

#### **4.13 UTILITIES AND SERVICE SYSTEMS**

The information below is based on the Community Impact Assessment Report (CIA), January 2004, which is available for public review at the Solano Transportation Authority (STA), One Harbor Center, Suite 130, Suisun City, CA 94585 during regular business hours.

##### **EXISTING CONDITIONS**

The North Connector Project (Project) site and vicinity contains various existing utility infrastructure typical of a suburban residential area, including water, wastewater, electricity, and natural gas.

##### **Water**

Water service is provided to the Project area by the Solano County Water Authority (SCWA). The SCWA obtains water from the Solano Project and the State Water Project. The State Water Project is a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping stations. The main purpose of the SCWA is to store and distribute 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.

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

The Project 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 (County) for crop irrigation. The SID also provides water to the City of Fairfield for street landscaping and commercial property landscape irrigation.

The most significant utility infrastructure in the Project area is a State Department of Water Resources (DWR) water pipeline, known as the North Bay Aqueduct (NBA). The NBA pipeline runs underground from Barker Slough in the Sacramento River Delta to Cordelia Forebay, located in the Green Valley area of Fairfield. The pipeline varies in diameter, ranging from 72 inches at Barker Slough to 54 inches at Cordelia Forebay. A portion of the NBA runs within the Project area just north of and parallel to Interstate 80 (I-80) between Abernathy Road and Suisun Creek.

##### **Wastewater**

The majority 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 and Travis Air Force Base. FSSD facilities include a wastewater treatment plant, 12 wastewater pump stations, force mains, trunk main collection facilities, and 70 miles of sewer network throughout Fairfield and Suisun City.

The FSSD wastewater treatment plant occupies a 150-acre parcel off Chadbourne Road, southwest of the I-80/SR12 interchange in the City. 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. This 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 percent of the treated effluent is recycled and used for agricultural irrigation or dispensed to the City for street landscaping and commercial property landscape irrigation.

Those areas of the Project 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**

Electric and natural gas service is provided to the County by Pacific Gas and Electric Company (PG&E). PG&E is one of the largest natural gas and electric utilities in the United States. PG&E's service area covers most of central and northern California and the company maintains 123,054 circuit miles of electric distribution lines, 18,610 circuit miles of interconnected transmission lines, 40,123 miles of natural gas distribution pipelines, and 6,136 miles of transportation pipelines. PG&E currently serves approximately five million customers throughout its service area. PG&E also currently maintains natural gas pipelines and electrical transmission lines throughout the County and in the vicinity of the I-80 corridor.

### **REGULATORY SETTING**

#### Integrated Waste Management Act of 1989 (AB939)

Assembly Bill 939 (AB939) requires all cities and counties in California to divert 50 percent of their waste stream from conventional landfills to alternative means of disposal by 2000. Cities and counties are also required to prepare Source Reduction and Recycling Elements (SRRE). The SRRE requires that counties demonstrate how they would achieve the mandated goals through the implementation of diversion programs.

#### Urban Water Management Planning Act

The Urban Water Management Planning Act, Cal. Water Code § 10610 et seq. (UWMP), requires every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually, should make every effort to ensure the appropriate level of reliability in water service is sufficient to meet the needs of its customers during normal, dry, and multiple dry years. In addition, The UWMP requires municipalities to develop Urban Water Management Plans, to govern local and regional water supplies.

## **UTILITIES AND SERVICE SYSTEMS IMPACTS ANALYSIS**

### **Significance Criteria**

#### **California Environmental Quality Act (CEQA)**

Appendix G of the CEQA Guidelines identifies environmental issues to be considered when determining whether the Project could have a significant effect on the environment. STA has applied these standards of significance for evaluating impacts of the Project.

The Project would have a significant impact if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB),
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects,
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects,
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed,
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments,
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, or
- Comply with federal, state, and local statutes and regulations related to solid waste.

#### **Issues Not Discussed Further**

*Exceed wastewater treatment requirements of the applicable RWQCB or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

The Project involves construction of a new roadway and does not include any residential or commercial development. Operation of the Project would not generate wastewater or necessitate wastewater treatment. Wastewater treatment is discussed in more detail in Section 4.9, Hydrology and Water Quality. Furthermore, the Project would not require the construction or expansion of new water or wastewater treatment facilities. Water demand would be limited to irrigation of landscaped areas and would be administered by Solano County. Therefore, no wastewater utility impacts are anticipated.

*Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

The Project would involve construction of new facilities to maintain proper roadway drainage treatment of storm water run off before being discharged to local streams pursuant to the requirements of the San Francisco Bay RWQCB. For further discussion

of these requirements, see section 4.9, Hydrology and Water Quality. No impacts related to stormwater drainage facilities are anticipated.

*Have sufficient water supplies available to serve the project from existing entitlements and resources.*

The Project consists of a new roadway and would not require the ongoing use of water once constructed. While the roadway would cross existing utility lines, including water lines, the Project would relocate these utilities or protect them in place. During construction water would be used to control dust, however the amount of water would be relatively small and be distributed on the site via water trucks. Landscaping to be installed with the Project would also require water during plant establishment. However, the types of plants to be used would be low maintenance, shrubs, trees, and grasses that would not require ongoing irrigation. Therefore, no impacts related to water demand are anticipated.

*Wastewater treatment provider's capacity to serve the project's projected demand in addition to the provider's existing commitments.*

The Project consists of a new roadway which would not generate wastewater requiring treatment during either construction or operation.

## **ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

### **Less than Significant Impacts**

*Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.*

The Project involves construction of a new roadway. Compared to other types of land uses (e.g., residential or commercial development) the Project would not generate a substantial amount of solid waste. The Project would require demolition of one building along Russell Road and removal of the existing bicycle path and bridge associated with the Fairfield Linear Park. Solid waste generated by construction would be recycled to the extent feasible as required under California law.

Any solid waste generated by the Project during the construction-period would be handled by the Potrero Hills Landfill.<sup>1</sup> The Landfill has sufficient capacity to handle construction-period solid waste produced by the Project. Solid waste generated during the operation-period of the Project would be negligible. Disposal of solid waste resulting from the construction period of the Project would be handled in compliance with applicable federal, state, and local statutes and regulations. Therefore, need for solid waste services are anticipated to be minor, and impacts related to solid waste are considered less than significant.

### **Significant and Potentially Significant Impacts and Mitigation Measures**

No significant or potentially significant impacts related to utilities and service systems were identified for this Project.

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<sup>1</sup> Under current conditions, the Landfill has an estimated capacity of 21,500,000 cubic yards (c.y.) and can accept up to 6,662 c.y. of solid waste per day. As of 2001, the facility had a remaining capacity of 14.8 million c.y. The facility accepts municipal solid waste, industrial waste, construction waste, ash, tires and sludge.