

3.1.5 Utilities and Emergency Services

Affected Environment

This section describes the existing utilities and emergency services within the proposed project right-of-way and that cross the project area. The information below is summarized from the CIA prepared for the proposed project.

Water Service

Water service within the project area is provided by the Solano County Water Agency (SCWA). The county has four main sources of water: the Solano Project, the North Bay Aqueduct (NBA), groundwater reservoirs, and Sacramento River entitlements. The SCWA stores and distributes water to 29 urban and agricultural water suppliers in northern California, the San Francisco Bay Area, the San Joaquin Valley, the central coast, and southern California.

The project area is also located within the service area of the Solano Irrigation District (SID). The SID delivers recycled water from the SCWA treatment plant to a small number of agricultural customers within Solano County for crop irrigation. The SID also provides water to Fairfield for street landscaping and commercial property landscape irrigation.

Within the city of Fairfield, water is treated at two water treatment plants and distributed by a municipal water distribution system to more than 20,000 service connections via more than 270 miles of water mains.

The most significant utility infrastructure in the project area is the State Department of Water Resources (DWR) water pipeline, the NBA. The NBA runs underground from Barker Slough in the Sacramento–San Joaquin River Delta to Cordelia Forebay, just outside of the city of Vallejo. The pipeline varies in diameter, ranging from 72 inches at Barker Slough to 54 inches at Cordelia Forebay. A portion of the NBA runs just north of and parallel to I-80 between Abernathy Road and Suisun Creek.

Wastewater Service

A portion of the project area is located within the Fairfield-Suisun Sewer District (FSSD) service area. The FSSD performs wastewater collection, treatment, and water recycling services for all areas within the boundaries of the cities of Fairfield and Suisun City. FSSD facilities include a wastewater treatment plant, 12 wastewater pump stations, force mains, trunk main collection facilities, and 70 miles of sewer networked throughout Fairfield and Suisun City.

The FSSD wastewater treatment plant occupies a 150-acre parcel off Chadbourne Road, southwest of the I-80/SR 12 interchange in Fairfield. The wastewater treatment plant currently has a capacity of 17.5 million gallons per day (mgd) of average dry weather wastewater flow and a capacity of 34.8 mgd during wet weather. On average, the wastewater plant treats 16 mgd. Plans are currently under development to expand the wastewater treatment plant, which would result in an ultimate capacity of 25 mgd under dry weather conditions.

The majority of treated effluent produced by the wastewater treatment plant is discharged to the Boynton Slough. Approximately 10% of the treated effluent is recycled and used for agricultural irrigation or distributed in the city of Fairfield for street landscaping and commercial property landscape irrigation.

The portions of the project area located in unincorporated Solano County and outside the boundaries of the FSSD service area generally contain no wastewater infrastructure. Wastewater needs in these locations are met by septic systems installed by individual land owners.

Electricity and Natural Gas

Solano County is provided with electric and natural gas service by PG&E. PG&E's service area covers most of central and northern California, and the company maintains 123,054 circuit miles of electrical distribution lines, 18,610 circuit miles of interconnected transmission lines, 40,123 miles of natural gas distribution pipelines, and 6,136 miles of natural gas transportation pipelines. PG&E currently maintains natural gas pipelines and electrical transmission lines throughout Solano County, adjacent to the I-80 corridor.

PG&E facilities in the area include a number of natural gas and power lines. Four 115 kV power lines cross the project area, the Vaca-Dixon-Ignacio Line 1 and Line 2, the Suisun Tap 115-kV line and the Vaca-Suisun-Jameson tower line. PG&E natural gas lines are located within the project area, primarily in the vicinity of the I-80/Green Valley Road and SR 12E/Pennsylvania Avenue interchanges.

Telecommunications Systems

Telephone communication service for Solano County is provided by AT&T, one of the country's largest telecommunications providers. AT&T offers local phone service, long-distance phone service, and high-speed internet service. Major telephone transmission lines traverse Solano County, primarily following road rights-of-way and rail lines. Both overhead and underground lines and conduit carrying telecommunications lines are located within the project area.

Schools

There is one elementary school and one high school located near the project area. Nelda Mundy Elementary School is located at 570 Vintage Valley Drive, north of I-80 and the project area. Rodriguez High School is located at 5000 Red Top Road, just west of I-680 within the project area. The former Green Valley Middle School is located at 3630 Ritchie Road in Fairfield, south of the I-80 and the project area. The school was relocated in 2004 to an area north of I-80 and the former school site is currently vacant.

Solano Community College is located just north of the project area at 4000 Suisun Valley Road. In addition to Solano Community College, other institutions of higher learning in the project area are the University of Phoenix at 5253 Business Center Drive and Chapman University at 4820 Business Center Drive.

Police and Fire

The California Highway Patrol (CHP) has jurisdiction over I-80, I-680, and SR 12 for matters involving both traffic and emergency services. The Solano County CHP office is located at 3050 Travis Boulevard in Fairfield.

Those portions of the project area located in unincorporated Solano County are under the jurisdiction of the Solano County Sheriff. The Solano County Sheriff's Department office is located at 530 Union Avenue in Fairfield.

Those portions of the project area within Fairfield city limits are under the jurisdiction of the Fairfield Police Department. The Fairfield Police Department is located at 1000 Webster Street in Fairfield City Hall. The Suisun City Police Department provides service to those areas located within Suisun City. The police department is located at 701 Civic Center Boulevard in downtown Suisun City.

The portion of the project area located in unincorporated Solano County is served by the Suisun Fire Protection District (SFPD). SFPD headquarters are located at 445 Jackson Street in Fairfield and serves 1,136 properties within a 136-square-mile area. The SFPD currently employs one fire chief, two fire captains, and 45 volunteer firefighters.

Those portions of the project area located within the city of Fairfield fall under the jurisdiction of the Fairfield Fire Department. The Fairfield Fire Department serves approximately 105,000 citizens with six fire stations and 68 firefighters.

In the western portion of the project area, the Cordelia Fire Protection District (CFPD) provides fire and emergency medical services to areas of unincorporated Solano County, including the communities of Green Valley, Rockville, Cordelia, and the Lower Suisun Valley. The CFPD provides service to approximately 5,000 residents within a service area of 56 square miles and currently employs four full-time employees, 12 extra-help firefighters, 13 volunteer firefighters, and between 21 and 26 resident firefighters.

Within Suisun City, fire and emergency services are provided by the Suisun City Fire Department, located at 621 Pintail Drive. The department employs a full-time fire chief and two full-time fire captains. The remainder of the department's staff is volunteer and includes a deputy fire chief, two battalion chiefs, six fire captains, three lieutenants, and approximately 22 volunteer firefighters.

Environmental Consequences

Potential Effect to Utilities

As part of both alternatives, utilities within the project area will be relocated, realigned, or extended as necessary to accommodate project construction and operation. Utilities that will be affected include water, electrical, gas, cable/fiber, and telephone lines. Water lines include those owned by the cities of Fairfield, Vallejo, and Benicia; the California Department of Water Resources; and the Suisun-Solano Water Authority. Irrigation and non-potable water and agricultural drains owned by the Solano Irrigation District are located within the project area. These water facilities, as well as sewer facilities owned by the cities of Fairfield and Suisun City and by the Fairfield-Suisun Sewer District, would be realigned or extended, as necessary.

Locations of PG&E-owned electrical and gas lines within the project area for each alternative are addressed specifically in the project description in Chapter 2. The precise field location of

high risk utilities will be identified during final design in accordance with the Department's procedures.

The relocation, extension, or realignment of utilities under all build alternatives would result in temporary construction impacts and may result in minor interruption of service. To minimize this potential, the Department will enter into agreements with the utility providers, including PG&E, AT&T, and the cities of Fairfield, Benicia, and Vallejo.

Under the No-Build Alternative, no construction would take place and no utilities would be relocated. Therefore, there would be no potential to affect utilities.

Potential Effects on Police, Fire, and Emergency Service Providers during Construction

Potential short-term impacts on police, fire, and emergency service providers may result from construction-related activities under all build alternatives. Potential impacts include increased emergency response times within the project area caused by congestion during project construction and temporary lane closures. Lane closures are expected to be of short duration and to occur in off-peak hours. The effect is expected to be minimal. In addition, as part of its standard procedure, the Department will prepare a Transportation Management Plan, discussed below.

Alternative C and Alternative C, Phase 1 would displace the Fairfield Fire Department station located at 473 Edison Court in the west end of the project area. This fire station is located in an industrial building and serves the Cordelia area. The fire station at Edison Court was opened as a temporary fire station in a warehouse building. The Fairfield Fire Department Strategic Plan (2007) calls for the construction of two permanent fire stations in the Cordelia area to replace the temporary station located on Edison Court.¹ As discussed in Chapter 3.1.4, page 3.1.4-11, there is sufficient commercial and industrial land available to accommodate the displaced uses including the fire station and the avoidance, minimization and mitigation measures described therein would also apply to the Fairfield Fire Department fire station.

Under the No-Build Alternative, no construction would occur and therefore no effect to emergency services would occur as a result of construction.

Avoidance, Minimization, and/or Mitigation Measures

Minimize Disruption of Utilities Services

The Department will enter into agreements with providers of utilities located within the project area that would be relocated, realigned, or extended as part of project construction or operation. The construction efforts will be coordinated to minimize interruption of service and to continue operation after the proposed project is complete.

¹ Fairfield Fire Department Strategic Plan, 2007;
<http://www.ci.fairfield.ca.us/civica/filebank/blobload.asp?BlobID=3820>

Prepare Transportation Management Plan (TMP)

Before initiating construction, a TMP will be prepared and provided to all emergency service providers in the area. The TMP will serve to notify all emergency service providers in the project area of the project construction schedule and the time and location of lane closures. The TMP will identify anticipated dates and hours of construction, as well as anticipated limits on access. Notice will be provided at least one week before construction begins. To the extent possible, emergency vehicles will be allowed through roadway segments temporarily closed for construction purposes.

