

## **3.10 PUBLIC SERVICES AND UTILITIES**

### **A. Setting**

#### **WATER**

Potable, commercial, industrial, and agricultural water supplies in Sonoma County are derived from a number of sources, including surface water, groundwater, and recycled water. Surface water sources are primarily used in the incorporated areas (cities) and are supplemented by groundwater. Residences in rural areas in the county, including those in the vicinity of the study area, rely mostly on groundwater sources (Sonoma County 2006).

The Russian River and Dry Creek (a tributary to the Russian River) are the principal sources of potable surface water supplies in Sonoma County. The Russian River originates in central Mendocino County, approximately 15 miles north of Ukiah, and drains an area of 1,485 square miles, including much of Sonoma and Mendocino Counties. The Russian River reaches the Pacific Ocean at Jenner, approximately 20 miles west of Santa Rosa. The main channel of the Russian River is approximately 110 miles long and has five principal tributaries: the East Fork of the Russian River, Big Sulphur Creek, Maacama Creek, Dry Creek, and Mark West Creek (Sonoma County 2006).

Two major reservoirs provide water storage for the Russian River Basin: Lake Mendocino on the East Fork of the Russian River and Lake Sonoma on Dry Creek. Lake Mendocino provides water for agricultural, municipal, and industrial uses and Lake Sonoma provides water for municipal and industrial uses. Releases from both lakes maintain minimum streamflows required by the State Water Resources Control Board (SWRCB) for recreational uses and fish habitat. A portion of the summer streamflow in the Russian River is augmented by diversions from the Eel River via the Potter Valley Project, a hydroelectric plant owned and operated by the Pacific Gas and Electric Company. Water for the Potter Valley Project is stored in Lake Pillsbury on the Eel River (Sonoma County 2006).

#### **WASTEWATER**

Incorporated cities and special districts own and operate numerous centralized wastewater collection and treatment systems throughout the county (Sonoma County 2006). The discharge of treated effluent and disposal of biosolids is permitted by the corresponding regional water quality control board (RWQCB) (for the study area, the North Coast RWQCB). Rural areas not served by centralized systems use on-site septic systems subject to regulation by the Sonoma County Permit and Resource Management Department, with larger systems subject to the approval of the RWQCBs.

#### **SCHOOLS**

There are 40 school districts in Sonoma County: 31 elementary districts, three high school districts, and six unified districts. The districts vary substantially in size. The study area is served by the Geyserville Unified School District, which operates two high schools, an elementary school, and a middle school (Geyserville Unified School District 2007).

## **POLICE PROTECTION**

Police protection in the unincorporated portion of Sonoma County is provided primarily by the Sonoma County Sheriff's Department (Sonoma County 2006). The sheriff's department also provides coroner and correctional services countywide (Sonoma County 2006).

The sheriff's department maintains a 24-hour patrol force operating from five substations and the main office. As of February 2003 there were a total of 159 peace officers, including deputies who work in patrol, administration, the helicopter unit, the boating unit, and the civil bureau, with 37 deputies working in investigations for a total of 196 officers. The Sonoma County Sheriff's Department currently maintains a service ratio of approximately 1.01 officers per 1,000 residents, less than the 2.0 officers per 1,000 residents set by the Federal Bureau of Investigation.

## **FIRE PROTECTION**

The study area is served by the Geyserville Fire Protection District. Founded in 1915 as the Geyserville Volunteer Fire Department, the Geyserville Fire Protection District was established in 1996. It is an all-volunteer department that provides fire, medical, and emergency response services to the communities of Geyserville, Alexander Valley, the Dry Creek Valley, the Geysers, and Lake Sonoma. The district operates three fire stations, two Type 1 and three Type 2/3 fire engines, a utility support vehicle, breathing support vehicle, rescue squad vehicle, command vehicle, and water tender vehicle.

## **SOLID WASTE**

The study area is served by the Healdsburg Transfer Station and the Sonoma County Central Landfill, which is located in an agricultural area southwest of Cotati (Sonoma County 2006).

## **B. Regulatory Framework**

Federal and state regulations concerning public resources and utilities are not applicable to this project. In addition, the goals, objectives, and policies of the *Sonoma County General Plan* are not applicable to the project for this issue area.

## **C. Potential Impacts and Mitigation Measures**

### **CRITERIA USED FOR DETERMINING IMPACT SIGNIFICANCE**

According to Appendix G of the State CEQA Guidelines, a project would typically have a significant impact if it would:

- produce an increased need for additional fire protection, police protection, schools, parks, and/or other public facilities or services that would result in new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives;
- produce an increase in water demand that exceeds the available supply or the planned supply;
- require sewer system improvements (including upgrading of collectors) for which there is no planned method of financing and constructing;

- generate solid waste that exceeds the existing or planned capacity of the landfill, or solid waste that does not comply with federal, state, and local statutes related to solid waste; or
- expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

## PROJECT IMPACTS

### *Findings in the ARM Plan PEIR*

Potential impacts on public services and utilities were evaluated in Section 8.14, "Public Services and Utilities," of the PEIR for the aggregate resource management plan (ARM Plan). The ARM Plan PEIR did not identify any impacts relevant to the criteria above for instream mining.

### *Project Impacts*

The project would not require construction of new facilities or the alteration of existing facilities with regard to fire and police protection, schools, parks, or other public facilities. In addition, the project would not generate crime or other incidents requiring police response because the study area would be located within private property with limited public access and the materials stored on the site (e.g., large mechanical equipment, stockpiles) are not particularly susceptible to burglary. Therefore, no impact on governmental facilities would result from implementation of the project and further discussion is not required.

The project would generate sand and gravel that would be used as construction material. It would not generate any solid waste that would require disposal at landfills. Limited trash would be generated from the ten full-time workers on site during the operating season. However, the amount of waste is expected to be minimal and would not exceed the existing or planned capacity of any landfills. As such, impacts would be less than significant.

### **Impact 3.10-1 The project would increase the demand for water during mining operations. However, the increase would not exceed the available supply.**

Syar would use a water truck to apply water for dust control on unpaved haul routes, and a motor grader to periodically rework the road surface and incorporate the wetted soil into the roadbed. The water truck would have a capacity of approximately 4,000 gallons. Application of water for dust control would vary depending on the temperature, but would occur approximately two times per day on a normal summer day. Given the longest estimated unpaved haul route with an area of 7.5 acres (assuming roads of 30 feet wide and 2 miles long), and assuming a volume of 2,000 gallons per acre for dust control, it is estimated that 15,000 gallons of water may be applied twice a day for a total use of 30,000 gallons per day. This watering would only occur during hauling operations, and this amount of water would not be used every mining year - it represents the worst case scenario for watering of haul routes. The water for dust control would be supplied from private irrigations wells.

As discussed in section 3.7, Air Quality, Mitigation Measure 3.7-1 requires additional watering of disturbed areas to reduce PM<sub>10</sub> emissions. All active mining areas, parking areas, staging areas and soil stockpile areas must be watered at least twice daily and more often in windy periods (i.e., 10mph).

This would occur throughout the operating season, or up to 5 months. Because mining will occur at only one bar at a time, watering will be limited to that one bar and the associated active areas.

The largest actively mined bar area is approximately 21 acres, and an approximately additional 3.5 acres would be needed for stockpiles and staging. As a result, the largest estimated area that may be watered would be 24.5 acres. Assuming a volume of 2,000 gallons per acre for dust control, it is estimated that an additional 49,000 gallons of water may be applied twice a day when implementing this mitigation measure for a total use of 98,000 gallons per day. This water would also be supplied from irrigation wells. When combined with Syar's proposed watering of the unpaved haul routes, the worst-case estimate of daily use of water is 128,000 gallons. This amount would not be used every mining year, and the amounts would vary depending on the actual area of the bars being mined, the staging areas, and the length of the relevant haul route. Use of 128,000 gallons per day represents the worst case scenario of watering the largest mining area, and the longest unpaved haul route, in the same mining year.

The historic use of groundwater resources in some areas of the county has resulted in a decline of the groundwater table (Sonoma County 2006). The significance of potential groundwater decline is unknown because of the lack of a countywide groundwater well monitoring network and a historic database. As Described in Section 3.2, "Geomorphology, Hydrology and Water Quality," the California Department of Water Resources (DWR), in cooperation with the Sonoma County Water Agency, conducted a series of studies of groundwater resources in Sonoma County between 1975 and 1982 that are documented in DWR Bulletin 118-4. As indicated by the studies, groundwater levels within the Alexander Groundwater Sub-basin (encompassing the study area within the Alexander Valley) are considered to be relatively stable. However, this information may not represent current conditions due to changes in land use and population over the past 30 years.

The *Sonoma County Aggregate Resources Management Plan, 2004–2005 Annual Monitoring Program Results for Russian River, Sonoma County, California, Final Report* (PRMD 2007) indicated there is no regular groundwater monitoring conducted in the Lower Alexander Valley reach of the Russian River. However, water surface elevations were taken at four locations between River Mile 49.8 and River Mile 47.5, providing an indirect measure of the groundwater table. The data show a relatively small increase of 0.3 foot in water surface elevation from 1997. However, this change does not necessarily reflect an increase in groundwater levels, as surface water level elevations varied between cross sections.

The project would increase water demand during mining activities for the proposed uses. However, the project's use of up to 114,000 gallons per day of water for up to 5 months per year would not result in a significant decline in groundwater supplies, largely because the relevant wells are located adjacent to the Russian River and groundwater would be replenished during the winter months. The project's estimated water demand thus would not exceed the available groundwater supply, and project impacts would be less than significant.

### ***Mitigation Measures***

None

**Impact 3.10-2 The project would not increase wastewater production such that sewer system improvements would be needed.**

The maximum number of full-time staff working at mining sites would be 10 if simultaneous mining operations occur. Staff would use portable sanitation toilets with built-in wash sinks. Sewage from the portable toilets would be cleaned periodically by a contract provider and disposed of appropriately. The wastewater production of 5 full-time workers at the study area during the weekday hours for the 5-month operating season (or 10 full-time workers for up to a 50-day operating season) would be limited, and would not result in the need for any sewage system upgrades to the existing system. As such, potential impacts would be less than significant.

***Mitigation Measures***

None

**Impact 3.10-3 The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.**

Syar would remove vegetation as part of mining activities from the following areas:

- the riparian area north of Alexander Valley Road to facilitate access to Bar SD-1,
- specific locations on the riverbanks to facilitate access to individual bars during mining operations, and
- the gravel bed skimming area (for transplanting to the high bank and upper head of the bars or removal of invasive species such as the giant reed).

Vegetation removal using mechanical equipment during mining activities has the potential to ignite a fire during the dry season, when vegetation is typically dry. However, upon completion of vegetation removal, the risk of fire ignition would be reduced, as mining operations would occur in areas devoid of vegetation. The study area is located within a rural area that is not considered wildlands. The Russian River is lined by riparian vegetation and surrounded primarily by cultivated vineyards. This risk of fire would be low, given the limited time that vegetation clearing would occur and because the area is not within wildlands. As such, the project would result in a less-than-significant impact associated with the risk of loss, injury, or death involving fires.

***Mitigation Measures***

None

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