
4.16 UTILITIES AND SERVICE SYSTEMS

This section evaluates the effects of the proposed project with regard to utilities and service systems by identifying anticipated demand and existing and planned utility availability. For the purposes of this EIR, services and utilities include water supply, solid waste collection and disposal, wastewater conveyance and treatment, storm water drainage facilities, and energy (electricity and natural gas).

The project's impacts to utilities and service systems would be less than significant. No mitigation is necessary.

4.16.1 ENVIRONMENTAL SETTING

Residences currently located on the project site are served by well water, on an individual basis. Wastewater is currently handled by individual leachlines. Electrical service is provided by Pacific Gas and Electric; natural gas service is not currently available on the site. Solid waste collection and disposal service for residences in the project vicinity is provided by Waste Management, Inc. The nearest landfill site is the Anderson Landfill, located at 18703 Cambridge Road in Anderson.

There are no storm water drainage facilities on the site. Natural storm water drainage consists of the following: The Anderson-Cottonwood Irrigation District (ACID) canal flows along and through the southern property boundary. Schmeider Gulch and several unnamed creeks flow generally north to south at and near the site; all are tributary to Cottonwood Creek. Cottonwood Creek, a major drainage, flows from west to east about one-half to one mile south of the project site; Cottonwood Creek is tributary to the Sacramento River.

The project site includes ±58 acres of transmission line corridor rights-of-way, held by the Western Area Power Administration and PG&E (Figure 3.6: Transmission Corridor Rights-of-Way). These entities have certain restrictions and guidelines associated with work/use within their rights-of-way. Restrictions and guidelines are typically related to the proximity of construction equipment and activities to conductors, storage of vehicles and equipment, burning of vegetation, blasting, drainage, and access obstructions and/or blockages. In addition, these entities maintain the right to manage vegetation within their rights-of-way.

REGULATORY SETTING

An overview of existing and proposed *Shasta County General Plan* land use classifications and *Shasta County Zoning Plan* designations for the project site is provided in Section 3.4: Panorama Planned Development Regulatory Setting. There are no *Shasta County General Plan* Objectives and/or Policies that are applicable to the project site with regard to utilities and service systems.

4.16.2 THRESHOLDS OF SIGNIFICANCE

Criteria for determining the significance of impacts related to utilities and service systems were based on the Environmental Checklist Form in Appendix G of the State CEQA Guidelines (Cal. Code Regs., Title 14, Section 15000 et seq.). An impact related to utilities and service systems was considered significant if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- 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 insufficient water supplies available to serve the project from existing entitlements and resources, requiring or resulting in new or expanded entitlements.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Fail to comply with federal, state, and local statutes and regulations related to solid waste.

4.16.3 ENVIRONMENTAL IMPACTS AND MITIGATION

Impact UTI-4.16-1 Exceed Wastewater Treatment Requirements (*Less-than-Significant Impact*)

Wastewater treatment requirements of the Regional Water Quality Control Board would not be exceeded by the project (PACE Civil, Inc. August 2006; PACE Civil, Inc. October 2006; and PACE Civil, Inc. 2007) (all referenced information is provided on the Appendices Compact Disc). Therefore, this would be a less-than-significant impact.

No mitigation measures are necessary for the above less-than-significant impact.

Impact UTI-4.16-2 Construction of New Water or Wastewater Treatment Facilities (*Less-than-Significant Impact*)

The project would include improvements to the Cottonwood Water District system, including construction of a one million gallon tank on County property off of Vantage Drive, as well as installation of a water line in the Vantage Drive right-of-way from the new tank to the northwestern corner of the project site. A new well, in conjunction with a water system valve, would be installed near the corner of Trefoil Lane and Balls Ferry

Road. The valve is necessary to divert flows from the new well to the proposed tank through an existing 8-inch main leading from the Main Pressure Zone to the Vantage Drive Pressure Zone. A new booster pump station would also be installed on Vantage Drive in order to increase pressures from the proposed water tank to the Vantage Drive Pressure Zone (See Figure 3.5: Proposed Annexation Boundary and Off-Site Utilities Improvements). The new storage tank would be sized to meet more than the needs of the Panorama Planned Development (PACE Engineering, 2009)⁶, and would be dedicated to the Cottonwood Water District when facility construction is completed. The District would be responsible for on-going operation and maintenance of the facilities.

As shown in Figure 4.16.1, the project proposal includes two options for collection of wastewater generated by the project. Under one option, all collection lines other than the force main to the wastewater treatment plant site would be constructed within the project site boundary. Due to slope constraints, this option would necessitate construction of two wastewater lift stations. As an alternative, a gravity flow line could be constructed across the PG&E parcel to the south of the subdivision; this would eliminate the need for one of the two proposed pump stations and approximately 1,350 feet of force main; the need would remain for one pump station and a force main leading to the treatment plant site. The benefit of the latter option is that it would eliminate the maintenance requirements associated with the pump station. Two possible routes for the off-site gravity-flow line have been addressed in this EIR; neither would result in significant environmental impacts.

The project would also include the expansion of off-site County Service Area No. 17 wastewater collection and treatment facilities. Improvements would include construction of a 1.5-million-gallon emergency retention basin and return pump station at the existing wastewater treatment plant site off of Live Oak Road. A new wastewater line would run from the project site to the treatment plant, generally within the Balls Ferry Road right-of-way. Upon completion of construction, the new wastewater facilities would be dedicated to County Service Area No. 17, which would be responsible for their on-going operation and maintenance. The facilities would be sized to meet the needs of the Panorama Planned Development only (PACE Civil, Inc., 2008a). Because sufficient water supply and wastewater treatment capacity would be provided, the effect of the proposed project on water and wastewater services would be less than significant.

No mitigation measures are necessary for the above less-than-significant impact.

⁶ The *Required Water System Improvements to Provide Service to the Proposed Locust Road Development* (PACE Civil, Inc., 2006) addressed a 300-unit subdivision, rather than the currently proposed 430-unit Panorama Planned Development. The report included Maximum Daily Demand (MDD) usage estimates for 300 new units, plus an existing 42 Household Equivalents (HE) currently serviced by the Cottonwood Water District's Vantage Drive Pressure Zone. MDD in the Cottonwood Water District is estimated at 1,700 gallons per HE. The MDD for the proposed project plus existing usage (430 HE plus 42 HE) would be 802,400 gallons. Water storage requirements have been increased since preparation of the 2006 report; the current requirement is that an amount equal to the MDD be provided for storage (PACE Engineering, 2009). This would provide for flow equalization, emergency storage, and fire flows. The proposed one-million-gallon storage volume exceeds current requirements.

Impact UTI-4.16-3 Construction of New Storm Water Drainage Facilities (*Less-than-Significant Impact*)

The project would introduce impervious cover to a currently undeveloped area and would therefore alter long-term drainage and groundwater infiltration patterns in the immediate project vicinity. The amount of impervious cover would be approximately 42 acres. To protect water quality and manage storm water runoff in the long-term, the applicant proposes to route all storm water to detention basins via culverts and natural, open channels before discharging off site. The purpose of the detention basins is to retain the runoff from storms so that the post-development storm water flow is no greater than the pre-development storm water flow.

A storm water storage design feasibility analysis was prepared for the project (Sharrah Dunlap Sawyer, Inc., August 2007) and subsequently peer-reviewed; results of the peer-review are included in the *Stormwater Runoff Mitigation, Panorama Point, Cottonwood, Shasta County, California* (Lawrence & Associates, 2008b). Both the Sharrah Dunlap Sawyer and Lawrence & Associates reports determined that storm water runoff mitigation is achievable on site to prevent increases in post-development peak runoff from all phases of development, using detention ponds with no additional mitigation or off-site improvements required.

No mitigation measures are necessary for the above less-than-significant impact.

Impact UTI-4.16-4 Sufficient Water Supplies Available to Serve the Project (*Less-than-Significant Impact*)

As documented in Section 4.8: Hydrology and Water Quality, a sufficient water supply is available to serve the proposed project.

No mitigation measures are necessary for the above less-than-significant impact.

Impact UTI-4.16-5 Wastewater Treatment Provider has Adequate Capacity (*Less-than-Significant Impact*)

As documented under Impact UTI-4.16.2 above, with implementation of the proposed project, sufficient wastewater treatment capacity would be available to serve the proposed project.

No mitigation measures are necessary for the above less-than-significant impact.

Impact UTI-4.16-6 Served By a Landfill with Sufficient Permitted Capacity (*Less-than-Significant Impact*)

Solid waste collection and disposal service for residences in the project vicinity is provided by Waste Management, Inc, a private solid waste disposal facility. The nearest Waste Management landfill site is the Anderson Landfill, located at 18703 Cambridge Road in Anderson. In addition, Shasta County has stated that it has sufficient capacity at the West Central Landfill, located at 14095 Clear Creek Road, to

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serve County residents until 2023 (Shasta County Department of Resource Management, 2008). The County also stated that it will expand its landfill capacity, as needed, to meet the needs of County residents. Project implementation would have a less-than-significant impact with regard to landfill capacity.

No mitigation measures are necessary for the above less-than-significant impact.

Impact UTI-4.16-7 Compliance with Federal, State, and Local Statutes and Regulations Related to Solid Waste (*Less-than-Significant Impact*)

The project would comply with all applicable federal, state, and local regulations related to solid waste. Therefore, this would be a less-than-significant impact.

No mitigation measures are necessary for the above less-than-significant impact.

4.16.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The project's impacts to utilities and service systems would be less than significant. No mitigation is necessary.

End of Section.

