

18 UTILITIES AND SERVICE SYSTEMS

This section describes the existing utilities setting of the project site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Placer County Government Center Master Plan Update Project (PCGC Master Plan Update or proposed project). This chapter also evaluates impacts associated with implementation of the first two projects under the proposed PCGC Master Plan Update—the Health and Human Services building and the Multifamily Residential project located at 1st Street and B Avenue.

Comment letters received in response to the Notice of Preparation for this EIR that address utilities and service systems include discussion regarding whether potable water supply for the PCGC campus would be provided from the Placer County Water Agency (PCWA) or Nevada Irrigation District (NID). The Notice of Preparation and comments received in response to it are provided in Appendix A.

18.1 EXISTING CONDITIONS

Wastewater

The Placer County Sewer Maintenance District #1 (SMD) currently provides wastewater collection services to the Placer County Government Center. SMD also provides service to all surrounding developed parcels (County of Placer 2018a).

The sewer facilities on the PCGC site are within the Sewer Maintenance District 1 (SMD 1). The collection system in this area consists of two main sewer trunks, the DeWitt trunk and the Highway 49 trunk. These trunks convey flows from the southern portions of the SMD 1 service area to the Mid-Western Placer Regional Sewer Pipeline, which replaced the SMD 1 Wastewater Treatment Plant by sending flows to the City of Lincoln’s Wastewater Treatment and Reclamation Facility. The majority of the sewer catchment areas on the PCGC property flow into the DeWitt trunk, but the eastern portion of the PCGC property flows into the Highway 49 trunk (Cartwright 2017). During Peak Wet Weather Flow conditions, where a 10-year storm event is applied to account for the potential risk of surcharge in the sewer system, it has been determined that portions of the Dewitt Trunk are surcharged to a level that exceeds the County’s minimum criteria and have insufficient capacity (Stantec 2016).

Within the PCGC property, much of the underground wastewater pipelines are quite old, having been constructed to service the hospital facility in the 1940s. Existing pipelines include areas where vintage iron (cast and ductile) pipe material remains, as well as newer pipelines in areas where redevelopment of the site has occurred (County of Placer 2018b).

Water Supply

The PCGC campus lies within the service area boundaries of the two principal water agencies in the area—PCWA and NID. Water service is currently provided to the PCGC campus by PCWA. There is a 16-inch NID water supply pipeline under Willow Creek Drive that extends into the PCGC property and heads south down 1st Street to Atwood Road. There are emergency interties between the PCWA and NID systems within the PCGC campus. The total water supply sources available to both PCWA and NID for various water year types are based on supply and demand comparisons provided in their respective Urban Water Management Plans (UWMP). The UWMPs provide forecasts and plans for the next 25 years, in five-year increments, for a normal water year, a single-dry water year, and multiple dry water years.

Placer County Water Agency

PCWA supplies water to approximately 150,000 people in Placer County via residential connections, and serves about 35,000 agricultural, municipal, and industrial connections. While a small amount of groundwater is used to supply PCWA’s customers, the primary water sources used by the Agency are the Yuba and Bear Rivers, which flow from Lake Spaulding. PCWA purchases water from this system from Pacific Gas and Electric (PG&E). Additional sources include the American River and the U.S. Bureau of Reclamation Central Valley Project.

PCWA has divided the area within its service boundaries into five separate service zones. The PCGC property is included in the largest of these zones, Zone 1. This zone, also known as the Channel Hill Pressure Zone, covers the area from the community of Bowman to the northern boundary of the City of Roseville. There is also a detached portion of Zone 1 south of the City of Roseville. The PCGC property is located in “upper Zone 1,” which includes the PCWA Bowman and Auburn Water Treatment Plants (WTPs). These plants obtain their water from PG&E’s Wise/South Canal and PCWA’s Boardman Canal and supply treated water to the communities of Bowman, Auburn, and Newcastle. Water supply for the PCGC property is provided via the Bowman WTP which treats 7 million gallons per day (mgd) and has a storage capacity of 11 million gallons (County of Placer 2018b).

The PCWA UWMP evaluated projected water supplies to Zone 1 in concert with supplies to Zone 5 as both of these zones have the same water supply sources. Projected water supplies available to Zones 1 and 5 in 2020 were expected to be 56,449 ac-ft above demands. Projections for 2025 show an excess supply of 71,350 ac-ft. By 2030, projections show an increase in demand, resulting in a reduced excess of supply. However, excess supply of 60,846 ac-ft is still projected (PCWA 2016). Table 18-1 displays projected water supply and demands for Zones 1 and 5 through 2040.

Table 18-1
Zones 1, 3 and 5 Projected Water Supply and Demand Comparison

	Projected Annual Amounts of Water (acre-feet)				
	2020	2025	2030	2035	2040
<i>Supply</i>					
PG&E	110,400	110,400	110,400	110,400	110,400
Middle Fork American River	120,000	120,000	120,000	120,000	120,000
Central Valley Project	0	32,000	32,000	32,000	32,000
Pre 1914 Appropriations	3,400	3,400	3,400	3,400	3,400
Recycled water	0	2,500	5,000	7,000	8,000
<i>Subtotals</i>	<i>233,800</i>	<i>268,300</i>	<i>270,800</i>	<i>272,800</i>	<i>273,800</i>
<i>Demand</i>					
Demand	177,351	196,950	209,954	224,056	246,250
Difference: Surplus or (Deficit)	56,449	71,350	60,846	48,744	27,550

Source: PCWA 2016

Nevada Irrigation District

NID supplies treated and raw (untreated) water for use in agricultural and urban uses, and to support environmental requirements (i.e., minimum pool levels and fish releases). Agricultural water use accounts for nearly 90 percent of the total water supply within NID’s system. Treated water is supplied for all urban water uses, including commercial, residential, and municipal. Municipal users include the cities of Grass Valley and Nevada City, which receive bulk raw water from NID.

NID relies on surface water for the provision of both treated and raw water. Water sources are separated into four categories: watershed runoff, carryover storage in surface reservoirs, contract purchases, and recycled water.

Over the last 30 years runoff has fluctuated from less than 77,378 ac-ft in a dry year (2015) to over 467,000 ac-ft in wet years (1995). Average runoff from the Upper Division watershed, including the watershed area feeding Scotts Flat Reservoir, is approximately 221,500 ac-ft (NID 2016).

The second largest component of NID’s supply is carryover storage, which is the volume of water left in storage reservoirs at the end of the irrigation season, usually at the end of

September. NID’s main storage reservoirs can contain a maximum of 279,985 acre feet of water and NID holds carryover storage at a level not less than 78,000 ac-ft. (NID 2016). This includes a total 30,900 acre feet of minimum pool requirements reserved for environmental needs and dead storage volume (includes siltation estimates) that cannot be counted upon as a supply resulting in an available storage capacity of 201,985 acre feet.

An existing raw water irrigation canal exists within the campus and runs from south to north along the eastern side of 1st Street. The surface canal carries raw water and exits the campus at Bell Road to the north where it continues to flow towards and eventually into the Combie Ophir III Canal. This system is owned and operated by the NID and appears to have been in use since the early 1940s for farming and irrigation purposes. Although there appears to be a metered gate provided to the County for prescriptive rights to use along the north side of the campus, the County does not currently utilize raw water onsite.

NID and PG&E have a long-standing agreement making 54,361 acre feet of water available to NID through contract water purchases during a year of normal or above normal precipitation. NID does not utilize groundwater as an existing or planned source of water supply due to limited groundwater availability (NID 2016).

NID maintains seven water treatment plants with an aggregate capacity of 19.73 mgd. (water.com/water-service/treated-water/). The NID North Auburn plant, which serves the project area, has a capacity of 6.0 mgd. Increases in urban water connections are expected to occur at 1.6% annually, which has been the growth rate for NID urban water connections over the last ten years. NID is planning various expansions to the existing water treatment plants to keep pace with increased demands. Proposed plant expansions would result in a 22 mgd increase in treated water supply by 2020.

Currently, NID total water supply far exceeds the demand. Overall (treated and raw) water demand was projected to be 178,919 ac-ft, while overall water supply was projected to be 360,800 acre feet in 2020. Projected supply was more than twice the projected demand. During past dry water years (drought conditions), NID’s supply has been reduced by approximately 15%. This reduction in supply has no significant effect on availability of water to NID customers, as the overall supply would still exceed the demand by approximately 182,000 acre feet (NID 2016). Projected supply and demand through the year 2040 is shown in Table 18-2.

**Table 18-2
NID Projected Water Supply and Demand (acre-feet)**

Totals	2020	2025	2030	2035	2040
Supply	360,800	360,800	360,800	360,800	360,800
Demand	178,919	187,960	196,076	203,080	209,521
Excess supply	181,881	172,840	164,724	157,720	151,279

Source: NID 2016

NID’s water supplies for treated water provision in the project area include Rollins Reservoir via the PG&E Bear River Canal/Rock Creek Reservoir and Combie Reservoir via the Combie/Ophir Canal System. The water treatment facility serving this area is located in North Auburn. The design capacity of the plant is 6 mgd and average flows are 2.5 mgd. The North Auburn Water Treatment Plant is a conventional water treatment plant, consisting of pre-chlorination, coagulation, upflow clarification, gravity filtration, and post-chlorination (NID 2016)

Existing Service

PCWA currently supplies water to the majority of the PCGC property through a 12-inch pipeline that travels between a pressure-reducing station on Bell Road to the location of the old DeWitt water treatment plant, which is adjacent to the eastern boundary of the project area. All water supplied to the PCGC passes through a single meter at this location. From the meter, water flows through the PCGC water system, which is laid out in a grid and consists of 12-inch and 10-inch mainlines and a series of smaller pipelines. Some of the existing domestic and irrigation water distribution pipelines include areas where vintage iron (cast and ductile, dating back to the original DeWitt General Hospital constructed in 1943) pipe material remain, as well as some areas where copper lines for domestic water remain (County of Placer 2018b).

Portions of the PCGC property receive water from NID. This includes the Community Development Resources Center (automatic fire suppression system water only) located in the northwest corner of the project site, east of Richardson Drive. In addition, there is a connection between the PCGC water system and NID’s mainline in Atwood Road at 1st Street. This connection is generally closed but can be opened so that NID can supply water to the PCGC property during an emergency in which PCWA is unable to provide an ample supply of treated water.

The estimated daily water supply demands at the PCGC campus, not including The Home Depot, are approximately 900 gallons per minute (gpm), based on the total water demands at the single metered connection to PCWA as well as metered water supply to the new Animal Services Center and demands for the Juvenile Detention Center and County Jail calculated based on a

demand factor for the number of beds occupied at each facility (County of Placer 2018b). In addition, the adequacy of water supply infrastructure is critical to providing sufficient water supply for fire fighting. The necessary fire flow at a given hydrant location varies based on the amount of building space in the vicinity, as well as building materials and construction standards. It is estimated that fire flow demand could range as high as 4,000 gallons per minute (gpm) in some locations within the project site. Given the current configuration of the PCWA distribution system, the existing 12-inch waterline that provides water supply to the PCGC property has a present capacity ranging between approximately 1,000 gpm and 1,500 gpm, which is well short of the 4,000 gpm fire flow needed for larger facilities. The dead end line and limited supply availability for fire is a substantial constraint to site development (County of Placer 2018a). When the NID emergency intertie connections are open, they provide additional supply for fire suppression to boost system capacity to flows ranging from 2,000 gpm to over 4,000 gpm but the presence of outdated and dilapidated 1940s era water lines located throughout the heart of the PCGC property is likely causing additional supply losses through leakage that is presently difficult to assess (County of Placer 2018b).

The service boundaries for PCWA and NID overlap in the area containing the PCGC Master Plan Update area and surrounding parcels. In order to consolidate service boundaries and eliminate the overlap, NID and PCWA have been evaluating the potential for reconfiguring those service boundaries. Previous considerations included switching the water provider for the entire PCGC property from PCWA to NID. The service adjustments currently under consideration would transfer service for only the eastern portion of the PCGC property from PCWA to NID. As the PCGC property is located within service boundaries for both providers, this transfer would not require annexation. The County would be required to pay hookup costs and capacity fees.

Electric and Natural Gas

PG&E provides both electricity and natural gas to the PCGC property. The nearest PG&E substation is the Rock Creek station, located northeast of the intersection at State Route 49 and Bell Road. Electricity is delivered to the PCGC property from this substation through both overhead and underground power lines. In addition, natural gas pipelines exist in both Bell and Atwood Roads. The PCGC property's primary natural gas feed comes from the line in Atwood Road, with a minor amount of natural gas reaching the PCGC property via Bell Road (County of Placer 2003). Natural gas primarily supplies power for water heating, space heating, and cooking for the residential and office land uses throughout the PCGC property. Natural gas is also used as fuel for some public buses, which can refuel at the Placer County Refueling Station in the PCGC property.

The PCGC property has various standby generators for backup power in case of an emergency, but none of these are considered to have “co-generation” capability. There are six stationary generators and several “trailer mount” generator units available at the PCGC property. The stationary generators are each dedicated to a specific building and will provide electricity to those buildings if PG&E power is lost. The generators contain an automatic transfer switch that will trigger the generator to power the building at the moment that PG&E power is lost. Stationary generators are located at the Finance Administration Building, the Main Jail, the Jail Kitchen, the Juvenile Hall, and the Children’s Receiving Home. The sixth is located at Building 7, which is the former location of the County’s 911 call-center. This facility has been relocated. The generator at this building is not necessary and could be relocated (County of Placer 2003). In addition, the County has several trailer mount units which can be transported and installed when and where emergency power is needed.

The emergency power generators are regularly maintained by both the Department of Facility Services and an outside contractor. Electricians at the Department of Facility Services perform regular tests to ensure that the generators are running properly and to check fluid levels. The outside contractor performs the more intensive maintenance tasks, including replacing worn belts and other parts (County of Placer 2003).

California experienced an energy supply shortage during the spring and summer of 2001. This crisis was defined by rapidly increasing energy costs in portions of the state as well as periodic blackouts and the potential for rolling blackouts. These events have focused greater attention on the need for energy conservation. The California Public Utilities Commission is sponsoring a continued advertising campaign to encourage energy conservation both at home and in the office. While PG&E is not an active part of this advertising campaign, the company does recommend that energy conservation techniques be implemented. To improve energy efficiency throughout the PCGC campus, Placer County has installed several roof-top solar collection arrays and one solar collection farm, located south of the Animal Services Center.

Energy Conservation. PG&E encourages energy conservation through the building design process. PG&E offers a rebate program for new buildings that are designed with energy efficient technologies, such as north-south orientation to take advantage of natural lighting and insulation beyond the minimum requirements to reduce the use of heating and cooling systems. PG&E does not currently operate any alternative energy programs (i.e., rebates for installation of solar power collectors).

Undergrounding. As development and redevelopment occurs at the PCGC property, the County must underground any new and existing power lines in the vicinity of the development activities, in compliance with Placer County General Plan Policy 4.A.4 and Implementation Program 4.5,

as well as Policy III.C.3.a.12 of the Auburn/Bowman Community Plan. Any plans for future development at the PCGC property will consider this requirement.

Emergency Generators. It is anticipated that as new construction occurs at the PCGC property, the need for additional emergency generators will be assessed for each new building. As additional generators are added, they will be included in the County’s maintenance programs for the existing generators.

Solid Waste

Solid waste collection services for the PCGC campus is provided by Recology. Collected solid waste is transported to the Western Regional Sanitary Landfill (WRSL) and Material Recovery Facility (MRF) in western Placer County.

The PCGC campus has 42 trash containers of various sizes to serve the County departments and private businesses that lease space at DeWitt Center. Table 13-3 displays the sizes and service frequency of these containers.

Table 13-3
Solid Waste Service

Number of Containers	Size of Containers (cubic yards)	Service Frequency per Week (Number of Containers at Pickup Frequency)				
		One	Two	Three	Five	Six
1	1	1				
7	2	6			1	
10	3	6	2	3		
11	4	2	5	2		1
3	5	2				1
1	6	1				
1	7	1				
8	90 ¹	8				

¹ Measured in gallons, rather than cubic yards.

In addition, Recology provides the PCGC campus with one 20-cubic yard “on-call” debris box for each of the following types of debris: garbage, cardboard, metal, wood, and newspaper. These boxes are located throughout the PCGC campus. As each box becomes full, a call is placed to Recology to request that the box be exchanged with an empty one. Service is provided the next day. The County is charged each time that the garbage, metal, or wood box is exchanged. There is no charge for the cardboard or newspaper boxes (County of Placer 2003).

The Western Placer Waste Management Authority (WPWMA) is a regional agency established in 1978 through a Joint Exercise of Powers Agreement between the County of Placer and the Cities of Roseville, Rocklin and Lincoln to acquire, own, operate, and maintain a sanitary landfill site and all related improvements (County of Placer 2003).

The WPWMA designed and built the MRF to divert solid waste from being disposed at the landfill. A majority of the solid waste collected in western Placer County is first processed at the WPWMA MRF. The MRF recovers, processes, and markets recyclable materials from the waste stream. The MRF also processes source separated wood waste and green waste and accepts separated recyclables, including electronics and other universal wastes (e.g. batteries and fluorescent lamps), at the recycling drop-off and buy-back center. The compost portion of the MRF has an annual processing capacity of 82,000 tons (averaged over the year and does not account for seasonal peaks). The MRF is permitted to have up to 75,000 cubic yards (approximately 37,500 tons) of compost material at the facility at any one time (County of Placer 2016).

Residual waste from the MRF is transported to the WRSL. The landfill is specified as a Class II/Class III non-hazardous site. Hazardous waste from households and Conditionally Exempt Small Quantity Generators is accepted at the Permanent Household Hazardous Waste Collection Facility, located next to the MRF (County of Placer 2016).

The WRSL is permitted to receive a total of 1,900 tons of solid waste and 624 vehicles per day (County of Placer 2009). The WRSL received an average of and currently receives an average of 824 tons per day in 2009 (County of Placer 2009) and an average of 638 tons per weekday and 86 vehicles per day in 2014 (County of Placer 2016). The current estimated life span for the WRSL is 2058 (County of Placer 2016). This anticipated lifespan is based on growth projections for the County contained in the Placer County General Plan.

18.2 REGULATORY FRAMEWORK

Federal Regulations

1972 Clean Water Act

The 1972 Clean Water Act set the framework for storm water regulations where pollutants are discharged to waters of the United States. Within the project area, these regulations are defined in the State Water Resources Control Board Water Quality Order No. 2013-001-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004 Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II MS4 Permit), as regulated by the State Water Resources Control Board. As a discharge permittee, Placer County must comply with this Phase II Small MS4 Permit.

Below is a brief summary of the provisions sections of the Phase II MS4 Permit that require implementation by the County. The permit went into effect on July 1, 2013 and at the time of this Master Plan Update, the County is in year three of the permit.

State

California Water Code

Pursuant to the definition of “project” in Section 10912(a)(1-7) of the California Water Code, the proposed DeWitt Government Center Facility Plan is not subject to the requirements of California Water Code Sections 10910 to 10915 (which implement the requirements of Senate Bill 610). The proposed project includes approximately 224,312 square feet of new construction and approximately 200,976 square feet of building demolition. The requirements of the water code apply to projects with either a minimum of 250,000 square feet of new office space, employing a minimum of 1,000 persons, or a minimum of 500,000 square feet of new shopping centers or other businesses.

Local

Auburn/Bowman Community Plan

The Community Development Element of the Auburn/Bowman Community Plan contains policies related to utilities that apply to residential development. The Auburn/Bowman Community Plan does not contain any policies related to solid waste, wastewater, or utilities applicable to the proposed project.

The following Auburn/Bowman Community Plan policies from the Community Development Element related to water service and supply are applicable to the project.

- Goal III.D.3.a.1.** Provide for each resident and business in the plan area an adequate, reliable, and safe water supply at a reasonable cost.
- D.3.b.1** Encourage, through allowable densities and distribution of land uses, the maximum feasible usage of treated surface water supplies rather than groundwater supplies as a basis for land development.
- D.3.b.2** Encourage continuing cooperation between water supply agencies in order to minimize costs of service and increase reliability of supply and treatment.

Placer County General Plan

The following Placer County General Plan policies included in the Public Utilities and Services Element related to electricity, natural gas, water service and supply, wastewater, and solid waste are applicable to the proposed project.

Goal 4.A To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.

Policy 4.A.2 The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met:

- a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means);
- b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant; and
- c. The facilities improvements are designed and built to the current standards of the agency providing service.

Policy 4.A.4 The County shall require proposed new development in identified underground conversion districts and along scenic corridors to underground utility lines on and adjacent to the site of proposed development or, when this is infeasible, to contribute funding for future undergrounding.

Goal 4.B To ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods.

Policy 4.B.1. The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Policy 4.B.2. The County shall require that new development pay the cost of upgrading existing public facilities or construction of new facilities that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Policy 4.B.3 The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on countywide facilities and services.

Goal 4.C To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

Policy 4.C.1 The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

Policy 4.C.2 The County shall approve new development based on the following guidelines for water supply:

- a. Urban and suburban development should rely on public water systems using surface supply.
- b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban

and no public water system exists or can be extended to the property, individual wells may be permitted.

- c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.

Policy 4.C.3 The County shall encourage water purveyors to require that all new water services be metered.

Policy 4.C.4 The County shall require that water supplies serving new development meet state water quality standards.

Policy 4.C.6 The County shall promote efficient water use and reduced water demand by:

- a. Requiring water-conserving design and equipment in new construction;
- b. Encouraging water-conserving landscape and other conservation measures;
- c. Encouraging retrofitting existing development with water-conserving devices; and
- d. Encouraging water-conserving agricultural irrigation practices.

Policy 4.C.7 The County shall promote the use of reclaimed wastewater to offset the demand for new water supplies.

Policy 4.C.11 The County shall protect the watersheds of all bodies of water associated with the storage and delivery of domestic water by limiting grading, construction of impervious surfaces, application of fertilizers, and development of septic systems within these watersheds.

Goal 4.D The County shall require wastewater conveyance and treatment facilities that are sufficient to serve the Placer County General Plan proposed density of residential, commercial, and public/institutional uses in a way which protects the public and environment from adverse water quality or health impacts.

Policy 4.D.1 The County shall limit the expansion of urban communities to areas where community wastewater treatment systems can be provided.

Policy 4.D.2 The County shall require proponents of new development within a sewer service area to provide written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy.

Policy 4.D.4. The County shall require developments needing new connections to construct wastewater conveyance facilities which are sized and located to provide sewer service based on permitted densities and applicable sewer shed area. Wastewater conveyance systems shall be designed for gravity flow. Where gravity conveyance systems are not feasible, the agency providing service may approve pumping service where a site specific engineering analysis demonstrates the long-term cost effectiveness of pumped facilities.

Policy 4.D.5. The County shall require developments needing new connections to pay their fair share of the cost for future public wastewater facilities which support development based on the Placer County General Plan. The fair share will be based on the demand for these facilities attributable to the new development.

Policy 4.D.7 The County shall promote efficient water use and reduced wastewater system demand by:

- a. Requiring water-conserving design and equipment in new construction as required in California law (AB 1881);
- b. Encouraging retrofitting with water-conserving devices; and
- c. Designing wastewater systems to minimize inflow and infiltration.

Goal 4.G To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

Policy 4.G.1 The County shall require waste collection in all new urban/suburban development, excluding rural development, to include provisions for solid waste collection.

Policy 4.G.2 The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

Policy 4.G.7 The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan.

Policy 4.G.9 The County shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.

18.3 PROJECT IMPACTS

Significance Criteria

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project would:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
2. 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.
3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction or which could cause significant environmental effects.
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
5. 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.
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
7. Comply with federal, state, and local statutes and regulations related to solid waste.

Impact Analysis

Impact 18-1

	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
Level of Significance:	No impact	No impact	No impact
Mitigation Measures:	None required	None required	None required
Significance after Mitigation:	No impact	No impact	No impact

PCGC Master Plan Update

Wastewater generated from the PCGC campus would be collected by the SMD 1 managed by the County and conveyed through the Mid-Western Placer Regional Sewer Pipeline to the City of Lincoln’s Wastewater Treatment and Reclamation Facility (WTRF). The Lincoln WTRF is a permitted facility that meets all applicable wastewater treatment requirements. The land uses anticipated under the proposed PCGC Master Plan Update include government and private offices, commercial, and residential uses. None of these land uses would generate wastewater with unusual or hazardous constituents and implementation of the PCGC Master Plan Update would have **no impact** associated with causing the WTRF to exceed wastewater treatment requirements.

Health and Human Services Building

Wastewater generated from the Health and Human Services building would be collected by the SMD 1 managed by the County and treated at the City of Lincoln WTRF. Wastewater generated by the Health and Human Services building would not include unusual or hazardous constituents and therefore the Health and Human Services building would have **no impact** associated with causing the WTRF to exceed wastewater treatment requirements.

Multifamily Residential Project

Wastewater generated from the Multifamily Residential Buildings would be collected by the SMD 1 managed by the County and treated at the City of Lincoln WTRF. Wastewater generated by the Multifamily Residential project would be typical of residential wastewater and would not include unusual or hazardous constituents. Therefore the Multifamily Residential project would have **no impact** associated with causing the WTRF to exceed wastewater treatment requirements.

Impact 18-2	Would the project require or result in the construction of new water or wastewater treatment facilities, expansion of existing facilities, or demand for new or expanded water supplies?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
Level of Significance:	Potentially Significant	Potentially Significant	Less than Significant
Mitigation Measures:	Mitigation Measure 18a	Mitigation Measure 18a	None required
Significance after Mitigation:	Less than Significant	Less than Significant	Less than Significant

PCGC Master Plan Update

Water supply would come from PCWA and NID through the County’s PCGC water system; wastewater collection and conveyance would be provided through the SMD 1 facilities, and wastewater treatment would occur at the City of Lincoln WTRF.

Wastewater Conveyance

The PCGC Master Plan Update includes information regarding the size and location of new wastewater conveyance infrastructure needed throughout the site based on the North Auburn DeWitt Trunk Sewer Capacity Evaluation Report (Stantec 2016). Any development within the DeWitt Trunk sewer shed would exacerbate the existing over-capacity conditions of the DeWitt Trunk under wet weather conditions and in the 10-year and greater storm events.

In the EIR prepared for the Timberline project that is currently under phases of construction north of the PCGC property, a series of sewer line upsizing needs were identified to corrected this over-capacity condition (County of Placer 2010). In approving the Timberline project, the County adopted Mitigation Measure 12-2(c) as identified in the Timberline EIR. This measure requires the developer of the Timberline project to upsize the DeWitt Trunk line as shown in Table 12-15 and Table 12-16 of the Timberline EIR. Subsequent to approval of the Timberline project, the SMD prepared the North Auburn DeWitt Trunk Sewer Capacity Evaluation Report (Stantec 2016). This analysis refined the list of sewer line upsizing needs to ensure adequate capacity in the DeWitt Trunk line to serve the approved and anticipated future development within this sewer shed. If the Timberline project off-site sewer improvement project proceeds ahead of the Health and Human Services building, or any other development within the DeWitt Trunk sewer shed portion of the PCGC property, the upsizing would be complete before any new sewage flows are generated at the PCGC property and the project would have a less than significant impact associated with sewage conveyance capacity. However if the Timberline project does not proceed or does not complete the off-site sewer line upsizing before the PCGC HHS building or any other building within the DeWitt Trunk sewer shed portion of the PCGC

property is completed, the additional sewage flow generated by the proposed PCGC Master Plan Update would exacerbate the existing over-capacity conditions and cause a significant impact. To reduce this impact to a less than significant level, Mitigation Measure 18a requires that the County or applicants for private development projects within the PCGC complete the off-site sewer line upsizing identified in the North Auburn DeWitt Trunk Sewer Capacity Evaluation Report (Stantec 2016). With implementation of Mitigation Measure 18a, the project would have a **less than significant** impact associated with wastewater conveyance capacity.

Water Supply

It is expected that PCWA would continue to serve all of the Placer County offices and other facilities within the PCGC campus, while NID would provide potable water service to all private development onsite. The PCGC Master Plan Update includes information regarding the size and location of new water pipelines needed throughout the site. The emergency interties between the PCWA and NID systems would be maintained. In addition, Placer County would divert a maximum of 12 miner inches of water daily from the Ophir canal, under the County's existing water rights allocation. The County would store this water in a water storage tank and use the stored water for landscape irrigation in the throughout the year. This would reduce the overall demand for potable water at the PCGC campus.

Much of the existing underground utilities within the PCGC campus were installed to service the hospital facilities that were built in the 1940s. The existing water supply pipeline include vintage iron (cast and ductile) and copper. As individual development projects within the campus are undertaken in implementation of the PCGC Master Plan Update, these existing pipelines would be replaced with modern lines. This would help avoid pipeline leakage and ensure appropriate management of water supply. Additionally, while some upgrades to plumbing have been made over time, many of the original buildings onsite do not include modern water-efficient fixtures. All new construction within the PCGC would install fixtures meeting current water-efficiency standards. This would help reduce the total water demand throughout the campus.

In 2015, NID maintained 18,635 connections and supplied 7,912 acre-feet per year across its total service area; in North Auburn, NID maintained 2,292 connections and supplied 1,510 acre-feet per year. NID currently maintains water rights for 450,000 acre-feet of diversion. The NID UWMP states that the current water demand is 126,653 acre-feet per year and projects total water demands in 2040 of $\pm 209,000$ acre-feet (NID 2016). PCWA currently delivers approximately 116,500 acre-feet per year and provides approximately 23,600 acre-feet per year of untreated water to neighboring purveyors. The total water delivery includes service to residential and non-residential land uses.

The estimated daily water supply demands at the PCGC campus, not including The Home Depot, are approximately 900 gallons per minute (gpm) (County of Placer 2018b). This correlates to approximately 4 ac-ft per day, or 1,451 ac-ft annually. As shown in Tables 18-1 and 18-2, both PCWA and NID have sufficient water to meet projected demands in their service territories through 2040 and sufficient water entitlements to meet the increased water demands at the PCGC campus that would occur with implementation of the proposed PCGC Master Plan Update. In 2035, NID is projected to have excess supply of 157,720 ac-ft and PCWA is projected to have excess supply of 48,744 ac-ft, thus both NID and PCWA are expected to have sufficient supply to meet the increased water demands within the PCGC campus. As individual construction projects are undertaken in implementation of the PCGC Master Plan Update, as part of the County’s standard development review process, the County will require each project to obtain a will-serve letter from either PCWA or NID to ensure water availability at the time of construction. No new water treatment facilities, water supply entitlements, wastewater treatment facilities, or improvements to offsite water and wastewater conveyance infrastructure would be needed to serve the PCGC campus at build-out of the PCGC Master Plan Update and the project would have a **less than significant** impact associated with demands for water and wastewater treatment.

Health and Human Services Building

The Health and Human Services building is a county facility and thus would receive potable water supply from PCWA. Wastewater conveyance would be provided through the SMD 1 facilities and wastewater treatment would be provided by the City of Lincoln WTRF. As discussed in the previous PCGC Master Plan Update section, any new wastewater flows into the DeWitt Trunk sewer line would exacerbate the existing over-capacity conditions of the DeWitt Trunk under wet weather conditions and in the 10-year and greater storm events, unless the trunk line upsizing identified in the North Auburn DeWitt Trunk Sewer Capacity Evaluation Report (Stantec 2016) is completed. These improvements are anticipated to be constructed by a phase of the Timberline Senior Housing development currently under phased construction north of the PCGC property at Richardson Drive and Bell Road. In the event that the Health and Human Services building is constructed before these improvements are complete, Mitigation Measure 18a requires the County to construct the off-site trunk line upsizing. This would reduce the impacts of the Health and Human Services building on wastewater conveyance to a **less-than-significant** level.

As part of construction of the Health and Human Services building, the County would place a new water pipeline loop, originating from the PCWA source at Professional Drive and 1st Street, traveling around the Health and Human Services site, and tying in the newer water lines in the northern portion of Richardson Drive and western extension of B Avenue.

The water supply and wastewater treatment demands of the Health and Human Services building are included within the overall water demands described above for the PCGC Master Plan Update. Development of the project would slightly increase the demand for water supplies at the PCGC campus. The Health and Human Services building is projected to require 4,380 gallons per day on an average day, which correlates to 4.9 acre feet per year. Based on the size of the building, a minimum fire flow of 4,000 gallons per minute is needed. This can be achieved when the emergency interties between the PCWA and NID systems are open.

As discussed above, the PCWA UWMP demonstrates that PCWA would have sufficient water supplies to meet this additional water demand. Therefore, the project would not require the construction of new water supply, treatment, or distribution infrastructure that could result in environmental impacts other than those evaluated in this EIR. The project would have **less than significant** impacts related to water supply, treatment, and conveyance.

Multifamily Residential Project

The Multifamily Residential project would be a private development project within the PCGC campus. Wastewater would be collected and conveyed through the SMD 1 Highway 49 Trunk. There is sufficient capacity in that trunkline to accommodate wastewater flows from the Multifamily Residential project.

Water supply for the project would come from NID. A new water line would be placed in 1st Street that would tie into the existing NID water line in Willow Creek Drive.

Development of the project would slightly increase the demand for water supplies at the PCGC property. The Multifamily Residential project is estimated to generate demand for 32,000 gallons per day on an average day, which correlates to 35.8 acre feet per year.

As discussed above, the NID UWMP demonstrates that NID would have sufficient water supplies to meet this additional water demand. The project would connect to existing water supply lines within and adjacent to the project site and would install necessary water distribution infrastructure within the project site to serve the proposed multifamily residences. No new water or wastewater treatment facilities or offsite improvements to conveyance infrastructure would be needed to serve the Multifamily Residential project and this project would have a **less than significant** impact related to water supply and water and wastewater treatment and conveyance.

Impact 18-3	Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction or which could cause significant environmental effects?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
Level of Significance:	No Impact	No Impact	No Impact
Mitigation Measures:	None required	None required	None required
Significance after Mitigation:	No Impact	No Impact	No Impact

PCGC Master Plan Update

The proposed PCGC Master Plan Update would require expansion of onsite stormwater drainage facilities. This includes the expansion of the diameter of existing pipes as well as the creation or expansion of 3 small detention basins, 1 medium detention basin, and 1 large detention basin (County of Placer 2018c). All of these improvements would occur within the boundary of the PCGC campus and are contained within the context of Master Plan Update. No offsite construction of new storm water drainage facilities or expansion of existing facilities would be needed to accommodate stormwater runoff from the PCGC campus. As described in the Master Drainage Report (Appendix H), each individual development project within the PCGC campus would be required to implement Best Management Practices to treat runoff from the site under a 2-year storm event while the detention basins within the PCGC campus would be sized to detain all stormwater runoff from the 10-year and 100-year storm events as well as the 2-year, 24-hour event to meet hydromodification requirements. Additional discussion of stormwater drainage is provided in Chapter 15, Hydrology and Water Quality. The environmental effects of providing stormwater management facilities within the PCGC campus are evaluated throughout this EIR. Implementation of the PCGC Master Plan Update would result in **no impact** associated with offsite construction of new storm water drainage facilities or expansion of existing facilities.

Health and Human Services Building

Stormwater runoff from the Health and Human Services project site would be initially routed through a bioretention swale at the southern end of the parking lot and then conveyed to regional stormwater Basin 2A within the broader PCGC campus (Appendix H). This basin does not have sufficient capacity to store stormwater runoff from the 100-year storm event and maintain the required freeboard. Therefore, the Health and Human Services building project includes reconfiguring and expanding the basin to increase the volume by 1.2 acre-feet prior to paving the Health and Human Services project site. This would ensure that the project would have **no impact** associated with offsite construction of new storm water drainage facilities or expansion of existing facilities.

Multifamily Residential Project

Stormwater runoff from the Multifamily Residential project site would be routed through bioretention swales that are proposed to be constructed within the project site. Some of the stormwater would be conveyed to a new stormwater basin at the northern end of the project site, while some would be conveyed to the south to an existing stormwater detention basin at the intersection of 1st Street and Professional Drive. This new basin has been designed to have sufficient capacity to store stormwater runoff from the 100-year storm event and maintain the required amount of freeboard; the existing basin to the south of the project site currently has sufficient capacity to store stormwater runoff from the project site while maintaining the required amount of freeboard (Appendix H). Therefore, the Multifamily Residential project would have **no impact** associated with offsite construction of new storm water drainage facilities or expansion of existing facilities.

Impact 18-4	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
Level of Significance:	Less than Significant	Less than Significant	Less than Significant
Mitigation Measures:	None required	None required	None required
Significance after Mitigation:	Less than Significant	Less than Significant	Less than Significant

PCGC Master Plan Update

Government Offices

The master plan update would increase governmental staff by 450 within an increase of 41,117 square feet of Government building space on the PCGC campus. Based on a review of statewide annual solid waste disposal, CalRecycle determined that the average solid waste disposal rate was 0.59 tons per employee per year (CalRecycle 2018). Using this rate, the increase in governmental building space would generate approximately an additional 265.5 tons of solid waste per year, which is approximately 5 tons per week. The MRF sorts all incoming solid waste for recyclables and is contractually obligated to achieve a diversion rate of 50%. Therefore, the effective solid waste generation rate of the proposed commercial/office space is 132.7 tons per year or 2.5 tons per week.

Commercial/Office

The project would create approximately 540,000 square feet of commercial/office/community space on the PCGC property. Based on a review of statewide annual solid waste disposal, CalRecycle determined that in 2016, the average solid waste disposal rate was 5 pounds per 1,000 square feet per day. Using this rate, the project would generate approximately 2,700 tons of solid waste annually or 52 tons per week. With a diversion rate of 50%, the effective solid waste generation rate of the proposed commercial/office space is 1,350 tons per year or 26 tons per week.

Residential

Implementation of the PCGC Master Plan Update is expected to include development of approximately 485 new residences on the project site. Project build-out would result in a population increase of approximately 1,300 residents. Based on a review of statewide annual solid waste disposal, CalRecycle determined that in 2016, the average solid waste disposal rate was 6 pounds per person per day (CalRecycle 2018). Using this rate, the project would generate approximately 1,423.5 tons of solid waste annually. With a diversion rate of 50%, the effective solid waste generation rate of the proposed commercial/office space is 712 tons per year or 13.7 tons per week.

Total

With all proposed site uses considered, the Master Plan Update would generate approximately 2136.8 tons of solid waste per year or 41 tons per week. The WRSL has a permitted throughput of 1,900 tons per day and typically receives less than 700 tons per day. The project would not cause the WRSL to exceed capacity and this impact would remain **less than significant**.

Health and Human Services Building

The proposed Health and Human Services building would accommodate 141 new employees by 2035. This would generate approximately 83.19 tons per year of solid waste, with 41.6 tons anticipated to be disposed of within the WRSL. As discussed above, the WRSL has sufficient capacity to receive this additional solid waste and this impact would remain **less than significant**.

Multifamily Residential Project

The proposed Multifamily Residential building would accommodate up to 100 dwelling units and 268 residents. This would generate approximately 293.46 tons of solid waste annually, with 146.7 tons anticipated to be disposed of within the WRSL. As discussed above, the WRSL has

sufficient capacity to receive this additional solid waste and this impact would remain **less than significant**.

Impact 18-5	Would the project comply with federal, state, and local statutes and regulations related to solid waste?		
	<i>PCGC Master Plan Update</i>	<i>Health and Human Services Building</i>	<i>Multifamily Residential Project</i>
Level of Significance:	No impact	No impact	No impact
Mitigation Measures:	None required	None required	None required
Significance after Mitigation:	No impact	No impact	No impact

PCGC Master Plan Update

All future development within the PCGC Master Plan Update plan area would be required to comply with all federal, state, and local statutes and regulations. No land uses are proposed that would generate acutely hazardous waste. As each applicant proposes to complete a project, County staff would ensure its compliance with all building codes and restrictions, statutes, and regulations. Therefore, the PCGC Master Plan Update would have **no impact** related to a potential conflict with federal, state, and local statutes and regulations related to solid waste.

Health and Human Services Building

Construction and operation of the Health and Human Services building would generate solid waste that is typical of office land uses. No acutely hazardous waste is anticipated. Thus, the project would have **no impact** related to a potential conflict with federal, state, and local statutes and regulations related to solid waste.

Multifamily Residential Project

Construction and operation of the Multifamily Residential project would generate solid waste that is typical of residential land uses. No acutely hazardous waste is anticipated. Thus, the project would have **no impact** related to a potential conflict with federal, state, and local statutes and regulations related to solid waste.

18.4 MITIGATION MEASURES

Mitigation Measure 18a The County shall develop and implement an off-site mitigation program that will replace and/or rehabilitate sewer infrastructure in order to reduce inflow and infiltration in areas tributary to the DeWitt trunk line within Sewer Maintenance District No. 1. The off-site mitigation program will create capacity

within the existing system equivalent to the project's peak wet weather flows. The off-site mitigation program shall consist of upsizing of the DeWitt Trunk line as identified in Table 5-2 of the North Auburn DeWitt Trunk Sewer Capacity Evaluation Report. The off-site mitigation program shall be coordinated, reviewed, and approved by the Facility Services Department, Environmental Engineering Division prior to or concurrent with the Improvement Plan approval for the Health and Human Services building. The on-site development project sewer improvements shall not be accepted as complete by the County until the County accepts the off-site sewer mitigation program improvements, which may be constructed by others, as complete.

18.5 REFERENCES CITED

- County of Placer. 2003. DeWitt Government Center Facility Plan EIR. Prepared for Placer County Department of Facility Services. Prepared by North Fork Associates. December 2003.
- County of Placer. 2018a. Placer County Government Center Master Plan, Draft Strategic Vision. Prepared by Williams + Paddon. November 16, 2018. <http://www.placer.ca.gov/pcgc>.
- County of Placer. 2018b. Placer County Government Center Master Plan, Draft Strategic Vision, Appendix E Wet Utility Plan. Prepared by Cartwright Engineers. November 16, 2018.
- Nevada Irrigation District (NID). 2015. Urban Water Management Plan. Prepared by Brown and Caldwell. June 2016.
- Placer County Water Agency (PCWA). 2016. 2015 Urban Water Management Plan. Prepared by Tully and Young. June 2, 2016.
- Stantec. 2016. North Auburn DeWitt Trunk Sewer Capacity Evaluation Report. March 6, 2016.

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