Priolo zone, the Watmaugh Road Alignment Project is located sufficiently far enough away from the Rodgers Creek fault to avoid damage associated with fault rupture and therefore, effects associated with fault rupture would be less than significant with implementation of NBWRP Mitigation Measure 3.1.1. These pipelines are also located in the flatlands that are not typically susceptible to earthquake induced landslides (ABAG, 1997).

Construction for Watmaugh Road Alignment would require, to a reduced degree than the SVCSD Phase 1 project, ground disturbing activities that include excavation, stockpiling removed soils, reuse of excavated soils. Soils disturbed by project earthwork and construction activities as well as stockpiled materials for use in the construction would be susceptible to the effects of wind or water induced erosion and loss of topsoil. As required by NBWRP Mitigation Measure 3.1.2 below, the SVCSD would be subject to National Pollutant Discharge Elimination System (NPDES) compliance measures, General Construction Activity Permit, including the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that would include best management practices (BMPs) designed to minimize the potential for erosion and sedimentation of stormwater runoff.

Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to geology and soils would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS.

## **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.1.1:** The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria, including the California Building Code (CBC) and American Waterworks Association (AWWA) criteria.
- The project construction materials and backfill materials will be designed according to a geotechnical investigation by a California-licensed geotechnical engineer or engineering geologist to address landslide, subsidence, liquefaction, and expansive soils and seismic hazards such as ground shaking and liquefaction.
- Implementation of industry standard geotechnical measures such as replacing excavated soils with engineered fill materials are effective means to overcome the potential for subsidence. If excavated soils are to be reused for backfill, they would still be appropriately compacted to mitigate the potential for subsidence or settlement and evaluated for expansion and amended, if necessary, to reduce the potential for expansion in accordance with accepted geotechnical practices.
- Proposed facilities will be designed to include flexible connections, where deemed necessary, along with backfill requirements that minimize the potential for significant damage. All other associated improvements will employ standard design and construction using the most recent geotechnical practices and California Building Code (CBC) seismic criteria, which would provide conservative design criteria.

**Mitigation Measure 3.1.2:** The Member Agencies will implement the following measures:

- Consistent with SWPPP requirements, the construction contractor shall be required to implement BMPs for erosion control onsite. The use of construction BMPs will minimize the potential for erosion and loss of topsoil, and shall include, without limitation, the following:

- Avoid scheduling construction activities during a rain event, but be prepared for sudden changes in conditions;
- Construct berms, silt fences, straw bales, fiber rolls, and/or sand bags around stockpiled soils;
- Cover stockpiled soils during a rain event and monitor perimeter barriers, repair as necessary;
- Stabilize entrances to work area to prevent tracking of dirt or mud onto roadways; and
- Implement dust control practices as appropriate on all stockpiled material<sup>3</sup>.

## 2.2 Surface Hydrology

Section 3.2 of the NBWRP EIR/EIS analyzed impacts to surface and identified potentially significant impacts including changes to drainage patterns, increased stormwater runoff due to increase impervious surfaces, and impacts to facilities associated with sea level rise. As stated in the EIR/EIS, SVCSD Phase 1 pipelines would generally be constructed within roadways, rights-of-way, and would only cross drainages where necessary. Grading, excavation, stockpiling, filling, and trenching, could alter existing surface drainage patterns; however, activities would be temporary and limited to areas of active construction within the construction corridor. The excavated areas would be returned to the pre-construction condition; therefore potential related to surface hydrology impacts would be less than significant.

Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to surface hydrology would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS. As discussed in the EIR/EIS, construction of the SVCSD Phase 1 pipeline would require eight stream crossings, including Sonoma Creek and Felder Creek at multiple locations, as well as Carriger Creek, Rodgers Creek, Fowler Creek, and a tributary to Felder Creek, potentially altering drainage patterns at the stream crossings during construction. The NBWRP analyzed construction methods including trenchless techniques: suspension of the pipeline to the vehicle bridge or jack and bore or directional drilling to prevent alteration of the stream course or waters; additionally, measures to protect the stream from construction activities, would ensure a less than significant impact.

The Watmaugh Road pipeline would include a single creek crossing at Schell Creek using bore and jack tunneling. The bore and jack undercrossing would require a jacking pit measuring approximately 30 feet by 10 feet. The temporary pits typically would be excavated to a maximum depth of 20 feet; excavated soils would be retained for backfill. This is consistent with the

<sup>3</sup> Common dust control measures include watering exposed/unpaved surfaces, covering spoils and topsoil stockpiles with tarp, covering haul truck loads with tarps, reducing vehicle speeds on unpaved access routes. Appropriate best management practices will be determined based on project site-specific conditions.

activities examined in the NBWRP EIR/EIS; implementation of Mitigation Measures 3.2.1 would reduce impacts to a less than significant level.

The Watmaugh Road Alignment Project pipelines would not significantly increase impervious surface areas that would affect drainage and surface water runoff. Consistent with the discussion provided in the NBWRP EIR/EIS, pipelines would be underground and would not add to impervious surfaces or change the existing drainage patterns. Drainage designs would be integrated with existing drainage systems, and would be designed to avoid or minimize effects to downstream areas and infrastructure. Implementation of NBWRP Mitigation Measure 3.2.2 would ensure a less than significant impact.

The Watmaugh Road Alignment Project pipelines would be located within 100-year floodplains. However, the pipeline would be buried underground and would not impede or redirect flood flows. As presented in the NBWRP EIR/EIS, based on the topography, elevation, and proximity to San Pablo Bay, there would be no impact on proposed facilities in the SVCSD Sonoma Valley Service Area related to sea level rise.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or increase the severity of impacts identified. Implementation of mitigation measures identified in the EIR/EIS, and listed below, would ensure potential impacts to a less-than-significant level. As such, the surface hydrology impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.2.1:** The Member Agencies would implement the following measure during pipeline installation at stream crossings:

- Schedule construction so as to avoid storm events to the extent feasible ;
- Use trenchless techniques such as jack and bore tunneling to avoid direct impacts to the streams;
- Employ short-term drainage diversion and control measures such as sandbags, dikes, pumps, or other means; and
- Following construction, restore the construction area to pre-existing conditions
- Implement **Mitigation Measure 3.5.1** (see Section 3.5 of the EIR/EIS).

**Mitigation Measure 3.2.3:** The Member Agencies will implement the following measures:

- Comply with the local storm drainage requirements;
  - Incorporate site design features to control any site runoff onsite; and
  - Install storm runoff, collection, and treatment system, as applicable, to control the runoff flow offsite.
-

## 2.3 Groundwater

Section 3.3 of the NBWRP EIR/EIS analyzed existing conditions and impacts to groundwater and groundwater quality. The EIR/EIS identified beneficial impacts to long-term groundwater levels and less than significant impacts to hydrostatic pressure, groundwater quality, flooding due to high groundwater levels, public health impacts associated with groundwater wells, and increased groundwater recharge due to increase of impervious surfaces.

Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to groundwater would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS. The use of recycled water to offset groundwater would help to maintain groundwater levels in the area over the long-term. The quantity of recycled water used to offset groundwater is not expected to increase the potential for high groundwater conditions that could affect structures or contribute to flooding since the majority of the recycled water would offset groundwater in areas with declining groundwater levels. This impact is considered less than significant, consistent with the determination in the NBWRP EIR/EIS.

Proposed pipelines would be constructed up to 20 feet below the ground surface and therefore would be subject to hydrostatic pressure relating to groundwater. As discussed in the NBWRP EIR/EIS, standard design features would be implemented to reduce the potential for damage due to fluctuating groundwater levels, in accordance with NBWRP Mitigation Measure 3.3.1. Consistent with the NBWRP EIR/EIS, project construction activities, particularly trenching and bore and jack tunneling, may intercept shallow or perched groundwater, requiring temporary localized dewatering to facilitate construction. As necessary, approximate groundwater levels in the construction areas would be identified prior to construction to determine the extent of dewatering required for construction. Any discharges from general construction activity and/or trench dewatering would comply with the San Francisco Bay Regional Water Quality Control Board (RWQCB) requirements.

All recycled water users would be required to adhere to the following Title 22 minimum distance requirements for recycled water use near domestic groundwater wells; therefore distribution supported by the Watmaugh Road Alignment Project is not expected to contribute to adverse water quality impacts associated with existing groundwater wells.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. Implementation of the mitigation measure identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, the groundwater impacts would be consistent with those identified in the EIR/EIS.

### Mitigation Measures listed in the EIR/EIS

**Mitigation Measure 3.3.1:** The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria.
  - Implement industry standard geotechnical measures to address high groundwater conditions as appropriate to reduce the potential for impacts related to groundwater fluctuation, in accordance with accepted geotechnical practices. Possible design features include drainage blankets, perimeter pumps to temporarily decrease hydrostatic pressure, perimeter drainage trenches, and specific groundwater monitoring scenarios.
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## 2.4 Water Quality

Section 3.4 of the NBWRP EIR/EIS analyzed existing conditions, regulatory framework, and impacts to water quality including incidental runoff of recycled water. The EIR/EIS identified potentially significant impacts to water quality, including erosion and sedimentation, dewatering of shallow groundwater resources, and less than significant impact to water quality due to incidental runoff, storage facilities, and pipeline rupture. The EIR/EIS also determined that the project will have less than significant impacts to public health and agricultural uses associated with loading of specific constituents to groundwater.

Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to water quality would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS. Implementation of the Watmaugh Road Alignment Project, would require earthmoving activities such as excavation, soil stockpiling, and filling that could result in increased erosion and discharge of sediment to neighboring surface water bodies through the disturbance of currently stable soils. With respect to the Watmaugh Road Alignment, project construction would occur within areas that immediately or eventually drain to tributaries to Nathanson and Schell creeks. Construction activities could result in soil erosion and subsequent discharge of sediment to adjacent surface water or drainages. Without mitigation, these impacts would be considered potentially significant. However, SVCSD would be required to comply with the requirements of the SWPPP, as identified in NBWRP Mitigation Measure 3.4.1. As stated in the EIR/EIS, installation the proposed SVCSD Phase 1 pipelines would require eight stream crossings. The Watmaugh Road Alignment would require only one bore and jack under Schell Creek. Therefore, there would be less potential for disturbance to water quality as a result of stream crossings. Consistent with the discussion in the NBWRP EIR/EIS, recycled water produced and transported by the proposed Watmaugh Road Alignment Project would comply with California Code of Regulations (CCR) Title 22 requirements for tertiary treated water, which prohibits over-irrigation that would cause ponding or surface runoff. Therefore, potential impacts to surface water quality associated with indirect runoff from irrigation are considered less than significant.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or increase the severity of impacts identified above.

Implementation of mitigation measures identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, the water quality impacts would be consistent with those identified in the EIR/EIS.

## Mitigation Measures listed in the EIR/EIS

**Mitigation Measure 3.4.1a:** NPDES Construction Activity Stormwater Permit. Member Agencies or their contractor shall comply with the provisions of the NPDES Construction Activity Stormwater permit, including preparation of Notice of Intent to comply with the provisions of this General Permit and preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will identify implementation measures necessary to mitigate potential water quality degradation as a result of construction-related runoff. These measures will include BMPs and other standard pollution prevention actions, such as erosion and sediment control measures, proper control of non-stormwater discharges, and hazardous spill prevention and response. The SWPPP will also include requirements for BMP inspections, monitoring, and maintenance.

The following items are examples of BMPs that would be implemented during construction to avoid causing water quality degradation:

- Erosion control BMPs, such as use of mulches or hydroseeding to prevent detachment of soil, following guidance presented in the California BMP Handbooks – Construction (CASQA 2003). A detailed site map will be included in the SWPPP outlining specific areas where soil disturbance may occur, and drainage patterns associated with excavation and grading activities. In addition, the SWPPP will provide plans and details for the BMPs to be implemented prior, during, and after construction to prevent erosion of exposed soils and to treat sediments before they are transported offsite.
- Sediment control BMPs such as silt fencing or detention basins that trap soil particles.
- Construction staging areas designed so that stormwater runoff during construction will be collected and treated in a detention basin or other appropriate structure.
- Management of hazardous materials and wastes to prevent spills.
- Groundwater treatment BMPs such that localized trench dewatering does not impact surface water quality.
- Vehicle and equipment fueling BMPs such that these activities occur only in designated staging areas with appropriate spill controls.
- Maintenance checks of equipment and vehicles to prevent spills or leaks of liquids of any kind.

**Mitigation Measure 3.4.6a:** Under the Master Recycling Permit for each Member Agency and Cooperating Agency, user agreements shall include provisions for compliance with Title 22 and the State Recycled Water Policy regarding storage and use of recycled water onsite at individual properties.

## 2.5 Biological Resources

Section 3.5 of the NBWRP EIR/EIS analyzed impacts to vegetation, wildlife, and wetlands. The EIR/EIS identified less than significant impacts to common plant and animal species. Potentially significant but mitigable impacts were identified for wetlands, streams, and riparian habitats, waters of the U.S., disturbance of habitat for special status species and plants, and disturbance of nesting habitat. The Watmaugh Road Alignment Project impacts would be consistent with impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to biological resources would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS.

### ***Wetlands and Jurisdictional Waters***

As stated in the EIR/EIS, the SVCSD Phase 1 construction activities could involve temporary and permanent impacts to jurisdictional wetlands and other waters of the U.S. Additionally, wetlands or drainages could be affected by pipeline trenching activities, bore and jack installation under streams, and temporary filling of seasonal wetlands in work areas. Potential impacts to riparian habitat include temporary and permanent disturbance of stream channels during construction activities, including removal or disturbance to riparian vegetation, and alteration of bed and banks of drainages due to trenching.

As discussed in the Trunk Main Project 2007 MND, construction of the Trunk Main Project would impact seasonal wetland features occurring within the pipeline corridor. Wetland area occurring within a 40-foot construction corridor are limited to 0.28 acres, with 0.20 acres of seasonal wetland occurring at Station 30+00, 0.03 acres at the Schell Creek bore and jack crossing, and 0.05 acres of isolated, non-navigable seasonal wetlands at Station 24+50. No other waters of the U.S. occur within this corridor. Impacts to wetland features at Schell Creek would be avoided by jack and bore crossing of the creek. Therefore, wetland impacts would be limited to temporary disturbance of 0.20 acres of seasonal wetland and 0.05 acres of isolated, non-navigable seasonal wetland. SVCSD acquired the following permits authorizing impacts to these wetland features for construction of the Trunk Main Project: USACOE Nationwide 12 Permit (SPN 2007-4008-78-N); USFWS Biological Opinion, (No. 81420-2009-F-1437-2); RWQCB 401 Water Quality Certification (Ref No. 02-49-CO926); CDFG Streambed Alteration Agreement (No. 2007-0515-03). As previously noted, the Trunk Main Project is currently under construction, and effects to wetland features along the construction easement are considered part of the current environmental baseline for the proposed Watmaugh Reach Project.

### ***Aquatic Species***

Watmaugh Road Alignment Project impacts to aquatic species would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. The Phase 1 project would require eight stream crossings in the Sonoma Valley Service Area; the modified Watmaugh Road Alignment Project would only require one crossing at Schell Creek. As



described in the NBWRP EIR/EIS, Schell Creek and nearby Nathanson Creek, as well as proximate agricultural ponds<sup>4</sup>, provide habitat for central California coast steelhead (*Oncorhynchus mykiss*) (Leidy, 2007) and California freshwater shrimp. Impacts related to sensitive fisheries species are consistent with those disclosed in the NBWRP EIR/EIS and would be reduced to a less than significant level through implementation of NBWRP Mitigation Measure 3.5.2.

Construction activities could potentially impact special status species if present in the project area.<sup>5</sup> Red-legged frogs are also considered potentially present, but unlikely, in Nathanson Creek and Arroyo Seco due to discontinuity with known red-legged frog populations. Pipeline routing and non-invasive trenchless stream crossing techniques such as bore and jack tunneling have been incorporated into the project design to avoid direct impacts to riparian and aquatic habitats that provide potential habitat for sensitive species. Additionally, protocol level CRLF surveys conducted in 2010 and 2011 along Schell Creek were negative for CRLF (SCWA, 2011). As previously noted in Section 1.0, USFWS determined that the Trunk Main Project can be appended to the *Programmatic Formal Endangered Species Act Consultation on Issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog* (USFWS, 1999). No compensatory mitigation was identified as required for implementation of the Trunk Main Project.

As described in the NBWRP EIR/EIS, Western pond turtles have the potential to occur in freshwater drainages throughout the project area in perennial and ephemeral drainages, and nearby irrigation ponds. Because the Watmaugh Road Alignment Project is a reduced project footprint, and because bore and jack will be implemented to cross Schell Creek, and because the Trunk Line will have been constructed, there are few anticipated project impacts on aquatic habitat. Turtles and their upland breeding sites could additionally be encountered in upland habitats. This presents the potential to inadvertently harm migrating or breeding turtles, or their nests. The potential loss or disturbance of California red-legged frog and western pond turtle and their habitat is potentially significant but mitigable with implementation of NBWRP Mitigation Measure 3.5.5, which requires pre-construction training.

### ***Sensitive Terrestrial Animal Species***

As previously noted, the Trunk Main Project is currently under construction; therefore, disturbance of potential sensitive species habitat that may be present within the construction easement are considered part of the current environmental baseline for the proposed Watmaugh Reach Project. Implementation of both the Trunk Main Project and the NBWRA EIR/EIS require appropriate pre-construction screening and construction monitoring be implemented to minimize

<sup>4</sup> No direct impacts are anticipated for Nathanson Creek or the agricultural pond.

<sup>5</sup> No impacts would occur to California brackishwater snail due to an absence of appropriate habitat in the action area. Myrtle's silverspot butterfly, Opler's longhorn moth, and monarch butterfly wintering sites are not known to occur in the service area and no impacts are expected. Ricksecker's water scavenger beetle is not known to occur in the action area, but they could be present at low-flow stream crossings. Salt marsh harvest mouse and Suisun ornate shrew are not present in this action area.

effects to sensitive species. A discussion of potential resources identified within the proposed alignment is provided below.

The proposed Watmaugh Road Alignment site is located in agricultural and ruderal areas that do not contain designated habitat for California black rail, California clapper rail, or western snowy plover, although other raptors or songbirds may nest in the area. As described in the 2007 MND for the Trunk Main Project, a number of bird species were observed during a June 21, 2007 site visit, and many of these undoubtedly nest in nearby trees and shrubs, under bridges, or in sheds in the Watmaugh Road Alignment Project area. Specifically, one unidentified nest was found under the bridge crossing Schell Creek at San Luis Road, and one unidentified nest was found on the side of the barn adjacent to the vernal pool. Species were not observed at nest locations. Other potential nesting sites include large trees, riparian corridors, streamside vegetation, shrubs, and open grasslands. Special-status birds that may nest in the Watmaugh Road Alignment Project area include Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), white-tailed kite (*Buteo albicaudatus*) and other raptors, loggerhead shrike (*Agelaius tricolor*), tricolored blackbird (*Agelaius tricolor*), and oak titmouse (*Baeolophus inornatus*).<sup>6</sup> Potential nesting sites include large trees, riparian corridors, streamside vegetation, shrubs, and open grasslands.

As discussed in both the 2007 MND for the Trunk Line and the NBWRP EIR/EIS, project activities, such as earthmoving, grading, and trenching during the nesting season (generally February 1 to August 31) have the potential to result in direct mortality of these species. In addition, human disturbances and construction noise have the potential to cause indirect impacts due to nest abandonment and death of young, or loss of reproductive potential at active nests located near project activities. If ground-disturbing activities (i.e., ground clearing, trenching, or grading, including removal or trimming of trees or shrubs), are scheduled to occur outside the nesting season (September 1 through January 28), no mitigation is required. However, if activities would occur from February 1 to August 31, then implementing NBWRP Mitigation Measures 3.5.8 and 3.5.9 would reduce potential impacts to a less-than-significant level.

Several species of bats may forage along the entire length of the project corridor, particularly above the open water in Schell Creek, Nathanson Creek, and the agricultural pond.<sup>7</sup> In addition, several species of bats (including special-status bats such as Townsend's big-eared bat, pallid bat, Yuma myotis) may roost in any of the large trees or sheds, or under any of the bridges along the pipeline alignment. The Yuma myotis, pallid bat, and Townsend's big-eared bat all may roost within the Watmaugh Road Alignment Project area, and are protected by CDFG, as described above. Bat roosts or individual bats may be negatively impacted by tree and shrub removal, construction noise, and other disturbances related to the project. Construction noise and increased human activity may also indirectly cause roost abandonment or otherwise result in reproductive failure. Bats are particularly vulnerable to these disturbances when they are in large colonies and are either (1) in a winter hibernacula (when a colony of bats hibernates together); or (2) in a

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<sup>7</sup> No formal nighttime surveys have been completed; however known occurrences in the area recorded. Roosting pallid bats have been identified under Sonoma Creek Bridge within the alignment (CNDDB, 2008). A roosting population was also identified within 0.4 mile of the alignment at Riverside Drive Bridge, but may not be affected by the project.

maternity colony during the breeding season (when a colony of pregnant female bats gives birth to pups, and raise their young together). Implementation of Mitigation Measure 3.5.11 would reduce potential impacts on special-status bats to a less-than-significant level.

Consistent with the NBWRP EIR/EIS discussion, project activities to construct off-road pipelines in the SVCSD area traverse ruderal grazing areas and non-native grasslands and could impact American badger dens. This species may be present on the site at any time of the year, and removal of active dens could result in the direct mortality of individual badgers. Implementation of NBWRP Mitigation Measure 3.5.12 would reduce potential impacts on American badger to a less-than-significant level.

### **Sensitive Plant Species**

To supplement the environmental setting provided in the NBWRP EIR/EIS, the description and plant survey results provided in the 2007 MND, are applicable to the modified Watmaugh Road Alignment Project. The northernmost portion of the Watmaugh Road Alignment (approximately 2,000 feet) supports non-native annual grassland with undulating microtopography. This area is relatively natural and has not been cultivated. Dominant plant species observed included Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), foxtail barley (*H. murinum* ssp. *leporinum*), Italian ryegrass (*Lolium multiflorum*), filaree (*Erodium moschatum*, *E. brachycarpum*, and *E. cicutarium*), and purple star thistle (*Centaurea calcitrapa*).

Rare plant surveys conducted for the SVRWP (2006) concluded that no impacts on listed or other special-status plants would occur. However, as described in the 2007 MND, the Watmaugh Road Alignment Project area contains suitable habitat for three special-status plants: Sonoma sunshine (*Blennosperma bakeri*), a federal- and state-listed endangered species, legene (*Legenere limosa*) and dwarf downingia (*Downingia pusilla*). Sonoma sunshine's distribution is limited to the Laguna de Santa Rosa and Sonoma areas in Sonoma County. Pre-construction sensitive plant species (*Sonoma sunshine*, *legenere*, and *dwarf downingia*) surveys were completed on May 16, 2011 by David Cuneo, Water Agency Senior Environmental Specialist (Wetland Specialist). No sensitive plant species were present, and no additional surveys are required (O'Keefe, personal communication, 2011).

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or increase the severity of impacts identified above. Implementation of mitigation measures identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, the biology impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.5.1:** Implement the following measures to avoid, minimize and compensate for impacts to jurisdictional wetlands and other waters of the U.S. and impacts to riparian habitat.

Construction activities resulting in the introduction of fill or other disturbance to jurisdictional wetlands and other waters of the U.S. will require permit approval from the U.S. Army Corps

of Engineers and water quality certification from the Regional Water Quality Control Board, pursuant to Section 401 of the Clean Water Act. The Watmaugh Road Reach Project will most likely be authorized under Nationwide Permit #12 (Utility Lines) pursuant to Section 404 of the Clean Water Act. The CDFG has jurisdiction in the action area over riparian habitat, including stream bed and banks, pursuant to Sections 1600-1616 of the Fish and Game Code. Pipeline construction resulting in alteration to channel bed or banks, extending to the outer dripline of trees forming the riparian corridor, is subject to CDFG jurisdiction. The project proponent will be required to obtain a Streambed Alteration Agreement (SAA) from the CDFG. Terms of these permits and SAA will likely include, but will not necessarily be limited to, the mitigation measures listed below.

1. Specific locations of pipeline segments, storage reservoirs, and pump stations shall be configured, wherever feasible, to avoid and minimize direct and indirect impacts to wetlands and stream drainage channels. Consideration taken in finalizing configuration placement shall include:
  - Reducing number and area of stream channel and wetland crossings where feasible. Crossings shall be oriented as close to perpendicular (90 degree angle) to the drainage or wetland as feasible.
  - Placement of project components as distant as feasible from channels and wetlands.
  - For pipeline construction activities in the vicinity of wetland and stream drainage areas, the construction work area boundaries shall have a minimum 20-foot setback from jurisdictional features<sup>8</sup>. Pipeline construction activities in proximity to jurisdictional features include: 1) entrance and exit pits for directional drilling and bore and jack operations; and 2) portions of pipeline segments listed as “parallel” to wetland/water features.
2. Sites identified as potential staging areas will be examined by a qualified biologist prior to construction. If potentially jurisdictional features are found that could be impacted by staging activities, the site will not be used.
3. Construction methods for channel crossing shall be designed to avoid and minimize direct and indirect impacts to channels to the greatest extent feasible. Use of trenchless methods including suspension of pipeline from existing bridges, directional drilling, and bore and jack tunneling will be used when feasible. Trenchless methods are required for all perennial drainage crossings. Construction occurring in the vicinity of riparian areas shall be delimited with a minimum 20-foot setback to avoid intrusion of construction activities into sensitive habitat.

The following additional measures shall apply to channel crossings in which the trenching construction method is used:

- Limiting of construction activities in drainage channel crossings to low-flow periods: approximately April 15 to October 15.
- At in-road drainage crossings where drainages pass beneath the road in existing culverts, and where there is sufficient cover between the culvert and road surface, the new pipeline will be installed above the existing culvert without removing or disturbing it. If the pipeline must be installed below the existing culvert, then the culvert will be cut and temporarily removed to allow pipeline installation.

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<sup>8</sup> Setbacks of channels with associated riparian vegetation will be from the outer dripline edge of the riparian corridor canopies and/or the upper bank edge, or per City or County code, whichever is greater.

- At off-road drainage crossings, the construction corridor width will be minimized to the greatest extent feasible at the crossing and at least 20 additional feet to either side of the drainage at the crossing.
  - If disturbance of the existing culvert is required, sediment curtains upstream and downstream of the construction zone shall be placed to prevent sediment disturbed during trenching activities from being transported and deposited outside of the construction zone.
4. Implement BMPs required in **Mitigation Measure 3.4.1** to reduce risk of sediment transport into all construction areas in proximity of drainages.
  5. For channels or wetlands for which soil removal is necessary (off-road crossings or wetlands to be trenched or otherwise directly disturbed), the top layer of the drainage or wetland bottom shall be stockpiled and preserved during construction. After the pipeline has been installed, the stockpiled material shall be placed back into the drainage or wetland feature to return the beds to approximately their original composition.
  6. To offset temporary and permanent impacts to wetlands and other waters of the U.S., and impacts to riparian habitat, compensatory mitigation will be provided as required by regulatory permits and SAAs.

**Mitigation Measure 3.5.2:** Specific measures shall be implemented to protect aquatic habitats potentially inhabited by special-status fish and California freshwater shrimp.

Sensitive fisheries and other aquatic resources shall be protected by minimizing in-stream and near-stream habitat impacts during project design, informally consulting with resource agencies (NMFS, USFWS, CDFG, and USACOE), and implementing protective measures. For Sonoma Creek, Petaluma River, Napa River, and other perennial drainages, special-status fish are presumed present. California freshwater shrimp are presumed present in Sonoma Creek. Because of the sensitivity of seasonal and ephemeral drainages, the following measures will be required to avoid and minimize impacts to aquatic habitat:

- 1) Project designs shall be reconfigured, whenever feasible, to avoid direct impacts to sensitive wetland areas and minimize disturbances to wetland and riparian corridors. Ground disturbance and construction footprints in these areas shall be minimized to the greatest degree feasible.
- 2) If trenching or directional boring stream crossing methods are used, the construction schedule of such activities shall be implemented according to conditions of the SAAs.
- 3) In-stream construction shall be avoided at all locations that are known, or presumed, to support threatened or endangered species, if at the time of construction such locations contain flowing or standing water.
- 4) In the event that equipment shall operate in any watercourse with flowing or standing water, the project proponent will ensure that they have the appropriate permit authorizations.
- 5) Prior to construction, a qualified biologist shall install fencing to establish a minimum 20-foot setback from sensitive habitat.

7. For work sites located adjacent to sensitive aquatic sites, a biological resource education program shall be provided by a qualified biologist, as per conditions of the SAAs.

Implementation of **Mitigation Measure 3.5.5** for the protection of California red-legged frogs and **Mitigation Measure 3.5.1** for protection and restoration of wetlands would protect special-status invertebrates that could potentially be impacted by the project. No specific mitigation is required.

**Mitigation Measure 3.5.5:** The appropriate Member Agency shall implement protection measures to avoid and minimize impacts to western pond turtles.

- When working within 200 feet of stream crossings, all construction personnel shall receive awareness training relating to the protection of western pond turtles, in accordance with the SAAs. Also, to minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be minimized to the greatest extent feasible. Based on reconnaissance-level surveys, if staging and construction activities occur principally within or immediately adjacent to project alignment roads the project will be outside of principal pond turtle habitat.
- Within 48 hours prior to the start of construction activities, a qualified biologist shall perform pond turtle surveys within suitable habitat within projected work areas. If a pond turtle nest is located within a work area, a biologist with the appropriate permits may move the eggs to a suitable facility for incubation, and release hatchlings into the creek system in late fall.

The measures proposed for protection of aquatic species and red-legged frogs (**Mitigation Measures 3.5.2** and **3.5.6**) will additionally protect western pond turtles during construction.

**Mitigation Measure 3.5.6:** The appropriate Member Agency shall implement the following protection measures to avoid and minimize impacts on California red-legged frog.

- 1) The implementation of measures identified for the protection of special-status fish and California freshwater shrimp would also protect California red-legged frogs within aquatic habitat. All protection measures identified in **Mitigation Measure 3.5.2** shall be applied to the protection of red-legged frogs at sites that provide potential aquatic habitat for this species. These include informal USFWS consultation, avoiding aquatic habitat, establishing a suitable buffer from the aquatic habitat (e.g., 50 feet), and implementing a worker education program.
- 2) All work activities within or adjacent to aquatic habitat that is potentially occupied by red-legged frogs will be completed between May 1 and November 1.
- 3) A qualified biological resource monitor will conduct a training session for construction personnel working in upland habitat near potentially occupied drainages, as per conditions of the SAAs.
- 4) All trash that could attract predators will be regularly contained and removed from the work site.

In the event trenchless methods cannot be employed, the project proponent would obtain appropriate permit authorizations and implement construction methods per applicable Streambed Alteration Agreements.

**Mitigation Measure 3.5.8:** The following measures to avoid, minimize, or mitigate impacts on burrowing owls would be incorporated into the project by the appropriate Member Agency:

- In areas identified to provide potential burrowing owl habitat, preconstruction surveys for burrowing owls would be conducted by a qualified biologist 14-30 days prior to the start of construction. Surveys would cover grassland areas within 500-foot buffer and check for adult and juvenile burrowing owls and their habitat.
- Construction exclusion areas would be established around the occupied burrows in which no disturbance would be allowed to occur. During the non-breeding season (September 1 through January 31), the exclusion zone would extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas would extend 250 feet around occupied burrows. Passive relocation of owls is not proposed.
- A qualified biologist (the on-site monitor or otherwise) will monitor owl activity on the site to ensure the species is not adversely affected by the project.

**Mitigation Measure 3.5.9:** To avoid disturbing common and special-status nesting birds, the following protection measures shall be implemented:

- Whenever feasible, vegetation shall be removed during the non-breeding season (generally defined as September 1 to January 31).
- For ground disturbing activities occurring during the breeding season (generally defined as February 1 to August 31), a qualified wildlife biologist will conduct preconstruction surveys of all potential nesting habitat for birds within 500 feet of earthmoving activities.
- If active bird nests are found during preconstruction surveys, a 500-foot no-disturbance buffer will be created around active raptor nests during the breeding season or until it is determined that all young have fledged. A 250-foot buffer zone will be created around the nests of other special-status birds. These buffer zones are consistent with CDFG avoidance guidelines; however, they may be modified in coordination with CDFG based on existing conditions at work locations.
- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by special-status birds or that are located at least 500 feet from active nests may be removed.
- **Mitigation Measure 3.5.11:** The appropriate Member Agency shall implement protection measures to avoid and minimize impacts on special-status bats in and near project facilities during construction.
- Concurrent with breeding bird surveys (**Mitigation Measure 3.5.8**), a qualified biologist will conduct preconstruction surveys for special-status bats at each bridge crossing location and in rural (i.e., non-road) areas where any large trees (e.g., > 24 inch diameter at breast height) will be removed. If an active roost is observed, a suitably-sized buffer

(e.g., 100 to 150 feet) will be placed around the roost if it appears that trenching or other project activities may cause abandonment. Demolition activities must cease until juvenile bats are self-sufficient and will not be directly or indirectly impacted by activities.

- **Mitigation Measure 3.5.12:** To avoid and minimize impacts on badgers, the appropriate Member Agency shall implement preconstruction surveys prior to ground clearing and grading in annual grasslands habitat or areas that are known or suspected to support badger.
- Within 30-days prior to ground-clearing, a qualified biologist shall survey areas that provide potential badger habitat that occur within 100-feet of project activities. If no evidence of badgers presence is detected, no further mitigation is required. If active badger dens are identified within the action area, badgers will be passively relocated. If identified, vacated dens shall be temporarily covered using plywood sheets or similar materials to prevent badgers from returning to the action area during construction.

**Mitigation Measure for Impact 3.5.13. Impacts on Rare Plants.** Before the initiation of any vegetation removal or ground-disturbing activities in areas that provide suitable habitat for special-status plants, the following measures shall be implemented by the appropriate Member Agency:

- A qualified botanist will conduct appropriately-timed surveys for special-status plant species, including those identified in Table 3.5.1<sup>9</sup>, in all suitable habitat that would be potentially disturbed by the project.
- Surveys shall be conducted following CDFG- or other approved protocol.
- If no special-status plants are found during focused surveys, the botanist shall document the findings in a letter to the appropriate agencies and no further mitigation will be required.

If special-status plants are found during focused surveys, the following measures shall be implemented:

- Information regarding the special-status plant population shall be reported to the CNDDDB.
- If the populations can be avoided during project implementation, they shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to this species and its habitat.
- If special-status plant populations cannot be avoided, consultations with CDFG and/or USFWS would be required. A plan to compensate for the loss of special-status plant species could be required, detailing appropriate replacement ratios, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures that would be implemented if the initial mitigation fails; the plan would be developed in consultation with the appropriate agencies prior to the start of local construction activities.

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<sup>9</sup> Table 3.5-1 included in the original NBWRP EIR/EIS. No special status plants are anticipated in the Novato North Service Area; however NMWD has adopted Mitigation Measure 3.5.13 as part of the larger Mitigation Monitoring and Reporting Program, and will implement surveys as required.



- If mitigation is required, the project proponent shall maintain and monitor the mitigation area for 5 years following the completion of construction and restoration activities. Monitoring reports shall be submitted to the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan.

**Mitigation Measure 3.5.14:** The following measures shall be implemented by the appropriate Member Agency to avoid or reduce impacts to heritage or other significant trees:

1. Prior to the commencement of construction activities, trees necessary to remove or at risk of being damaged will be identified.
2. A certified arborist will inventory these trees, with the results of the inventory providing species, size (diameter at breast height, or *dbh*), and number of protected trees. Also, in consultation with the appropriate County, the arborist will determine if any are heritage or landmark trees.
3. If any protected trees are identified that will be potentially removed or damaged by construction of the Watmaugh Road Project, design changes will be implemented where feasible to avoid the impact.
4. Any protected trees that are removed will be replaced per applicable City and County tree protection ordinances. Foliage protectors (cages and tree shelters) will be installed to protect the planted trees from wildlife browse. The planted trees will be monitored as required by the ordinance, or regularly during a minimum two-year establishment period and maintenance during the plant establishment period will include irrigation. After the establishment period, the native tree plantings are typically capable of survival and growth without supplemental irrigation.

## 2.6 Land Use and Agricultural Resources

Section 3.6 of the NBRWP EIR/EIS analyzed land use and planning impacts including short-term disruption from construction activities and long-term conversion of land uses that would apply to the Watmaugh Road Alignment Project. Watmaugh Road Alignment Project impacts would be consistent with and slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to land use and agriculture would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS. Construction activities could generate noise, dust, and construction traffic and could affect sensitive receptors such as residences; however the impact would be short-term and would not divide an existing community. Construction and operation of the Watmaugh Road Alignment Project would not result in long-term disruption, physical division, or isolation of existing residences or communities in the vicinity of the Watmaugh Road Alignment Project area and therefore no impact would occur.

Surrounding land uses around the proposed Watmaugh Road Alignment are agricultural and pastoral; the land is zoned as Diverse Agriculture and is privately owned with the exception of the

SVCSD wastewater treatment facility and SVCSD easements. The Watmaugh Road Alignment is limited to the installation of below-grade recycled water pipeline within areas currently used for grazing. Diverse Agriculture zoning and permitted uses within this designation do not necessarily include recycled water facilities; however, public uses such as the proposed pipeline are allowed with a use permit. The Watmaugh Road Alignment Project would temporarily disturb a corridor of approximately 5,650 feet in length. Generally, construction activities could result in additional long-term loss of Important Farmland if protective measures are not taken during construction. No agricultural land would be permanently converted to land uses other than agriculture. This impact would be less than significant with the incorporation of Mitigation Measure 3.6.1. Following construction, the land would be returned to its pre-construction conditions.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or increase the severity of impacts identified above. As such, the land use impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.6.1:** To support the continued productive use of Important Farmlands in the action area, the appropriate Member Agency shall implement the following measures during project construction:

- Replace soils over pipelines in a manner that will minimize any negative impacts on crop productivity. The surface and subsurface soil layers will be stockpiled separately and returned to their appropriate locations in the soil profile.
- To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top 3 feet) to within 5 percent of original density.
- Where necessary, rip the top soil layers to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers, such as the construction staging areas.
- Avoid working or traveling on wet soil to minimize compaction and loss of soil structure. Before construction begins, geotechnical testing will be done to determine the moisture content limit above which work should not occur. Where working or driving on wet soil cannot be avoided, roadways will be capped with spoils that will be removed at the end of construction and/or ripped and amended with organic material as needed.
- Remove all construction-related debris from the soil surface. This will prevent rock, gravel, and construction debris from interfering with agricultural activities.
- Perform soil density monitoring during backfill and ripping to minimize excessive compaction and minimize effects on future agricultural land use.
- Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.

- Control compaction to minimize changes to lateral groundwater flow which could affect both irrigation and internal drainage.

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## 2.7 Traffic and Transportation

Section 3.7 of the NBWRP EIR/EIS analyzed traffic and circulation impacts associated with the identified short-term increases in construction-related traffic. As described in the EIR/EIS, (SVCSD Phase 1) project would not introduce any new land uses within the project corridor that would generate noticeable long-term changes in traffic; operational traffic would be limited to infrequent trips by maintenance personnel and by vehicles delivering chemicals to the treatment plant. Thus potential traffic and transportation effects would be confined to construction of the proposed facilities and would not result in any long-term degradation in operating conditions or level of service on any project roadways. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles. Watmaugh Road Alignment Project impacts would be consistent with and slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to traffic would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS.

Construction activities that would generate off-site traffic during the construction period would include the initial delivery of construction vehicles and equipment to the site, the daily arrival and departure of construction workers and material delivery throughout the construction period.

The duration of impacts related to short-term disruption of traffic flow and increased congestion generated by construction vehicles would be limited to the period of time needed to complete construction. Construction traffic would be dispersed throughout the day. Construction-generated traffic would be temporary and would not result in any long-term degradation in operating conditions on any roadways. These project-generated trips would not be substantial relative to existing traffic volumes, and would fall within the daily fluctuations of traffic volumes for these roadways. Therefore, this short-term effect of the Watmaugh Road Alignment Project on traffic load and capacity of the street system would be less than significant.

The EIR/EIS determined that SVCSD Phase 1 project construction would include temporary closure of one lane of traffic (on the following roads: Arnold Drive, Orange Avenue, Elm Avenue, and Leveroni Road. Under the modified project, these roadways would not be affected, and no additional roadways or corresponding levels of service and traffic flow would be affected. Traffic control measures would be identified by the local jurisdiction's (City of Sonoma) roadway encroachment permit, and would likely only be required at the areas of ingress and egress to the site. Public roads that provide access to the Watmaugh Road Alignment Project area include Broadway and 8<sup>th</sup> Street East, from Highway 121. South of Napa Road, Broadway becomes a two-lane roadway with no improvements or on-street parking. The posted speed limit is 25-45

miles per hour (mph). 8<sup>th</sup> Street East is a two-lane north-south roadway. On-street parking is permitted and shoulders are discontinuous. The paved right-of-way is approximately 40 feet. The posted speed limit is 25 mph.

Implementation of the Watmaugh Road Alignment Project would not involve additional changes in traffic patterns or onsite circulation, would not require street closure, and would not generate additional traffic trips beyond the short-term trips identified in the EIR/EIS. Although the pipeline alignment is modified, the impacts are consistent with those disclosed in the EIR/EIS; therefore, the Watmaugh Road Alignment Project would not result in any new impacts to traffic and circulation beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. As such, the traffic and transportation impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.7.1a:** The appropriate Member Agency for each project component shall obtain and comply with local road encroachment permits for roads that are affected by construction activities.

The *Work Area Protection and Traffic Control Manual* includes requirements to ensure safe maintenance of traffic flow through or around the construction work zone, and safe access of police, fire, and other rescue vehicles. In addition, the Traffic Management Plan (subject to local jurisdiction review and approval) required by Mitigation Measure 3.7.1b, below, would direct how traffic flow is safely maintained during project construction.

**Mitigation Measure 3.7.1b:** The construction contractor for each project component shall prepare and implement a Traffic Control/Traffic Management Plan subject to approval by the appropriate local jurisdiction prior to construction. The plan shall:

- Identify hours of construction (between 8:00 AM and 7:00 PM; no construction shall be permitted between 10:00 PM and 7:00 AM);
- Identify hours for deliveries (Monday – Friday, 9:00 AM to 3:30 PM, or other hours if approved by the appropriate local jurisdiction);
- Include a discussion of haul routes, limits on the length of open trench, work area delineation, traffic control and flagging;
- Identify all access and parking restriction, pavement markings and signage requirements (e.g., speed limit, temporary loading zones);
- Layout a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;

- Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times;
- Include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access; and
- Specify the street restoration requirements pursuant to agreements with the local jurisdictions.

**Mitigation Measure 3.7.1d:** The appropriate Member Agency for each project component shall develop circulation and detour plans to minimize impact to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.

## 2.8 Air Quality

Section 3.8 of the NBWRP EIR/EIS analyzed potential impacts to air quality and determined project construction would result in significant but mitigable effects associated with emissions from excavation activities, construction equipment exhaust, haul truck trips, and related construction worker commute trips, in addition to operational emissions, during installation of the proposed recycled water pipelines. Watmaugh Road Alignment impacts would be consistent with and slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to air quality would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS. Consistent with the NBWRP EIR/EIS discussion, open trenching of the Watmaugh Road Alignment will result in earth disturbance and associated fugitive emissions. Exhaust emissions would result from the use of equipment such as boring machines, jackhammers, backhoes/loaders, excavators, and other heavy-duty construction equipment. Operational activity would be passive and would include the conveyance of recycled water through pipes.

The Watmaugh Road Alignment Project would be located in the vicinity of residences; the closest residence is approximately 50 feet from the Watmaugh Road Alignment site. Consistent with the NBWRP EIR/EIS discussion, Watmaugh Road Alignment construction activities would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions, which could expose sensitive receptors to pollutant concentrations. Construction activities would be required to comply with Bay Area Air Quality Management District's (BAAQMD) CEQA requirements for control of fugitive dust emissions. Short-term construction impacts would be less than significant with implementation of NBWRP Mitigation Measures 3.8.1a.

Emissions increases that would result under the Watmaugh Road Alignment Project would not be expected to individually have a significant impact on global climate change or conflict with the State goals for reducing greenhouse gas emissions. As part of the EIR/EIS analysis, it is determined that the estimated CO<sub>2</sub> emissions (metric tons annually) are significantly under the CARB interim threshold. Since the Watmaugh Road Alignment Project is reduced in size compared to the Phase 1 project, associated emissions, similarly, will be significantly under the CARB interim threshold. To meet the General Conformity rule requirements required by NEPA, an analysis of criteria air pollutants was provided in the NBWRP EIR/EIS. The Phase 1 Implementation Plan projects, which include the proposed Watmaugh Road Reach Project, would not exceed the de minimis thresholds. The project was also analyzed with respect to regional emission levels. Construction emissions of carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) are estimated to be well under the de minimis threshold levels applicable to the project area. Therefore the project would be exempt from General Conformity determination requirements and would be in compliance with the National Ambient Air Quality Standards (NAAQS) and the State Implementation Plan; therefore long term emissions impacts would be less than significant.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. Implementation of the mitigation measure identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, air quality impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.8.1a: Construction Fugitive Dust Control Plan.** The appropriate Member Agency shall require its contractor(s) to implement a dust control plan that shall include the following dust control procedures during construction as required by the BAAQMD:

- Water all active construction areas at least twice daily, taking into consideration temperature and wind conditions.
- Cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on 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.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 mph.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways, consistent with Mitigation Measure 3.1.2, Erosion Control.
- Replant vegetation in disturbed areas as quickly as possible.

**Mitigation Measure 3.8.1b: Construction Exhaust Emissions Control Plan.** The appropriate Member Agency shall require its contractor(s) to implement an exhaust emissions control plan that shall include the following controls and practices:

- On road vehicles with a gross vehicular weight rating of 10,000 pounds or greater shall not idle for longer than five minutes at any location as required by Section 2485 of Title 13, Division 3, Chapter 10, Article 1 of the California Code of Regulations. This restriction does not apply when vehicles remain motionless during traffic or when vehicles are queuing.
- Off road equipment engines shall not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Division 3, Chapter 9, Article 4.8 of the California Code of Regulations. All vehicle operators shall receive a written idling policy to inform them of idling restrictions. The policy shall list exceptions to this rule that include the following: idling when queuing; idling to verify that the vehicle is in safe operating condition; idling for testing, servicing, repairing or diagnostic purposes; idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); idling required to bring the machine to operating temperature as specified by the manufacturer; and idling necessary to ensure safe operation of the vehicle.
- Off road engines greater than 50 horsepower shall, at a minimum, meet Tier 2 emissions standards. When available, higher Tier engines shall be utilized. Additionally, contractor(s) shall comply with current CARB and BAAQMD regulations for off-road engines greater than 50 horsepower.

## 2.9 Noise

Section 3.9 of the NBRWP EIR/EIS described existing noise levels and applicable regulations and analyzed noise impacts associated with project construction and operation. As described in the EIR/EIS, temporary construction noise and vibration related to the Phase 1 project could affect nearby sensitive receptors. Watmaugh Road Alignment Project impacts would be consistent with and slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to noise would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS.

Consistent with the components of Phase 1 in the NBWRP EIR/EIS, Watmaugh Road Alignment construction activity would be located within approximately 50 feet of sensitive receptors, including single-family residences. Noise levels from pipeline construction activity could range up to 101 dBA at these residences from jack and bore tunneling or directional drilling or up to 89 dBA if trenching is used. The highest noise levels would occur during bore and jack tunneling at the Schell Creek crossing, which would produce noise levels comparable to those generated by pile driving operations and rock drilling operations, respectively. Additionally, as described in the

NBWRP EIR/EIS, building damage is typically the primary issue concerning temporary construction impacts from vibration. Impacts to these sensitive receptors would be short-term, temporary, and mitigated to a less than significant level through mitigation identified in the EIR/EIS.

The Watmaugh Road Alignment would impact less sensitive receptors than anticipated in the NBWRP EIR/EIS due to the reduced project footprint and would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. Implementation of the mitigation measure identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, noise impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.9.1:** The appropriate Member Agency shall develop and implement a Construction Noise Reduction Plan that requires, at a minimum, the following:

- The contractor shall locate all stationary noise-generating equipment, including hammer bore and drill rigs, as far as possible from nearby noise-sensitive receptors. Stationary noise sources located within 500 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings, and the line of sight between such sources and nearby sensitive receptors shall be blocked by portable acoustic barriers.
- The contractor shall assure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an un-muffled exhaust.
- All construction activities within unincorporated Marin County shall be limited to between the hours of 7 a.m. and 6 p.m. on weekdays and between 9 a.m. and 5 p.m. on Saturdays.
- Residences and other sensitive receptors within 200 feet of a construction area shall be notified of the construction schedule in writing, at least two weeks prior to the commencement of construction activities. This notice shall indicate the allowable hours of construction activities as specified by the applicable local jurisdiction or as defined by this mitigation measure. The construction contractor shall designate a noise disturbance coordinator who would be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and entrances and included in the construction schedule notification sent to nearby residences and sensitive receptors.

**Mitigation Measure 3.9.2:** The appropriate Member Agency will implement the following measure:

- The construction contractor shall use a trenchless technology (e.g., horizontal directional drill, lateral drilling, etc.) other than jack and bore when there are structures within 100 feet of the proposed activities. If the construction contractor provides the Member Agency with acceptable documentation indicating that alternative trenchless technology is not feasible for the crossing, the contractor shall develop and implement a Construction



Vibration Mitigation Plan to minimize construction vibration damage using all reasonable and feasible means available, including siting the jack and bore as far as possible from all nearby structures. The plan shall provide a procedure for establishing thresholds and limiting vibration values for potentially affected structures based on an assessment of each structure's ability to withstand the loads and displacements due to construction vibrations. The plan should also include the development of a vibration monitoring plan to be implemented during construction of particular crossing.

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## 2.10 Hazards and Hazardous Materials

Section 3.10 of the NBRWP EIR/EIS characterized the existing conditions in the project area, discussed the applicable regulations and analyzed potential hazardous materials impacts associated with implementation of project. The EIR/EIS identified potentially significant but mitigable impacts associated with excavation of, storage, and transport of hazardous materials during construction. Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to hazardous materials would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS.

Implementation of the Watmaugh Road Alignment Project would involve grading and excavation, consistent with the NBWRP EIR/EIS discussion, but would not be located on a site, or within 500 feet of a site, with known hazardous materials contamination; probability of encountering hazardous materials in excavated soil or shallow groundwater, since contaminants in soil is low.

Consistent with the NBWRP discussion, use of hazardous materials during construction could result in an accidental release of fuel or oils into the environment. During construction activities for the Watmaugh Road Alignment Project, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, and paints would be used for vehicles and motorized equipment. Accidental spill of any of these substances could impact environmental and water quality or pose a hazard to construction workers and the public. NBWRP Mitigation Measures 3.10.2a through 3.10.2d require implementation of BMPs for handling hazardous materials onsite to reduce impacts to less-than-significant-levels. As described in the NBWRP EIR/EIS, project components implemented in the SVCSD area, and subsequently the Watmaugh Road Alignment action area, could be located in wildland fire hazard zones. However, construction and/or maintenance workers would only be in the area on a temporary basis during construction and an intermittent basis for maintenance activities. Therefore, implementation of the Watmaugh Road Alignment Project would not result in a significant risk of loss, injury, or death involving wildland fires. Furthermore, Mitigation Measures 3.10.4a and 3.10.4b identified in the NBWRP EIR/EIS would reduce the level of impact to less-than-significant.

There are no existing or proposed schools within one-quarter mile of the Watmaugh Road Alignment Project area. Consistent with the NBWRP EIR/EIS discussion, Watmaugh Road Alignment Project does not include any structures of significant height or include any activities that would impair Sonoma Skypark Airport operations or safety.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. Implementation of the mitigation measure identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, the hazards and hazardous materials impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.10.1a:** Project contract specifications shall require that, in the event that evidence of potential soil contamination such as soil discoloration, noxious odors, debris, or buried storage containers, is encountered during construction, the contractor will have a contingency plan for sampling and analysis of potentially hazardous substances, including use of a photoionization detector. The required handling, storage, and disposal methods shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediation shall comply with applicable laws and will coordinate with the appropriate regulatory agencies,

**Mitigation Measure 3.10.1b:** If unknown USTs are discovered during construction, the UST, associated piping, and impacted soil shall be removed by a licensed and experienced UST removal contractor. The UST and contaminated soil shall be removed in compliance with applicable county and state requirements governing UST removal.

**Mitigation Measure 3.10.1c:** Prepare a project-specific Health and Safety Plan that would apply to excavation activities. The plan shall establish policies and procedures to protect workers and the public from potential hazards posed by hazardous materials. The plan shall be prepared according to federal and California OSHA regulations and submitted to the appropriate agency with jurisdiction prior to beginning site activities.

**Mitigation Measure 3.10.1d:** Project contract specifications shall include a Dust Abatement Program to minimize potential public health impacts associated with exposure to contaminants in soil dust.

**Mitigation Measure 3.10.2a:** Consistent with the SWPPP requirements, the construction contractor shall be required to implement BMPs for handling hazardous materials onsite. The use of construction BMPs will minimize any adverse effects on groundwater and soils, and will include, but not limited to, the following:

- Follow manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction;
- Spill control and countermeasures, including employee spill prevention/response training;
- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

**Mitigation Measure 3.10.2b:** The contractor shall follow the provisions of California Code of Regulations, Title 8, Sections 5163 through 5167 for General Industry Safety Orders to protect the action area from being contaminated by the accidental release of any hazardous materials and/or wastes. The local CUPA agency will be contacted for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

**Mitigation Measure 3.10.2c:** Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with applicable regulatory requirements. All hazardous materials shall be transported handled, and disposed of in accordance with applicable regulatory requirements.

**Mitigation Measure 3.10.2d:** In the event of an accidental release of hazardous materials during construction, containment and clean up shall occur in accordance with applicable regulatory requirements.

**Mitigation Measure 3.10.4a:** For applicable Member Agencies, in consultation with local fire agencies, a Fire Safety Plan will be developed for each of the service areas associated with the project. The Fire Safety Plan(s) will describe various potential scenarios and action plans in the event of a fire.

**Mitigation Measure 3.10.4b:** For applicable Member Agencies, during project construction, all staging areas, welding areas, or areas slated for development using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Any construction equipment that includes a spark arrestor shall be equipped with a spark arrestor in good working order. All vehicles and crews working at the project site(s) will have access to functional fire extinguishers at all times. In addition, construction crews will be required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.

## 2.11 Public Services and Utilities

Section 3.11 of the NBRWP EIR/EIS discussed impacts to public services and utilities. The EIR/EIS identified that pipeline installation would occur predominantly within existing roadways and would disrupt normal access to homes and businesses along local roadways. Project construction could also cause temporary traffic congestion and possible road closures, which could affect response time for local police and fire departments as well as ambulance services in case of emergencies. Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to public services and utilities would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS. The Watmaugh Road Alignment would occur in an overland route not located within roadways; therefore it would not change emergency access (via Broadway) in the Sonoma Valley area. Similarly, it would not impair implementation of an adopted emergency response plan or emergency evacuation plan and therefore, no impact would occur.

Pipeline installation has the potential to generate a short-term increase in demand for police and fire services if an accident were to occur during construction. Construction activities could also result in interference with high-pressure gas lines, petroleum product lines, and high-voltage lines. In the event of such an occurrence, response from fire units may be required.

Implementation of NBWRP Mitigation Measures 3.11.1, 3.11.2, and 3.11.3 would reduce any construction-related impacts to a less than significant level.

Consistent with the information described in the NBWRP EIR/EIS, use of this recycled water for urban and agricultural uses for SVCSD would offset potable demands would also improve local and regional water supply reliability, allowing for flexibility during times of drought and giving groundwater supplies opportunity to recharge. The Watmaugh Road Alignment Project would not require construction of a storm drainage system or expansion of an existing stormwater drainage facility. The Watmaugh Road Alignment Project construction activities would generate minimal solid waste related to excess construction materials and material removed during site clearing. The quantity of solid waste is not anticipated to affect the capacity of a landfill and disposal of all waste would comply with applicable regulations.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. Implementation of the mitigation measure identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, the public services and utilities impacts would be consistent with those identified in the EIR/EIS.

### **Mitigation Measures listed in the EIR/EIS**

**Mitigation Measure 3.11.1:** The Member Agencies will coordinate with local emergency service providers in its service area to inform them of the proposed construction activities and schedule, and provide temporary alternate access routes around construction areas as necessary.

**Mitigation Measure 3.11.2:** Public service providers shall provide, upon request, a copy of the Traffic Control Plan to the related police and fire agencies for their review prior to construction. The appropriate Member Agency shall provide 72-hour notice to the local service providers prior to construction of individual pipeline segments. Discussion on the Traffic Control Plan is provided in Section 3.7, Traffic and Circulation.

**Mitigation Measure 3.11.3:** The Member Agencies will identify utilities along the proposed pipeline routes and project sites prior to construction and implement the following measures:

- a. Utility excavation or encroachment permits shall be obtained as required from the appropriate agencies. These permits include measures to minimize utility disruption. The service provider and its contractors shall comply with permit conditions regarding utility disruption.
- b. Utility locations shall be verified through the use of the Underground Service Alert services and/or field survey (potholing).

- c. As necessary, detailed specifications shall be prepared as part of the design plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.
- d. In areas where the pipeline would traverse parallel to underground utility lines within five feet, the project applicant shall employ special construction techniques, such as trench wall-support measures to guard against trench wall failure and possible resulting loss of structural support for the excavated areas.
- e. Residents and businesses in the project corridor shall be notified of any planned utility service disruption two to four days in advance, in conformance with county and state standards.

## 2.12 Cultural Resources

Section 3.12 of the NBWRP EIR/EIS analyzed potential impacts to cultural, archaeological, paleontological, and historic resources resulting from the Phase 1 Project. Reclamation concluded that a finding of no adverse effect was appropriate for the Phase 1 Project in accordance with Section 106 of the National Historic Preservation Act (NHPA) as codified at 36 CFR Part 800. The California State Historic Preservation Officer (SHPO) concurred with this finding in a letter of March 18, 2011.

An addendum record search and field survey of the Watmaugh Road Alignment APE was conducted by ESA Registered Professional Archaeologist, Heidi Koenig, on April 21, 2011, and documented in a cultural resources survey report of June 2011. No historic properties were identified in the Watmaugh Road Alignment. Reclamation also sent additional letters to Native American tribes requesting information that they may have regarding sites of religious and cultural significance in the area of the Watmaugh Road Alignment. No responses were received. Reclamation initiated Section 106 consultation by letter (July 12, 2011) with the SHPO regarding the Watmaugh Road alignment addendum to the project area of potential effect. The SHPO responded by letter on July 19, 2011 and concurred with Reclamation's finding of no adverse effect. In the unlikely event that cultural resources or human remains are identified during the implementation of this project, Reclamation may have additional responsibilities pursuant to 36 CFR § 800.13.

### Mitigation Measures listed in the EIR/EIS

**Mitigation Measure 3.12.1:** The appropriate Member Agency will incorporate the following measures:

**Mitigation Measure 3.12.1a: Prepare a Cultural Resources Monitoring Plan.** Prior to authorization to proceed, or issuance of permits, the applicant shall prepare and submit a cultural resources monitoring plan to the appropriate jurisdiction for review and approval. Monitoring shall be required for all surface alteration and subsurface excavation work including trenching, boring, grading, use of staging areas and access roads, and driving vehicles and

equipment within all areas delineated as sensitive for cultural resources. A qualified professional archaeologist (cultural resources monitor) that is approved by each Member Agency in consultation with all affected jurisdictions shall prepare the plan. The plan shall address (but not be limited to) the following issues:

- Training program for all construction and field workers involved in site disturbance;
- Person(s) responsible for conducting monitoring activities, including Native American monitors;
- How the monitoring shall be conducted and the required format and content of monitoring reports, including any necessary archaeological re-survey of the final pipeline alignment (including the need to conduct shovel-test units or auger samples to identify deposits in advance of construction), assessment, designation and mapping of the sensitive cultural resource areas on final project maps, assessment and survey of any previously unsurveyed areas;
- Person(s) responsible for overseeing and directing the monitors;
- Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports;
- Procedures and construction methods to avoid sensitive cultural resource areas (i.e. boring conduit underneath recorded or discovered cultural resource site);
- Clear delineation and fencing of sensitive cultural resource areas requiring monitoring;
- Physical monitoring boundaries (e.g., 200-foot radius of a known site);
- Protocol for notifications in case of encountering of cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation);
- Methods to ensure security of cultural resources sites;
- Protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction.

**Mitigation Measure 3.12.1b: Archaeological and Native American Monitoring.** If an intact archaeological deposit is encountered, all soil disturbing activities in the vicinity of the deposit shall cease until the deposit is evaluated. The appropriate Member Agency, as necessary, shall retain the services of a Native American monitor and a qualified archaeological consultant that has expertise in California prehistory to monitor ground-disturbing within areas designated as being sensitive for buried cultural resources. The archaeological monitor shall immediately notify the appropriate Member Agency of the encountered archaeological deposit. The monitors shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, present the findings of this assessment to NBWRA and the appropriate Member Agency. During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.

If a Member Agency, in consultation with the monitors, determines that a significant archaeological resource is present within their jurisdiction and that the resource could be adversely affected by the NBWRP, the Member Agency shall:

- Re-design the NBWRP to avoid any adverse effect on the significant archaeological resource; *or*,
- Implement an archaeological data recovery program (ADRP) (unless the archaeologist determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible). If the circumstances warrant an archaeological data recovery program, an ADRP shall be conducted. The project archaeologist and the Member Agency shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the appropriate Member Agency for review and approval. The ADRP shall identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ADRP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, shall be limited to the portions of the historic property that could be adversely affected by the NBWRP. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

**Mitigation Measure 3.12.1c: Cultural Resources Assessment for Staging Areas.** When locations for staging are defined the areas of potential effect should be subject to a cultural resources investigation that includes, at a minimum:

- An updated records search at the Northwest Information Center;
- An intensive survey of all areas within the lots;
- A report disseminating the results of this research; and,
- Recommendations for additional cultural resources work necessary to mitigate any adverse impacts to recorded and/or undiscovered cultural resources.

**Mitigation Measure 3.12.1d: Inadvertent Discoveries.** If discovery is made of items of historical or archaeological interest, the contractor shall immediately cease all work activities in the area (within approximately 100 feet) of discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. After cessation of excavation the contractor shall immediately contact the NBWRA and appropriate Member Agency. The contractor shall not resume work until authorization is received from the appropriate Member Agency.

- In the event of unanticipated discovery of archaeological indicators during construction, the Member Agency shall retain the services of a qualified professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site.
- In the case of an unanticipated archaeological discovery, if it is determined that the find is unique under NHPA and/or potentially eligible for listing in the National Register, and the site cannot be avoided, appropriate Member Agency shall provide a research design and excavation plan, prepared by an archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan

shall be submitted to NBWRA and appropriate Member Agency and approved by the appropriate Member Agency prior to construction being resumed.

**Mitigation Measure 3.12.1e: Project-level Cultural Resources Assessment.** When project-level plans are completed for the Basic System; the Partially Connected System; and the Fully Connected System, NBWRA the appropriate Member Agency will conduct a cultural resources investigation for the APE that includes, at a minimum:

- An updated records search at the NWIC;
- An intensive cultural resources survey of the APE;
- A report disseminating the results of this research; and,
- Recommendations for additional cultural resources work necessary to mitigate any adverse impacts to recorded and/or undiscovered cultural resources.

**Mitigation Measure 3.12.2: Discovery of Human Remains.** If potential human remains are encountered, the appropriate Member Agency shall halt work in the vicinity of the find and contact the county coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner shall contact the NAHC. As provided in Public Resources Code Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

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## 2.13 Recreation

Section 3.13 of the NBWRP EIR/EIS analyzed impacts to recreation and determined that construction activities could temporarily conflict with access to recreational resources; however, implementation of mitigation measures would reduce impacts to a less than significant level. As stated in the NBWRP EIR/EIS, the SVCSD Phase 1 pipeline would temporarily disrupt (noise, traffic, dust) Ernie Smith Community Park on Arnold Drive and bikeways along Arnold Drive and Leveroni Road. Watmaugh Road Alignment Project impacts would be slightly reduced from impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. There are no recreational resources within two miles of the Watmaugh Road Alignment that would be directly impacted. No additional mitigation would be required.

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## 2.14 Aesthetics

Section 3.14 of the NBWRP EIR/EIS analyzed visual resource impacts associated with construction of the SVCSD Phase 1 project and determines construction activities would temporarily affect residential and scenic roadway views during construction, and above ground



facilities could result in new sources of light and glare; however, implementation of mitigation would reduce impacts to a less than significant level. Watmaugh Road Alignment Project impacts would be consistent with, or slightly reduced from, impacts identified in the NBWRP EIR/EIS, as the pipeline length is reduced compared to the SVCSD Phase 1 project previously examined. Potential impacts related to aesthetics would be reduced to a less than significant level through implementation of mitigation measures identified in the NBWRP EIR/EIS.

Consistent with the aesthetic environment described in the NBWRP EIR/EIS, the Watmaugh Road Alignment Project location is relatively flat, with mature trees, vineyards and other agricultural fields, and houses within view. The Watmaugh Road Alignment Project site is visible from Broadway to the west and from agricultural fields to the east. Broadway is characterized by varying degrees of development ranging from open space/agricultural to commercial/industrial development and residential areas. The Watmaugh Road Alignment Project site is also visible from the nearby residences; the closest residence is approximately 50 feet. The visual sensitivity of the Watmaugh Road Alignment Project is considered moderate, as the site is located within a rural land use designation visible from a public roadway, but is not within a land use or zoning designation protecting scenic or natural resources. The pipeline would be located below grade, and not permanently visible from public view. The project site and adjacent areas are not identified as scenic areas, and consist of undeveloped and agricultural areas, with some adjacent residences and commercial/industrial areas. Therefore, the Watmaugh Road Alignment Project would not have a substantially adverse impact on a scenic vista, and would not result in damage to any scenic resource. Consistent with the discussion in the NBWRP EIR/EIS, construction of the pipeline would result in short-term impacts from presence of heavy equipment/machinery, stockpiling, and materials storage to the existing visual character and quality of the site, but would not significantly impact the long-term visual character of the area. Surface restoration would involve repaving roadways and replanting grasses, shrubs, and trees in unpaved areas outside of the roadways (see Mitigation Measure 3.14.1a). The Watmaugh Road Alignment Project would not require security lighting. No nighttime construction is planned, and lighting of the construction area is not anticipated.

The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. Implementation of the mitigation measure identified in the EIR/EIS and listed below would reduce potential impacts to a less-than-significant level. As such, the aesthetic impacts would be consistent with those identified in the EIR/EIS.

## Mitigation Measures listed in the EIR/EIS

**Mitigation Measure 3.14.1a:** Following construction activities, disturbed areas shall be restored to baseline conditions, including repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediately surrounding area.

## 2.15 Environmental Justice

Section 3.15 of the NBRWP EIR/EIS analyzed impacts to environmental justice. As discussed in the EIR, the overall construction-related project impacts would be short-term and temporary. consistent with the discussion in the NBWRP EIR/EIS, construction of the Watmaugh Road Project would involve activities and use equipment typical for any construction project and would not cause a disproportionate impact to the minority and low-income community in the area; therefore no impact is expected. As such, the Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified.

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## 2.16 Socioeconomics

Section 3.16 of the NBRWP EIR/EIS describes socioeconomic conditions in the project area and analyzes effects on the economy from implementation of the project including project construction; operation and maintenance; increased vineyard production and costs; increased recreational expenditures; and potential changes in customer water and sewer fees. As discussed in the EIR/EIS, impacts related to socioeconomics would be less than significant or beneficial. Short-term construction activities would create jobs and generate additional economic activity within the region during the period of construction. Recycled water use instead of groundwater or surface water for irrigation purposes would be more reliable and could support long-term agricultural production and farm income, which would be a beneficial impact to the agricultural economy. The Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified in the EIR/EIS, or any increase in the severity of impacts identified. As such, socioeconomic impacts would be consistent with those identified in the EIR/EIS.

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## 2.17 Growth

Chapter 5, Growth Inducement and Secondary Effects of Growth, of the NBRWP EIR/EIS analyzed the growth inducement potential of the NBWRP and secondary effects of growth resulting from the NBWRP. As described in the EIR/EIS, no appreciable growth in population or employment would occur as a direct result of construction or operation of the proposed facilities. The Watmaugh Road Alignment Project would provide recycled water for urban irrigation and as such would contribute to the provision of adequate water supply to support a level of growth that is consistent with the amount planned and approved within the General Plans of the City and County of Sonoma. No additional impacts are anticipated beyond those identified in General Plan EIRs for City and County of Sonoma. The mitigation measures listed in the City and County of Sonoma General Plan EIRs and described in the NBWRP EIR/EIS for the Sonoma Valley Service Area would apply to the proposed Watmaugh Road Alignment Project. The proposed Watmaugh Road Alignment Project would not result in any new impacts beyond those previously identified

in the EIR/EIS, or any increase in the severity of impacts identified. As such, any secondary effects associated with the proposed Watmaugh Road Alignment Project would be consistent with those discussed in the EIR/EIS.

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## **2.18 Indian Trust Assets**

Indian Trust Assets (ITAs) are legal interests in property or rights held in trust by the United States for Indian Tribes or individual Indians. Indian reservations, Rancherias, and Public Domain Allotments are common ITAs in California. There are no ITAs at or near the revised alignment area. Therefore, the Proposed Action would not adversely affect ITAs.



## **SECTION 3**

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### **Conclusion**

This Supplemental EA demonstrates that the environmental impacts of the Watmaugh Road Alignment Project are consistent with, or slightly reduced from, those identified in the NBWRP EIR/EIS. The proposed pipeline alignment modification would not result in any new or more severe environmental impacts that were not previously identified in certified environmental documents. The project would incorporate and comply with all appropriate mitigation measures that have already been identified and incorporated into the NBWRP Mitigation Monitoring and Reporting Program. In addition, no new information of substantial importance has become available since the EIR/EIS was prepared regarding new significant impacts, or feasibility of mitigation measures or alternatives.



## **SECTION 4**

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### **Consultation and Coordination**

#### **4.1 Federal Endangered Species Act**

Section 1.8 of this Supplemental EA/Addendum discusses Federal Section 7 consultation with the USFWS and NMFS during the EIS/EIR process. According to Sec. 402.16 of the Endangered Species Act Section 7 Regulations, reinitiating formal consultation may be required if (1) new information becomes available indicating that listed species or critical habitat may be affected by the project in a manner or to an extent not previously considered; (2) current project plans change in a manner that causes an effect to listed species or critical habitat in a manner not previously considered; or (3) a new species is listed or critical habitat designated that may be affected by the action. SVCSD acquired a Biological Opinion for the Trunk Main Project; since the location and timing of the projects overlap, the proposed Watmaugh Road Reach Project will be implemented in compliance with both the previous Biological Opinion and the NBWRA Biological Opinion.

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#### **4.2 Section 106 of the National Historic Preservation Act**

Section 1.8 of this Supplemental EA/Addendum discusses National Historic Preservation Act Section 106 Consultation. Section 106 requires Federal agencies to take into account effects on historic properties. Section 106 consultation with SHPO for the NBWRP was completed on March 21, 2011. SHPO issued a letter of concurrence with Reclamation's finding of no significant adverse effect to historic properties and cultural resources.

Based on proposed project modifications, subsequent consultation with SHPO was necessary to modify the Area of Potential Effect (APE). ESA prepared a letter report, dated June 2011, to address a proposed change in the APE. The letter confirmed that construction methods would be consistent with the methodology described for the approved NBWRP and the previous cultural resources investigations completed for the project (ESA, 2011). The original records search radius and previous geoarchaeological analysis encompass all portions of the revised APE. SHPO found that the additions to the APE were included in the original records search and that a pedestrian survey was conducted. As such, SHPO issued a letter of concurrence with Reclamation's finding of no significant adverse effect to historic properties and cultural resources

on July 19, 2011.

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### **4.3 Clean Water Act**

As noted in Section 1.8 of this Supplemental EA/Addendum, the project is subject to the Clean Water Act (CWA) Section 404. The CWA requires that a permit be obtained from USACE when discharge of dredged or fill material into wetlands and waters of the U.S. occurs. The NBWRP EIR/EIS determined that pursuit of permits to protect jurisdictional waters of the U.S., would be necessary. SVCSD acquired the USACE Nationwide 12 and RWQCB 401 Water Quality Certification permits authorizing impacts to these wetland features for construction of the Trunk Main Project, and since the project location and timing overlap, the proposed Watmaugh Road Reach Project will be implemented in compliance with these previous permits.



## SECTION 5

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### List of Preparers

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**US Bureau of Reclamation**

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Doug Kleinsmith, Natural Resource Specialist

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**Sonoma Valley County Sanitation District (Sonoma County Water Agency)**

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Marc Bautista, Environmental Specialist

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**Environmental Science Associates**

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Jim O'Toole, Project Director

Katie Baker, Technical Analyst



## SECTION 6

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## References

All references included in the *Draft EIR/EIS for the North San Pablo Bay Restoration and Reuse Project (North Bay Water Recycling Program)*, SCH No.2008072096, Prepared for the United States Bureau of Reclamation and North Bay Water Reuse Authority, May 2009, as well as all references included in the *2007 SVCSD Sewer Trunk Main Replacement Project Initial Study/Mitigated Negative Declaration*, SCH No. 2007072059, are herein incorporated by reference. Specific citations are listed below.

Association of Bay Area Governments (ABAG), *Summary Distribution of Slides and Earth Flows in the San Francisco Bay Region*, <http://www.abag.ca.gov/bayarea/eqmaps/landslide/index.html>, sourced from USGS Open File Report 97-745 E, 1997.

California Stormwater Quality Association (CASQA). 2003. Best Management Practices Handbook. 2003.

Environmental Science Associates, *Draft EIR/EIS for the North San Pablo Bay Restoration and Reuse Project (North Bay Water Recycling Program)*, SCH # 2008072096, Prepared for the United States Bureau of Reclamation and North Bay Water Reuse Authority, May 2009.

Environmental Science Associates, *Draft North Bay Water Recycling Program Marin, Sonoma and Napa Counties- Addendum Cultural Resources Survey Report SVCSD Service Area – Watmaugh Road Alignment.*, Prepared for the United States Bureau of Reclamation and North Bay Water Reuse Authority, June 9, 2011.

Leidy, Robert A. 2007. Ecology, Assemblage Structure, Distribution, and Status of Fishes in Streams Tributary to the San Francisco Estuary, California. San Francisco Estuary Institute, Contribution No. 530, April 2007.

Sonoma County Water Agency 2011. California Red legged Frog Surveys for the North San Pablo Bay Restoration and Reuse Project. Sonoma County Water Agency, Dave Cook, Senior Environmental Specialist. 2011.

O’Keefe, Yolanda. Personal Communication to James O’Toole; June 14 2011 email. RE: special status plant species survey results.



## **APPENDIX A**

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### **Regulatory Permits – SVCSD Trunk Main Project**





DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO, CALIFORNIA 94103-1398

COPY

ORIGINAL DOCUMENT  
SONOMA COUNTY WATER AGENCY

Regulatory Division

OCT 05 2009

TO O'KEEFE  
OCT - 7 2009

SUBJECT: File Number SPN-2007-400878-N

Proj/SONOMA VALLEY CSD  
SEWER TRUNK MAIN REPLACEMENT  
(Watmaugh Road East to Treatment Plant)  
70-12-7 #37

Ms. Yvette O'Keefe  
Sonoma County Water Agency  
P.O. Box 11628  
Santa Rosa, California 95406

Dear Ms. O'Keefe:

This letter is written in response to your submittal of November 21, 2007 concerning Department of the Army authorization to place fill in 0.25 acres of jurisdictional waters of the U.S. for the replacement of a sewer trunk main in seasonal wetlands, near the Town of Schellville, Sonoma County, California.

Based on a review of the information you submitted and an inspection of the project site conducted by Corps personnel on April 17, 2009, your project qualifies for authorization under Department of the Army Nationwide Permit 12 - Utility Line Activities (72 Fed. Reg. 11092, March 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). See Enclosure 1. All work shall be completed in accordance with the plans and drawings titled "Sonoma Valley County Sanitation District Sewer Trunk Main Replacement (Watmaugh Road East to Treatment Plant)", dated August 20, 2007, in ten sheets.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Non-compliance with any condition could result in the suspension, modification or revocation of the authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid for two years from the date of this letter unless the Nationwide Permit is modified, suspended or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have 12 months from that date to complete the project under the present terms and conditions of the Nationwide Permit. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the San Francisco Bay Region Regional Water Quality Control Board (RWQCB). If the RWQCB fails to act on a valid request for certification within two months after receipt of a complete application, the Corps will presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

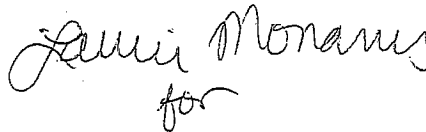
To ensure compliance with this Nationwide Permit authorization, the following special conditions shall be implemented:

1. This Corps permit does not authorize you to take an endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit or a Biological Opinion (BO) under ESA Section 7 with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service (FWS) BO, dated September 21, 2009, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take authorized by the attached BO, whose terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The FWS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.
2. All Wetlands and Other Waters disturbed during construction will be returned to pre-project conditions, including contours, topography, hydrology, and habitat composition. Where soil removal is necessary, the top layer shall be preserved during construction. After the pipeline has been installed, the stockpiled material shall be placed back into the Wetland or Other Water to return it to its original composition.



Should you have any questions regarding this matter, please call Philip Shannin of our Regulatory Division at 415-503-6781. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

A handwritten signature in cursive script that reads "Jamie Monamus". Below the signature is a small, handwritten word "for".

Jane M. Hicks  
Chief, Regulatory Division

Enclosures

Copy furnished (w/o enclosures):

US FWS, ATTN: Nicole Nakagawa, Sacramento, CA  
CA RWQCB, Oakland, CA

## Nationwide Permit 12 - Utility Line Activities

Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States. **Utility lines:** This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area. Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a French drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody. **Utility line substations:** This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities. **Foundations for overhead utility line towers, poles, and anchors:** This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible. **Access roads:** This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into nontidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows. This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit. This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate. **Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) The activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 27.) (Sections 10 and 404)

**Note 1:** Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters), copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation. **Note 2:** Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, accordance with the requirements for temporary fills. **Note 3:** Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

### *Nationwide Permit General Conditions*

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/ or Coastal Zone Management Act consistency for an NWP.

1. *Navigation.* (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. *Aquatic Life Movements.* No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
3. *Spawning Areas.* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. *Migratory Bird Breeding Areas.* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. *Shellfish Beds.* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.
6. *Suitable Material.* No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
7. *Water Supply Intakes.* No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
8. *Adverse Effects From Impoundments.* If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
9. *Management of Water Flows.* To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
10. *Fills Within 100-Year Floodplains.* The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. *Equipment.* Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. *Removal of Temporary Fills.* Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. *Proper Maintenance.* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and

Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. *Endangered Species.* (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species specific regional endangered species conditions to the NWPs. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.htm/> respectively.

18. *Historic Properties.* (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow

their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. *Designated Critical Resource Waters.* Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. *Mitigation.* The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require preconstruction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project specific waiver of this requirement. For wetland losses of 1/10 acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood

of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWP. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan. (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. *Water Quality.* Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. *Coastal Zone Management.* In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. *Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. *Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. *Transfer of Nationwide Permit Verifications.* If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee) \_\_\_\_\_  
(Date) \_\_\_\_\_

26. *Compliance Certification.* Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

27. *Pre-Construction Notification.* (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity: (1) Until notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.); (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate; (5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act. (c) *Form of Pre-Construction Notification*: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring preconstruction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination. (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS. (e) *District Engineer's Decision*: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.



28. *Single and Complete Project.* The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Enclosure 3

Permittee: Sonoma Valley County Sanitation District

File Number: SPN-2007-400878-N

**Certification of Compliance  
for  
Nationwide Permit**

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

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(Permittee)

---

(Date)

Return to:

Philip Shannin  
U.S. Army, Corps of Engineers  
San Francisco District  
Regulatory Division, CESPN-OR-R  
1455 Market Street  
San Francisco, CA 94103-1398



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In Reply Refer To:  
81420-2009-F-1437-2

SEP 21 2009

Ms. Jane M. Hicks  
Chief, Regulatory Division  
U.S. Army Corps of Engineers  
San Francisco District  
333 Market Street  
San Francisco, California 94105-2197

Subject: Review of the Proposed Sewer Trunk Main Replacement Project, Town of Schellville, Sonoma County, California for Inclusion Under the Programmatic Biological Opinion for Impacts to the California Red-legged Frog (USFWS 1999) (Corps File Number SPN-2007-400878-N)

Dear Ms. Hicks:

This letter is in response to the Army Corps of Engineers' (Corps) June 8, 2009 request for initiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Sewer Trunk Main Replacement Project (proposed project) by the Sonoma County Water Agency (SCWA) in the Town of Schellville, Sonoma County, California. At issue is the potential effect of the proposed project on the threatened California red-legged frog (*Rana aurora draytonii*) (CRLF). The Corps' letter was received by the Service on June 10, 2009. This response is in accordance with the requirements of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act).

The Service has determined that the proposed project can be appended to the *Programmatic Formal Endangered Species Act Consultation on Issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog* (USFWS 1999) (Programmatic Consultation). The Service concurs that the proposed project may affect CRLF, but take would be minimized with the implementation of the minimization measures outlined in the "Minimization of Adverse Effects" section below.

The findings and recommendations in this appendage to the Programmatic Consultation are based on: (1) the Corps' June 8, 2009 consultation request letter; (2) the January 4, 2009 *Biological Assessment* and the November 2007 *Pre-Construction Notification* prepared by Environmental Science Associates (ESA); (3) various correspondence between the Service, Corps, SCWA and ESA; (4) other information available to the Service.

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**Consultation History**

July 6, 2005	Customized species list and letter entitled, "Subject: Species List for Sonoma Valley Recycled Water Project" mailed to Yolanda Molette, SCWA, from the Service.
June 25, 2007	Customized species list and letter entitled, "Subject: Species List for Sonoma Valley Main Sewer Trunk Replacement Project" mailed to Dana Ostfeld, ESA wildlife biologist, from the Service.
February 28, 2008	David Cook, Senior Environmental Specialist with SCWA, requests approval from the Service to conduct protocol-level surveys for CRLF at Schell Creek from the agricultural pond to the Sonoma Valley Wastewater Treatment Plant.
May 14, 2008	Email response from Andrew Raabe of the Service to David Cook of SCWA indicating that he is preparing a response to David Cook's survey request and would like additional project information.
June 18, 2008	The Service prepares a letter response stating that the presence of both CRLF and California freshwater shrimp should be assumed in the action area.
August 13, 2008	Telephone conference between David Cook of SCWA, and Andrew Raabe and Chris Nagano of the Service regarding potential project effects to CRLF and California freshwater shrimp and suitable minimization measures.
August 21, 2008	Email from David Cook of SCWA to Andrew Raabe and Chris Nagano of the Service summarizing a phone conversation that led to the agreement that the proposed project is not likely to affect California freshwater shrimp or its habitat because of the use of a dry bore and tunneling machine, and providing minimization language to avoid proposed project effects to CRLF.
August 28, 2008	Email from Andrew Raabe of the Service to David Cook of SCWA agreeing with phone notes and suggesting changes to the wording of Cook's revised minimization measure.
September 26, 2008	Jim O'Toole, ESA Project Manager, contacts Philip Shannin of the Corps to summarize discussions to date between SCWA and the Service.
June 10, 2009	The Service receives the Corps' consultation request letter, and the <i>Biological Assessment</i> dated January 4, 2009 and the <i>Pre-Construction Notification</i> dated November 2007 prepared by ESA.

July 13, 2009

Telephone conversation between Nicole Nakagawa of the Service and Jim O'Toole, ESA Project Manager, regarding clarification of bore and jack method, minimization measures and surveys conducted in vernal pool habitat. Nicole Nakagawa of the Service receives follow-up email to phone conversation from Jim O'Toole, ESA Project Manager.

## **BIOLOGICAL OPINION**

### **Description of Proposed Action**

The Sewer Trunk Main Replacement Project will take place along an existing concrete sewer trunk main from Watmaugh Road East and extend along a new main to the Sonoma Valley County Sanitation District wastewater treatment facility in the Town of Schellville, Sonoma County, California. Major waterways in close proximity to this project include Nathanson Creek and Schell Creek. A vernal pool and two agricultural ponds are also located within the project area. The proposed project will require the installation of approximately 5,560 linear feet (about one mile) of PVC pipe ranging in size from 30 to 42 inches in diameter and is detailed below:

- Removal of approximately 2,700 linear feet of existing pipeline;
- Approximately 2,135 linear feet of new pipeline alignment;
- Abandonment in place of approximately 2,800 linear feet of existing pipeline;
- Abandonment in place of approximately six manholes;
- Replacement of approximately 13 manholes and two junction boxes; and
- Installation of approximately five new maintenance manholes.

Methods of installation include the use of a bore and jack tunneling technique (i.e. a dry bore and tunneling machine) under Schell Creek, excavation, backfill (both native and engineered), paving at three rural roads crossed during project construction (Watmaugh Road East, Splude Road and San Luis Road), and fill of abandoned pipelines and manholes with cement-sand slurry. The installation rate is estimated at 100 feet per day and the removal/replacement rate is estimated at 50 feet per day. Following construction, disturbed areas will be restored by re-establishing topography, repaving roadways and reseedling with native seed mix.

The proposed action described above would temporarily affect 0.2 acre (8,712 square feet) of jurisdictional waters of the U.S. (including wetlands) and 0.05 acre (2,115 square feet) of non-jurisdictional vernal pools. Temporary impacts to an additional 0.03 acre of jurisdictional wetlands at Schell Creek will be avoided with the use of a trenchless bore and jack installation method. With this method, there is no pressurized use of bentonite or potential for frac-out. Thus, no frac-out contingency plan was provided by the project proponent.

### **Minimization of Adverse Effects**

To the maximum extent practicable, the proposed project shall be designed and implemented in such a way as to minimize adverse effects to CRLF and their habitat. To achieve this purpose, the measures below shall be followed:

1. At least 15 days prior to the onset of activities, the applicant or project proponent shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.
2. A Service-approved biologist shall survey the work site (i.e. Schell Creek, Nathanson Creek, and the agricultural pond at station 28+00) two weeks before the onset of earthmoving activities. If CRLF adults, juveniles, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In making this determination, the Service shall consider if an appropriate relocation site exists. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the work site before work activities begin. Only Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of CRLF.
3. Before any construction activities begin on the proposed project, a Service-approved biologist shall conduct a training session for all construction personnel working at or near Schell Creek, Nathanson Creek, and the agricultural pond. At a minimum, the training shall include a description of CRLF, California freshwater shrimp and Central California coast steelhead, their habitats, the importance of these species and their habitats, the general measures that are being implemented to conserve these species as they relate to the proposed project, and the boundaries within which the project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.
4. A Service-approved biologist shall be present in areas near identified habitat for CRLF and California freshwater shrimp (i.e. Schell Creek, Nathanson Creek, and the agricultural pond at station 28+00) and shall inspect work areas in the morning. A Service-approved biologist will be on-site during all work activities. A "no take" approach shall be taken for work activities. If any frogs, turtles or other wildlife are observed, the Service-approved biologist will be contacted. If any CRLFs or other special-status species are encountered during construction activities, they shall be relocated by the Service-approved biologist upon approval of the Service. Construction activities shall cease until the area is determined to be free of the special-status species encountered.
5. During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, trash and construction debris shall be removed from work areas.
6. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 20 meters from any riparian habitat or water body. The Corps and permittee shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the Corps shall ensure that the permittee has prepared a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of

the importance of preventing spills and of the appropriate measures to take should a spill occur.

7. A Service-approved biologist shall ensure that the spread or introduction of invasive exotic plant species shall be avoided to the maximum extent possible. When practicable, invasive toxic plants in the project areas shall be removed.
8. The project site shall be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by the Service and the Corps. Such a plan must include, but not be limited to, location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.
9. Stream contours shall be returned to their original condition at the end of project activities, unless consultation with the Service has determined that it is not beneficial to the species or feasible.
10. The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts occur in these staging areas, and access routes, restoration shall occur as identified in measures 8 and 9 above.
11. Work activities shall be completed between April and November 1. Should the proponent or applicant demonstrate a need to conduct activities outside this period, the Corps may authorize such activities after obtaining the Service's approval.
12. To control erosion during and after project implementation, the applicant shall implement best management practices, as identified by the appropriate Regional Water Quality Control Board.
13. If a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters to prevent CRLF from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.
14. A Service-approved biologist shall permanently remove, from within the project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible. The permittee shall have the responsibility to ensure that their activities are in compliance with the California Fish and Game Code.

15. Any excavation hole greater than one foot deep and two feet in diameter shall be covered at the end of the work day, or an escape ramp provided using materials such as planks or earthen fill.
16. In-stream construction will be avoided at locations that may support CRLF or other special-status aquatic species (including California freshwater shrimp and Central California coast steelhead), and especially for sites where they are known to be present.

The project proponent has also proposed the following measures to minimize affects to special-status plants:

1. Avoid the vernal pool and establish a suitable buffer around it (e.g. 50 feet). As a preliminary estimate, site the pipeline as close as feasible to the barn structures to the west of the current design from about stations 23+00 to 25+00, and keep all construction activity in the developed areas near the barn rather than in the pasture.
2. Utilize non-surface disturbing methods such as jack and bore to avoid surface disturbance in a buffer area around the vernal pool at station 24+50. If the same alignment is retained, this buffer could begin about 50 feet from the delineated wetland boundary to the north and end about 15 feet from the south end of the pool and adjacent property line.
3. Avoid surface disturbance within the constructed pond at station 28+00 and establish a suitable buffer from the pond (e.g. 50 feet).

### Action Area

The action area is defined in 50 CFR § 402.02 as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The action area for the proposed project contains aquatic and upland habitat suitable for CRLF. According to the Wildlife Reconnaissance Survey for the proposed project, the pipeline runs through a vernal pool, adjacent to an agricultural pond, parallel to Nathanson Creek and Shell Creek, and at one point runs within 300 feet of Schell Creek. Potential breeding habitat is located adjacent to the action area as well. According to National Wetland Inventory maps, there are 5 freshwater ponds within a half mile of the project site. There are no physical barriers that would prevent CRLF from utilizing the action area on their way to or from one of these ponds. In addition, three of the closest records of CRLF (California Natural Diversity Database occurrences #659, #524 and #753) occurred within the Sonoma Creek watershed, the same watershed as the project site; occurrence #524 is 2.9 miles from the action area, #753 is 3 miles away and #659 is 4.3 miles away.

The action area also lies within an important CRLF dispersal habitat corridor. The site is between two CRLF core recovery areas, Petaluma Creek-Sonoma Creek Core Recovery Area to the west and Jameson Canyon-Lower Napa River Core Recovery Area to the east. The goal of designating core areas is to protect metapopulations that, combined with suitable dispersal habitat, will allow for the long-term viability within existing populations; this management strategy will allow for the recolonization of habitat within and adjacent to core areas that are



naturally subjected to periodic localized extinctions, thus assuring the long-term survival and recovery of CRLF.

### **Evaluation under the Programmatic Consultation**

The Service has determined that it is appropriate to append the proposed project to the Programmatic Consultation. Therefore, this letter is an agreement by the Service to append the proposed project to the Programmatic Consultation and represents our biological opinion on the effects of the proposed action.

### **INCIDENTAL TAKE STATEMENT**

Section 9 of the Act and Federal regulation, pursuant to section 4(d) of the Act, prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described in the "Minimization of Adverse Effects" section are non-discretionary, and must be implemented by the Corps so they become binding conditions of project authorization for the exemption under 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity that is covered by this incidental take statement. If the Corps (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of 7(o)(2) may lapse.

### **Amount or Extent of Take**

The quantification of take by harassment, harm and mortality is difficult to ascertain because of the species' small size and aquatic habitat. These factors make it difficult to detect where CRLF, particularly tadpoles, are and if any could be affected by the proposed action. For actions covered by this consultation, some harassment and mortality could be directly observed from those captured during translocation efforts. However, mortality from other sources would be difficult to observe. Based upon the width of the construction corridor and length of the replacement pipeline, the Service estimates that the proposed action will result in the take of all frogs inhabiting or utilizing 5.19 acres of the action area.

The observed take may be lower than the actual take. However, with the implementation of the reasonable and prudent measures, the effects of the unobserved take would not change our analysis of effects of the actions covered by the Programmatic Consultation.

### **Effect of the Take**

It is the opinion of the Service that the effects of the actions included under the auspices of this formal consultation are not likely to jeopardize the continued existence of CRLF.

### **Reasonable and Prudent Measures**

The following reasonable and prudent measure is necessary and appropriate to minimize the impact of take on CRLF:

Adverse effects to CRLF and their habitat shall be minimized to the extent possible.

### **Terms and Conditions**

To be exempt from the prohibitions of Section 9 of the Act, the Corps must ensure that the permittee complies with the following terms and conditions, which implement the reasonable and prudent measure described above.

The following measures are hereby incorporated into these terms and conditions as requirements of the proposed action:

1. The Corps shall ensure the measures described in the "Minimization of Adverse Effects" section are incorporated into their permit.
2. Sightings of CRLF or other listed or sensitive species shall be reported to the California Natural Diversity Database of the California Department of Fish and Game.

### **Reporting Requirements**

The Service must be notified within one (1) working day of the finding of any injured or dead CRLF or any unanticipated damage to their habitats associated with the proposed project. Injured CRLF must be cared for by a licensed veterinarian or other qualified person(s), such as the Service-approved biologist. Notification must include the date, time, and precise location of the individual/incident clearly indicated on a USGS 7.5 minute quadrangle and other maps at a finer scale, as requested by the Service, and any other pertinent information. Dead individuals of any listed species must be sealed in a zip-lock® plastic bag containing a paper with the date, time, and location where the dead animal was found, and the name of the person who found it, and the bag containing the specimen frozen in a freezer located in a secure site. The Service contact persons are Chris Nagano, Division Chief, Field Endangered Species Program, at the Sacramento Fish and Wildlife Office at (916) 414-6600; and Daniel Crum, Resident Agent-in-Charge of the Service's Division of Law Enforcement, 2800 Cottage Way, Room W-2928, Sacramento, California 95825, at (916) 414-6660.

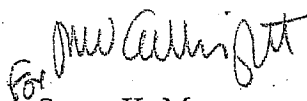
The applicant shall submit a post-construction compliance report prepared by the Service-approved biologist to the Sacramento Fish and Wildlife Office within sixty (60) calendar days of the date of the completion of construction activity. This report shall include: (i) dates that construction occurred; (ii) pertinent information concerning the success of the project in meeting compensation and other conservation measures; (iii) an explanation of failure to meet such measures, if any; (iv) known project effects on the California red-legged frog, if any; (v) occurrences of incidental take of any of these listed species, if any; (vi) documentation of employee environmental education; and (vii) other pertinent information.

### REINITIATION – CLOSING STATEMENT

This concludes the Service's review of the proposed Sewer Trunk Main Replacement Project. As provided in 50 C.F.R. § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion, (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion, or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions or concerns about this consultation, please contact Nicole Nakagawa or Ryan Olah of my staff at (916) 414-6600 or [Nicole\\_Nakagawa@fws.gov](mailto:Nicole_Nakagawa@fws.gov) and [Ryan\\_Olah@fws.gov](mailto:Ryan_Olah@fws.gov).

Sincerely,



Susan K. Moore  
Field Supervisor

cc:

Liam Davis, California Department of Fish and Game, Yountville, California  
Janice Gan, California Department of Fish and Game, Yountville, California  
Marcia Grefsrud, California Department of Fish and Game, Yountville, California  
Scott Wilson, California Department of Fish and Game, Yountville, California

**DEPARTMENT OF FISH AND GAME**

BAY DELTA REGION

(707) 944-5520

Mailing address:

POST OFFICE BOX 47

YOUNTVILLE, CALIFORNIA 94599

Street address:

7329 SILVERADO TRAIL

NAPA, CALIFORNIA 94558

Notification Number: **1600-2007-0515-03****Schell Creek tributary to Sonoma Creek, Sonoma County****Mr. Randy Poole****Sonoma Valley County Sanitation District****P.O. Box 11628****Santa Rosa , CA 95406****PROJECT DESCRIPTION and PROJECT CONDITIONS****Description**

The purpose of the Project is to abandon in place or remove and replace portions the entire existing underground concrete sewer trunk main with approximately 5,560 linear feet of polyvinyl chloride pipe, extending from Watmaugh Road East to the SVCSD wastewater treatment facility.

The Project generally avoids the riparian zone with the exception of the stream crossing at Schell Creek. This Agreement authorizes the activities at the stream crossing provided that the project conditions in this Agreement are properly implemented. The Applicant will reduce impacts to Schell Creek by using a "bore and jack" installation method to place the polyvinyl chloride pipe underneath the creek. Bore pits shall be located outside the riparian zone approximately 20 ft from top of bank.

**Conditions**

1. Work within the stream/riparian corridor shall be confined to the period of June 15 to October 15. Revegetation work is not confined to this time period but must be completed in the same calendar year.
2. No phase of the project may be started if that phase cannot be completed prior to the onset of a storm event. Seventy-two-hour weather forecasts from the National Weather Service shall be consulted prior to start up of any phase of the project.
3. The Applicant shall provide the Department with written documentation that the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) have been informed about the project prior to the commencement of work in the stream zone. The Operator shall provide the USFWS and NMFS a current description and location of the proposed activity. If the USFWS and NMFS determine that take

will occur, then a copy of the Federal Permit (Section 7 or 10) shall be provided to the Department.

4. Within 48 hours prior to beginning of any excavation, clearing, or staging in or near the riparian area, the project site shall be surveyed for active nests of breeding birds or raptors roosts shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities). If any listed species are found, work shall not start until the U.S. Fish and Wildlife Service has been contacted and has given their approval for work to continue. In addition, if any listed species are found, the Department of Fish and Game shall be contacted within 24 hours at (707) 944-5520. If active nests are found, the Operator shall consult with DFG and the United States Fish and Wildlife Service (USFWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the Fish and Game Code of California.
5. No later than 30 days prior to beginning of any excavation, clearing, or staging in or near the riparian area, the applicant shall submit to DFG a revegetation plan to mitigate the loss of oak trees in the project area for approval. Work shall not commence until DFG has approved these plans. Once approved by DFG, the methods, criteria, and conditions of these plans shall be considered enforceable conditions covered by this agreement. The revegetation plan shall include success criteria, contingency plans, annual monitoring protocol, reporting for at least 10 years, and shall propose mitigation ratios for removal of trees that have a diameter at breast height in excess of 4 inches.
6. Prior to clearing and grubbing operations, a qualified biologist shall clearly mark/flag trees within the designated construction corridor that should be avoided or will be trimmed only as directed by the arborist. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Vegetation outside the construction corridor shall not be removed or damage without prior consultation and approval of a Department representative. Where feasible, hand tools (chain saw, etc.) shall be used to trimmed vegetation to the extent necessary to gain access to the work sites. All cleared material/vegetation shall be removed out of the riparian/stream zone.
7. The disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Precautions shall be taken to avoid other damage to vegetation by people or equipment. The disturbed portions of the stream channel within the normal high-water mark of the stream shall be restored to as near their original condition as possible.
8. A certified arborist must provide oversight for those portions of the project that will result in the destruction of or damage to, trees in the riparian area. The intent of the oversight is to minimize damage and retain trees that might otherwise be destroyed or damaged beyond saving.

9. A qualified biological monitor shall be on site to monitor the jack and bore activities at the stream crossings. If a "frac-out" occurs work shall cease and the biological monitor shall contact DFG immediately. If a frac-out occurs the biological monitor shall be responsible for implementing the contingency plan required in Condition 10 of this agreement.
10. A dry jack method shall be used for the jack and bore pipeline stream crossings. Bentonite or other chemical lubricants shall not be used. Only water shall be used to reduce friction at the drill head. The Applicant shall design, pre-plan and direct the project in such a way as to minimize the risk of spills of all types. The Applicant shall provide a contingency plan, in the event of the release of accidental spills or seepage of drilling lubricants through fractures in the streambed or bank ("frac-outs"). The Operator shall operate in a manner that will reduce risk of frac-out or harming aquatic life. Boring plans should include:
- A sketch of the construction site, including equipment staging areas, approximate location of drill entry and exit points in relation to the surrounding area.
  - Proposed depth of bore and statement of streambed condition (subsurface strata and percent of gravel and cobble) that support the depth of the bore
  - Approximate length of bores
  - Type and size of boring equipment to be used
  - Estimated time to complete bore
  - List of lubricants and additives to be used
  - Name of Applicant's agents and cell phone numbers
  - Frac-out prevention and clean-up plans should include:
    - Name(s) and phone numbers of biological monitor(s), and crew supervisor(s)
    - Monitoring protocols (include biological monitoring and frac-out monitoring)
    - Containment and clean-up plan (include staging location of vacuum trucks and equipment, equipment list, necessary hose lengths, special measures etc)
11. Boring activities and set-up activities for boring operations shall be situated outside of wetlands and riparian areas.
12. Bore pits or trenches shall be covered with plywood when project activities are not occurring
13. Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waters of the State. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream.
14. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the State. Any of these materials, placed within or where they

may enter a stream or lake, by Applicant or any party working under contract, or with the permission of the Applicant, shall be removed immediately.

15. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.
16. The contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.
17. Spoils from the projects shall be properly disposed of outside the riparian zone.
18. Equipment shall not be operated in wetted areas (including but not limited to ponded, flowing, or wetland areas) or within the stream channel below the level of top-of-bank.
19. Any equipment or vehicles driven and/or operated adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat.
20. Refueling of construction equipment and vehicles may not occur within 300 feet of any water body, or anywhere that spilled fuel could drain to a water body. Tarps or a similar material shall be placed underneath construction equipment and vehicles, when refueling to capture incidental spillage of fuels. The project proponent will check and maintain equipment and vehicles operated in the project area daily to prevent leaks of fuels, lubricants or other liquids.
21. If dewatering activities are required, any discharge into the open channel draining into Schell Creek or within the Corps jurisdiction or other waters shall be filtered or allow silt to settle prior to being discharged into any drainage or other wetland.
22. To the extent that any provisions of this Agreement provide for activities that require the Applicant to traverse another owner's property, such provisions are agreed to with the understanding that the Applicant possesses the legal right to so traverse. In the absence of such right, any such provision is void.
23. In the event that the project scope, nature, or environmental impact is altered by the imposition of subsequent permit conditions by any local, state or federal regulatory authority, the Applicant shall notify the Department of any imposed project modifications that interfere with compliance to Department conditions.
24. If the Applicant needs more time to complete the authorized activity, the work period may be extended on a day-to-day basis by Dan Wilson at (707) 944-5534 or the Yountville office at (707) 944-5520.

25. A copy of this agreement must be provided to the contractor and all subcontractors who work within the stream zone and must be in their possession at the work site.
26. At least one week prior to construction, the Applicant shall notify Dan Wilson, Environmental Scientist of the anticipated commencement date for work, by phone at 707-944-5534 or email [dwilson@dfg.ca.gov](mailto:dwilson@dfg.ca.gov). This information shall include the DFG notification number, the stream name, commencement date, and the names and telephone numbers of the construction supervisors.
27. Department personnel or its agents may inspect the work site at any time.
28. The Applicant is liable for compliance with the terms of this Agreement, including violations committed by the contractors and/or subcontractors. The Department reserves the right to suspend construction activity described in this Agreement if the Department determines any of the following has occurred:
- A). Failure to comply with any of the conditions of this Agreement
  - B). Information provided in support of the Agreement is determined by the Department to be inaccurate.
  - C). Information becomes available to the Department that was not known when preparing the original conditions of this Agreement (including, but not limited to, the occurrence of State or federally listed species in the area or risk to resources not previously observed)
  - D). The project as described in the Agreement has changed or conditions affecting fish and wildlife resources change.
- Any violation of the terms of this Agreement may result in the project being stopped, a citation being issued, or charges being filed with the District Attorney. Contractors and subcontractors may also be liable for violating the conditions of this agreement.

### **Amendments and Extensions**

The Applicant shall notify the Department before any modifications are made in the project plans submitted to the Department. Project modifications may require an amendment or a new notification.

This Agreement is transferable to subsequent owners of the project property by requesting an amendment.

To extend the Agreement beyond the expiration date, a written request or completed "Request to Extend Lake or Streambed Alteration Agreement" form, with an appropriate fee, must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599) for consideration at least 30 days before the Agreement expiration date. An extension requires a fee. The Fee Schedule and Extension form can be obtained at [www.dfg.ca.gov/1600](http://www.dfg.ca.gov/1600) or by phone at (707) 944-5520. Extensions of the original Agreement are issued at the discretion of the Department.

To modify the project, a written request for an amendment or a completed "Request to Amend



Lake or Streambed Alteration Agreement" form, with an appropriate fee, must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599). An amendment requires a fee. The Fee Schedule and Amendment form can be obtained at [www.dfg.ca.gov/1600](http://www.dfg.ca.gov/1600) or by phone at (707) 944-5520. Amendments to the original Agreement are issued at the discretion of the Department.

***Please note that you may not proceed with construction until your proposed project has undergone CEQA review and the Department signs the Agreement.***

***I, the undersigned, state that the above is the final description of the project I am submitting to the Department for CEQA review, leading to an Agreement, and agree to implement the conditions above required by the Department as part of that project. I will not proceed with this project until the Department signs the Agreement. I also understand that the CEQA review may result in the addition of measures to the project to avoid, minimize, or compensate for significant environmental impacts:***

**Applicant's name (print):** \_\_\_\_\_

**Applicant's signature:** \_\_\_\_\_

**Signed the** \_\_\_\_\_ **day of** \_\_\_\_\_, 2008



Linda Adams  
Agency Secretary

# California Regional Water Quality Control Board

## San Francisco Bay Region

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1515 Clay Street, Suite 1400, Oakland, California 94612  
(510) 622-2300 • Fax (510) 622-2460  
<http://www.waterboards.ca.gov/sanfranciscobay>



Arnold Schwarzenegger  
Governor

Date:

Site No. 02-49-C0926 (AHS)

CIWQS Place No. 729911

**Sent via electronic mail: No hard copy will follow**

Sonoma Valley County Sanitation District  
PO Box 11628  
Santa Rosa, CA 95406  
Attention: Randy Pool  
[rdp@scwa.ca.gov](mailto:rdp@scwa.ca.gov)

**SUBJECT: Conditional Water Quality Certification for Sonoma Valley County  
Sanitation District Sewer Trunk Main Replacement Project, City of Sonoma,  
Sonoma County**

Dear Mr. Pool:

We have reviewed your application and hereby issue conditional water quality certification for the proposed Sonoma Valley County Sanitation District (SVCS D) Sewer Trunk Main Replacement Project in Sonoma County. You have also applied for a U.S. Army Corps of Engineers' Nationwide Permit (NWP) *12 Utility Line Activities* and *33 Temporary Construction, Access and Dewatering*, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) for the proposed project. The project is located within the SVCS D service area boundary and starts at Watmaugh Road extends southeast from Watmaugh Road and runs to the east of Broadway and adjacent to Schell and Nathanson Creeks until it reaches the SVCS D Wastewater Treatment Facility located at 22675 8<sup>th</sup> Street East in the City of Sonoma.

**Project:** The purpose of the proposed project is to upgrade the sewer pipeline system by replacing existing sewer pipelines and installing new ones for a total of 5,700 linear feet of piping. The project will require replacing existing pipeline along 2,700 linear feet and installing new pipeline along 3,000 linear feet. Approximately 110 linear feet of the existing pipeline will be replaced and installed parallel to and setback 20 feet from Nathanson Creek. Approximately 2,160 linear feet of the new pipeline will be installed parallel to and setback 25 feet from Schell Creek. The project will also require replacing 13 manholes and installing 5 new ones along the pipeline alignment.

In order to protect the Creeks from potential impacts, the Applicant will have to excavate a 9 to 12-foot deep and 5-foot wide trench along the entire alignment to replace the existing sewer lines and install the new ones. The area of disturbance will only be allowed to extend 40 feet outward from either side of the trench. The work area would be reduced to 10 feet outward where the trench alignment approaches Schell and Nathanson Creeks. The Applicant will also

implement erosion and sediment control measures including the use of silt fences, waddles, hay bales, and sand bags to stabilize the construction area on both sides of the trench.

**Impacts:** The proposed project will result in temporary impacts to 0.25 acres (340 linear feet) of wetlands in order to replace the existing sewer pipeline. The existing pipeline runs under a seasonal wetland that is adjacent to Nathanson Creek and under a vernal pool that is adjacent to an existing barn. The replacement of the pipeline will require disturbing 0.20 acres of the seasonal wetland and 0.05 acres of the vernal pool. All trenching and related construction activities along the remaining 5,360 linear feet of the pipeline alignment will take place outside of the riparian zone and will be set back approximately 20-40 feet from the top of the bank of Schell and Nathanson Creeks.

In addition, the Project will require placing 2,270 linear feet of the sewer pipeline adjacent to Schell and Nathanson Creeks and within the 100 year flood plain, which could pose a threat to water quality. Water quality and beneficial uses could be impacted if the sewer pipes, which are located within 20 feet of the creeks and within the flood plain, leaked or if the system were inundated by flood flows. This could result in the contents of the sewer line being released to the creeks or flood flows overwhelming the pipeline system and causing the system to back up.

**Mitigation:** The Project does not involve any new wetland fill, but it will temporarily impact 340 linear feet (0.25 acres) of wetlands and pose a potential threat to water quality. The Applicant will minimize impacts to the wetlands by re-using the excavated soil to restore the trenched areas and planting the trenched areas with native wetland vegetation. The disturbed areas outside of the wetlands will also be restored by using native soils and replanting the areas with native riparian and upland vegetation. The Applicant will minimize the threat to water quality in Schell and Nathanson Creeks by installing rubberized gaskets at all pipeline joints and installing locking and gasketed manhole covers. This would eliminate leaking at the pipeline joints and prevent sewer from escaping from the manholes. The Applicant will also test the pipeline joints and manholes under head pressures equal to 25 feet of water before the pipeline is put into service.

Board staff finds that the project proponent has taken appropriate steps to avoid and then to minimize impacts, as required by the Basin Plan.

**CEQA:** On March 18, 2008, the Sonoma Valley Sanitation District, as lead CEQA agency, issued a Negative Declaration for the Project pursuant to CEQA guidelines.

**Wetland Tracker System:** It has been determined through regional, state, and national studies that tracking of mitigation/restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. In addition, to effectively carry out the State's No Net Loss Policy for wetlands, the State needs to closely track both wetland losses and mitigation/restoration project success. Therefore, we require that the

Mr. Randy Pool  
Sonoma Valley Sanitation District Sewer Trunk Main Replacement Project

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Applicant use the Wetland Tracker Standard Form to provide Project information related to impacts and mitigation/restoration measures (see Condition 5 of this Certification). An electronic copy of the form and instructions can be downloaded at:

<http://waterboards.ca.gov/sanfranciscobay/certs/htm>. Project information concerning impacts and mitigation/restoration will be made available at the web link: <http://wetlandtracker.org>.

**Certification:** I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification", which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

1. This certification does not allow for the take, or incidental take, of any special status species. The Applicant and its contractors shall use the appropriate protocols, as approved by the CDFG, National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service, to ensure that Project activities do not impact the Beneficial Use of the Preservation of Rare and Endangered Species.
2. All construction work, with the exception of necessary planting work, is limited to the time period between June 15<sup>th</sup> and October 15.
3. Disturbance or removal of vegetation shall be minimized. The site shall be stabilized through incorporation of appropriate Best Management Practices, including the successful reestablishment of native vegetation, to enhance wildlife habitat values, and to prevent and control erosion and sedimentation.
4. No debris, soil, silt, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into waters of the State.
5. No fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to waters of the State may occur.
6. No equipment shall be operated in stream channels or other waters where there is flowing or standing water.

7. Disturbance or removal of vegetation shall be minimized. The site shall be stabilized through incorporation of appropriate Best Management Practices, including the successful reestablishment of native vegetation, to enhance wildlife habitat values, and to prevent and control erosion and sedimentation.
8. To mitigate for the temporary impacts to wetlands and riparian areas along the sewer pipeline alignment, the Applicant must replant the wetland and the riparian areas and the other disturbed areas according to the *Sonoma Valley County Sanitation District Sewer Trunk Main Replacement Project: Revegetation and Monitoring Plan* dated February 2009.
9. The Applicant is required to implement the mitigation plan as proposed and achieve the success criteria as outlined in the *Sonoma Valley County Sanitation District Sewer Trunk Main Replacement Project: Revegetation and Monitoring Plan* dated February 2009.
10. Monitoring of mitigation for the permanent impacts shall be performed as described in the *Sonoma Valley County Sanitation District Sewer Trunk Main Replacement Project: Revegetation and Monitoring Plan*, February 2009. The Applicant shall establish photo-documentation points at each mitigation site and will mark them on the as-built plans. Monitoring reports shall be submitted by December 31<sup>st</sup> during the monitoring period. These reports shall include photographs from the photo-documentation points and vegetation monitoring data to document whether success criteria are being achieved. If success criteria are not being achieved, the reports shall describe adaptive management measures to be undertaken to ensure that criteria will be achieved, including additional planting and/or extension of the monitoring period as warranted. Monitoring reports may be submitted either by uploading them to the Wetland Tracker website at <http://www.wetlandtracker.org/tracker/ba/list> or via mail (see the address on the letterhead).
11. The Applicant is required to use the standard Wetland Tracker form to provide Project information describing impacts and restoration measures within 14 days from the date of the certification. The completed Wetland Tracker form shall be submitted electronically to [wetlandtracker@waterboards.ca.gov](mailto:wetlandtracker@waterboards.ca.gov) or shall be submitted as a hard copy to the address on the letterhead (or to the Water Board), to the attention of Wetland Tracker.
12. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code (CWC) and Section 3867 of Title 23 of the California Code of Regulations (23 CCR).
13. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent

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certification application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

14. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833) and owed by the applicant. The fee for the proposed project is \$2,816. Payment in full has been received.

This certification applies to the Project as proposed in the Application materials and designs referenced above in the conditions of certification. Be advised that failure to implement the Project and habitat mitigation and monitoring plan as certified is a violation of this water quality certification. Also, any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) Section 13350. Failure to meet any condition of a certification may subject the Applicant to civil liability imposed by the Water Board to a maximum of \$5,000 per day of violation or \$10 for each gallon of waste discharged in violation of this action. Any required report made as a condition to this action (e.g., Conditions 10 and 11) is a formal requirement pursuant to CWC Section 13267, and failure or refusal to provide, or falsification of such required report, is subject to civil liability as described in CWC Section 13268. Should new information come to our attention that indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR Section 3857.

Should new information come to our attention that indicates a water quality problem with this project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR Section 3857.

If you have any questions, please contact Abigail Smith of my staff at (510) 622-2413 or e-mail at [asmith@waterboards.ca.gov](mailto:asmith@waterboards.ca.gov).

Sincerely,

Bruce Wolfe  
Executive Officer

Cc: SWRCB-DWQ, Bill Orme [Stateboard401@waterboards.ca.gov](mailto:Stateboard401@waterboards.ca.gov)  
U.S. EPA, David Smith, WTR-8 [R9-WTR-Mailbox@epa.gov](mailto:R9-WTR-Mailbox@epa.gov)  
ACOE, SF Regulatory Branch,  
Philip Shannin [Philip.A.Shannin@usace.army.mil](mailto:Philip.A.Shannin@usace.army.mil)

Mr. Randy Pool  
Sonoma Valley Sanitation District Sewer Trunk Main Replacement Project

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CA Department of Fish & Game, Greg Martinelli [gmartinelli@dfg.ca.gov](mailto:gmartinelli@dfg.ca.gov)

ESA Associates, James E. O'Toole, [jotoole@esassoc.com](mailto:jotoole@esassoc.com)



**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

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July 19, 2011

In Reply Refer To: BUR110214A JUL 21 2011

Michael A. Chotkowski  
Regional Environmental Officer  
United States Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, CA 95825-1898

BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED		
CODE	ACTION	SURNAME & DATE
150	✓	July 21/2011

Re: North Bay Water Reuse Authority (NBWRA) Phase I Project, Marin, Sonoma, and Napa Counties, California (Project No. 09-CCAO-132).

Dear Mr. Chotkowski:

Thank you for seeking consultation with me regarding the above noted undertaking. Pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA), the Bureau of Reclamation (BUR) is the lead federal agency for this undertaking and is seeking my comments on the effects that the proposed project will have on historic properties. The project will be implemented in part by the BUR using American Recovery and Reinvestment Act (ARRA) funds and title XVI funds. The BUR has identified this use of federal expenditures as an undertaking subject to compliance with Section 106 regulations. The BUR is continuing consultation, as a result of revisions to the original APE, namely a change in proposed pipeline alignment.

The proposed project is Phase I of the NBWRA program that is designed to provide recycled water for agricultural, urban, and environmental uses as an alternative to discharging recycled water into San Pablo Bay. The main components of the proposed undertaking are the construction of 41 miles of recycled water conveyance pipeline, seven booster pumps, upgrades to treatment capacity at existing wastewater treatment plants, and the retrofit of two existing storage tanks. The BUR has determined that the Area of Potential Effects (APE) consists of approximately 220 acres, which includes a 50-foot wide corridor along the proposed pipeline route and necessary staging and access locations. The vertical APE for the pipeline installations will be approximately 8-feet except at locations of jack and bore and directional drilling which will extend to a maximum of 20 feet. In addition to your letters of February 14, 2011, March 18, 2011, June 6, 2011, and July 12, 2011 you have submitted the following reports as documentation of your efforts to identify and evaluate historic properties in the project APE:

- North Bay Water Reuse Authority North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties: Addendum Cultural Resources Survey Report SVCSD Service Area – Watmaugh Road Alignment (Heidi Koenig, ESA – Cultural Resources Group: June 30, 2011).

SCANNED

Classification	ENV-3.00
Project	214
Control No.	11058294
Folder ID	1147982-1

7/21/2011 J.S.



- *North Bay Water Recycling Project, Proposed Pipeline Modification – NMWD LGVSD Service Area* (Heidi Koenig and Brad Brewster, ESA– Cultural Resources Group: May 25, 2011)
- *North Bay Water Reuse Authority North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties Cultural Resources Survey Report* (Heidi Koenig and Brad Brewster, ESA – Cultural Resources Group: January 25, 2011a).
- *North Bay Water Reuse Authority North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties Cultural Resources Survey Report Confidential Attachment 2* (Heidi Koenig and Brad Brewster, ESA – Cultural Resources Group: January 25, 2011b).
- *North Bay Water Reuse Authority North Bay Water Recycling Program, Marin, Sonoma, and Napa Counties Archaeological Extended Phase I Report* (Heidi Koenig, ESA – Cultural Resources Group: January 25, 2011).
- *Memorandum: Supplementary Information for North Bay Water Recycling Program Cultural Resources* (Heidi Koenig, ESA to Kevin Booker and Marc Bautista, SCWA: March 14, 2011).

Identification efforts, including records search and field survey, concluded that there are no archaeological sites located within the project APE. Eight previously recorded archaeological sites were; however, plotted on maps at the Northwest Information Center at locations near the APE. Although there were no surface manifestations of any of these sites observed during the field survey, subsurface techniques, including 2-inch geoprobes and 4-inch augers, produced negative findings at all eight locations.

Efforts directed toward identification of built-environment historic properties resulted in the identification of four previously documented historic properties and four newly identified historic period cultural resources. The four previously recorded historic properties are the Hamilton Army Air Field Discontiguous Historic District (listed on the NRHP under criteria A and C in 1998, site #98001347) in Marin County, the Napa State Hospital in Napa County, several segments of the Northwestern Pacific Railroad in Marin and Sonoma Counties, and a segment of the Southern Pacific Railroad-Schellville Branch in Sonoma County. The BUR has concluded that the project effects in the vicinity of the Hamilton Army Air Field Discontiguous Historic District and the Napa State Hospital will be restricted to transitory visual impacts during project construction only. As the proposed pipeline will be installed under the existing railroad grades using either directional drilling and/or jack and bore techniques, none of these documented linear historic properties will be adversely affected. The additions to the APE were included in the original records search and a pedestrian survey was conducted. No new historic properties were identified.

In addition to my previous concurrence with determinations of eligibility and identification efforts, after reviewing your consultation letters and supporting documentation, I have the following comments:

- 1) I concur that your identification of an Area of Potential Effects is appropriate pursuant to 36 CFR Part 800.4(a)(1) and that your efforts to identify and evaluate

historic properties in the APE represent a reasonable and good faith effort in accordance with 36 CFR Part 800.

- 2) Please be aware that the BUR should be consulting with all contacts indicated by the Native American Heritage Commission as it continuously updates its APE. Please consult with all contacts listed and address all comments and concerns and continue consultation as necessary **prior to project implementation**.
- 3) I acknowledge that, for the purposes of this undertaking only, the BUR is treating the Napa State Hospital, a segment of the Northwestern Pacific Railroad in Sonoma County, and a segment of the Southern Pacific Railroad-Schellville Branch in Sonoma County as eligible for the NRHP.
- 4) In conclusion, based on my comments above and my review of your Section 106 consultation letters and supporting documentation, I have no objection to your proposed finding of No Adverse Effect for this undertaking.

Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, the BUR may have additional future responsibilities for this undertaking under 36 CFR Part 800. Thank you for seeking my comments and for considering historic properties in planning your project. If you require further information, please contact Trevor Pratt of my staff, at phone 916-445-7017 or email [tpratt@parks.ca.gov](mailto:tpratt@parks.ca.gov)

Sincerely,

A handwritten signature in cursive script, reading "Susan K. Stratton for".

Milford Wayne Donaldson, FAIA  
State Historic Preservation Officer