This section describes and evaluates the potential for project impacts on fire protection, recreation facilities, and utility systems. There were three written comments received during the public review period for the Notice of Preparation regarding these topics:

- A letter to Shasta County from Shasta County Sheriff-Coroner Tom Bosenko, dated July 22, 2009, concluded that the proposed project would have less than significant impacts to the Shasta County Sheriff's Office.
- A letter to Shasta County from John Loane of the California Integrated Waste Management Board, dated July 31, 2009, advised that project description at that time did not appear to qualify as an "active compost" site and would not require a Compostable Materials Handling Facility Permit (CMHFP).
- A letter to Shasta County from Daniel L. Warner of the California Regional Water Quality Control Board, Central Valley Region, dated July 21, 2009, described the appropriate permits and regulations for the proposed project.

Information in this section is derived primarily from the following sources:

- California Integrated Waste Management Board. Facility/Site Summary Details: Anderson Landfill, Inc. (45-AA-0020). Accessed online on October 22, 2009 at http://www.ciwmb.ca.gov/SWIS/45-AA-0020/Detail/
- City of Anderson. 2007. City of Anderson General Plan.
- County of Shasta. 2004. Shasta County General Plan.
- Lawrence and Associates. December 14, 2007. Hydrogeologic Analysis for Expansion of Cogeneration Plant at Sierra Pacific Industries Anderson Facility. (Appendix E)
- Shasta County Fire Department. 2007. Shasta County Fire Department Master Plan.
- Shasta County Fire Department. Accessed online on October 19, 2009. http://www.co.shasta.ca.us/html/SC_Fire/scfire_index.htm
- Gordon, Don. Shasta County Fire Marshall. July 2010. Email correspondence with Ben Ritchie of De Novo Planning Group.

As discussed in the Initial Study, impacts related to public services including police protection, schools, parks, and other public facilities were determined to be less than significant while impacts to fire protection services were determined to be potentially significant. Therefore, the only public services item to be discussed in this section will be fire protection. The Initial Study also identified potential impacts related to landfill capacity, wastewater treatment requirements, wastewater treatment facilities, and inadequate wastewater treatment capacity, but found that these impacts would be less than significant or result in no impact. Therefore, the analysis of impacts to utilities in this section is limited to storm water drainage, water supply, and solid waste.

3.9.1 Existing Conditions

FIRE PROTECTION

Fire protection for the project site is currently provided by and would continue to be provided by the Shasta County Fire Department (SCFD) (Wilson, 2009). SCFD contracts with the California Department of Forestry and Fire Protections (CAL FIRE) to provide emergency response throughout Shasta County. The organization combines two groups into one in order to provide a greater force of firefighters and equipment.

SCFD provides a broad range of services, including fire protection, emergency medical services, hazardous materials handling, and fire prevention.

SCFD includes a total of sixteen paid employees, but relies heavily upon volunteers for firefighting services (SCFD, 2007). There are 385 allocated volunteer positions within SCFD, but actual volunteer totals are typically around 215 (SCFD, 2008). Volunteer firefighter numbers are directly related to SCFD's ability to respond to incidents as they occur. Most volunteer companies are stretched thin during the traditional work hours of 8:00 AM to 5:00 PM, Monday through Friday (SCFD, 2007). Many of the volunteer companies' rosters include a large amount of seasonal firefighters employed during the summer months by CAL FIRE, the United States Forest Service, or the National Parks Service (SCFD, 2007). This means that many volunteers may be unable to respond during wildfire season as they may be occupied by the other agencies.

The project site receives fire protection from Station 43, located at 6103 Airport Road in Redding (Wilson, 2009). Station 43 is located approximately 3 miles northeast of the project site. During fire season, CAL FIRE staffs two Type 3 fire engines and one bulldozer (SCFD, 2008). During non-fire season months, one engine is staffed with one company officer and one firefighter under the "Amador" contract (SCFD, 2008). Station 43 maintains 17 volunteers and participates with students from Shasta County's ROP (ride-along program) (SCFD, 2008).

RECREATION

With an abundance of open space and the presence of the Sacramento River, recreational opportunities abound in Shasta County. Tourism is a major industry in Shasta County, thanks to the many Federal State, and County recreational facilities, as well as private recreational facilities (Shasta County General Plan, 2004:6.9.02).

Recreational facilities near the project site include:

- Shasta District Fairgrounds. 1890 Briggs Street, Anderson. Approximately one mile southeast of the project site.
- Tucker Oaks Golf Course. 6241 Churn Creek Road, Redding. Approximately one mile northeast of the project site. A public 9-hole golf course.
- Churn Creek Golf Course. 7335 Churn Creek Road, Redding. Approximately two miles north of the project site. A public 9-hole golf course.

- Anderson River Park. Approximately 2.5 miles east of the project site. Facilities include softball and soccer fields, boating, fishing, tennis, basketball, picnic and BBQ areas, wildlife viewing, hiking and equestrian trails, KiddieLand Playground, TotLot, and an amphitheatre.
- Veterans Park, Anderson. Approximately two miles south of the project site. Facilities include grass area, basketball court, and playground equipment.
- Volonte Park, Anderson. Approximately 2.15 miles south of the project site. Facilities include baseball fields, playground equipment, and the Anderson Skateboard Park.

The Sacramento River is a major recreational asset to Shasta County. The project site is bordered to the northeast by the Sacramento River.

UTILITIES

Stormwater Drainage

The 121-acre Sierra Pacific site is essentially self-contained with respect to stormwater drainage. There are water storage ponds near the area of proposed improvements. The entire Sierra Pacific property is constantly being watered by sprinklers and trucks to suppress fire and keep the logs wet. The water that accumulates from this effort flows through a series of surface drainage channels to on-site detention basins, where it is recycled and reused.

The City of Anderson and unincorporated areas of Shasta County surround the project site. As such, these entities maintain stormwater infrastructure throughout the area surrounding the project site.

Water Supply

The project site uses groundwater for its water supply. Potable water is provided on the project site by two existing on-site wells. Non-potable water is generated from the on-site surface water ponds which are fed by natural underground springs. As needed, non-potable water is supplemented with water from the two on-site pumps. See Chapter 3.7 for a discussion of groundwater conditions.

Solid Waste

The Shasta County Public Works Department administers the County's Solid Waste Program. The County has franchise agreements with two solid waste collectors, Waste Management, Inc. in the greater Redding area, and Burney Disposal, Inc. in the Intermountain area.

Sierra Pacific Industries currently transports solid waste generated on the project site by truck to the Anderson Landfill. The Anderson Landfill is located at 18703 Cambridge Road, approximately four miles southwest of the project site. The Anderson Landfill is a Class III landfill and accepts a variety of wastes, including agricultural, asbestos, ash, construction/demolition, industrial, mixed municipal, sludge, tires, and wood (CIWMB, 2009). The landfill has a maximum capacity of 16,840,000 cubic yards (CIWMB, 2009). As of March 16, 2008, the facility still had a remaining capacity of 11,914,025 cubic yards (CIWMB, 2009). The maximum daily throughput of the facility is 1,850 tons per day (CIWMB, 2009).

3.9.2 REGULATORY SETTING

FIRE PROTECTION SERVICES

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new and existing buildings and premises. The Bureau of Fire Prevention in the Fire Authority enforces the Uniform Fire Code.

Shasta County General Plan

The September 2004 Shasta County General Plan contains a Fire Safety and Sheriff Protection Element that seeks to "[p]rotect development from wildland and non-wildland fires by requiring new development projects to incorporate effective site and building design measures commensurate with level of potential risk presented by such a hazard and by discouraging and/or preventing development from locating in high risk fire hazard areas". To accomplish this objective, Shasta County has adopted policies requiring new development to comply with all applicable local fire standards as well as analyze fire risks during the entitlement process. The following fire safety policies of the General Plan are relevant to the proposed project:

- **FS-a** All new land use projects shall conform to the County Fire Safety Standards.
- **FS-b** Known fire hazard information should be reported as part of every General Plan amendment, zone change, use permit, variance, building site approval, and all other land development applications subject to the requirements of the California Environmental Quality Act (CEQA)
- **FS-c** Fire Hazard Maps shall be kept on file by the County and used in conjunction with the adopted County Fire Safety Standards and other County development standards.
- **FS-e** Development in areas requiring expanded levels of police and fire services shall participate in adopted County programs designed to offset the added costs for providing the expanded level of services.
- **FS-f** The Sheriff's Office and Shasta County Fire Department should annually review the County's standard development conditions as they relate to the provision of police and fire services created as a result of new land use projects and recommend to the Planning Commission appropriate changes including the need to implement equitable property tax assessments to help defray the costs of providing new and/or expanded services.

RECREATION

Shasta County General Plan

The September 2004 Shasta County General Plan contains an Open Space and Recreation Element that seeks to protect "the open space and recreational resources of Shasta County" (Shasta County General Plan 2004:6.9.06). To accomplish this objective, Shasta County has adopted "policies recognizing the contributions of these resources to the economy of the County" (Shasta County General Plan 2004:6.9.6).

UTILITIES

Federal Clean Water Act

The Federal Clean Water Act places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although this does establish certain guidelines for the states to follow in developing their programs and allows the EPA to withdraw control from states with inadequate implementation mechanisms.

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator (EPA Region 5). The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWC.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

California Integrated Waste Management Act

In 1989, AB 939, known as the Integrated Waste Management Act, was passed into law. Enactment of AB 939 established the California Integrated Waste Management Board (CIWMB) and set forth aggressive solid waste diversion requirements. Under AB 939, every city and county in California was required to reduce the volume of waste sent to landfills by 50% by 2000, and assure maintenance of at least a 15-year landfill capacity for solid wastes that are generated in the county and cannot be reduced or recycled. Reduction of the waste stream would be accomplished through recycling, reuse, composting, and other means. AB 939 requires counties to prepare a Countywide Integrated Waste Management Plan (CIWMP). An adequate CIWMP contains a summary plan that includes goals and objectives, a summary of waste management issues and problems identified in the incorporated and unincorporated areas of the county, a summary of waste management programs and infrastructure, information about existing and proposed solid waste facilities, and an overview of specific steps that will be taken to achieve the goals outlined in the components of the CIWMP.

Shasta County General Plan

The September 2004 Shasta County General Plan contains a Public Facilities Element that seeks to develop comprehensive, long-range plans for public facilities through the understanding of the opportunities and constraints within the County and land use patterns. To accomplish this objective, Shasta County has adopted policies which require new development to provide resources for public facilities, permit alternative disposal systems, and cooperative planning efforts to ensure adequate public facilities. General Plan objectives and policies related to solid waste are

provided below; see Chapter 3.7 for discussion of policies related to water supply and storm water.

- **PF-3** Develop the Shasta County solid waste program in accordance with the adopted management plans.
- **PF-c** Shasta County shall take actions required to implement plans for the management of its solid waste stream.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Public Services

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on public services if it would result in:

- Substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
 - o Fire Protection
 - o Police Protection
 - Schools
 - Parks
 - Other public facilities

The IS/NOP prepared for this project determined that the proposed project would not result in an increase in population growth, and therefore, would result in less than significant impacts to police protection and schools, and no impact to parks or "other public facilities" would occur as a result of project implementation. Therefore, only fire protection will be addressed in this section.

Recreation

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on public services if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or,
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The IS/NOP prepared for this project determined that the proposed project could result in potentially significant impacts regarding recreation based on comments and analysis under the Aesthetics, Air Quality, Noise, and Biological Resources sections of the IS/NOP. Those topics are addressed in their respective sections of this Draft EIR. As such, this section will discuss the proposed project's potential impacts on recreational facilities.

Utilities and Service Systems

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on utilities and service systems if it would:

- 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;
 or,
- Require new or expanded entitlements for water supply; or,
- 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; or,
- Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs; or,
- Not comply with Federal, State, and local statutes and regulations related to solid waste.

The IS/NOP prepared for this project determined that the proposed project would result in less than significant impacts related to utilities and service systems regarding landfill capacity, and no impact related to wastewater treatment requirements, wastewater treatment facilities, or inadequate wastewater treatment capacity. Therefore, this section will only discuss stormwater drainage, water supply, and solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: Increased Demand for Fire Services (Less than Significant)

The project site is currently served by existing fire services. The closest fire station to the project site is Station 43, located at 6103 Airport Road in Redding. Implementation of the proposed project would not require the construction of a new fire station to serve the project site, and therefore, no environmental impacts associated with the construction of new fire protection facilities would occur.

Onsite fire protection is provided through numerous fire hydrants throughout the property.

The project site includes onsite fire hydrants and the operator engages in daily fire prevention activities. The project site contains ponds used to collect water for fire suppression activities. The project operator engages in daily fire suppression activities, which include watering of the site using water collected in the two on-site ponds. The expansion of the cogeneration facility is not anticipated to increase the demand for fire services. The Shasta County Fire Marshall has indicated that the project applicant would be required to prepare a Fire Safe Plan prior to issuance

of a Conditional Use Permit for the project. The Fire Safe Plan will primarily involve providing the necessary fire protection systems for the new facilities such as sprinklers, fire hydrants, monitoring, adequate fire flow and access to the facilities. Additionally, management of the fuel piles, maximum size of the outdoor fuel pile, and separation of the fuel piles would be addressed in the Use Permit.

For these reasons, implementation of the proposed project would not adversely impact existing fire and emergency services within the County, and would not require the construction of new fire protection facilities. This impact is **less than significant** and no mitigation is required.

Impact 3.11-2: Implementation of the proposed project would not increase the use of existing parks such that substantial deterioration of the facilities would occur (Less than Significant)

As discussed in Section XII, Population and Housing, of the IS/NOP, the proposed project would add six employees and is not expected to induce population growth in the area. Because the project would not lead to substantial growth, it is unlikely that there would be a substantial increase in use of existing parks that would lead to accelerated deterioration of existing facilities nor a need for additional recreational facilities. This impact is **less than significant** and no mitigation is necessary.

Impact 3.11-3: Implementation of the proposed project would not require new or expanded stormwater facilities (Less than Significant)

The project site currently utilizes a series of surface drainage channels to convey water to the onsite detention ponds. The water collected is utilized for fire prevention and suppression activities, including daily watering of log decks.

As discussed in Section 3.7, Hydrology and Water Quality, of this Draft EIR, impacts related to stormwater are determined to be less than significant with mitigation incorporated. All of the additional stormwater runoff generated as a result of project implementation would be treated with BMPs and channeled to the existing onsite ponds, where it will be detained. Implementation of the proposed project would not result in an increased volume of stormwater leaving the SPI property. The project would not result in additional demand for stormwater conveyance through infrastructure in the vicinity of the site, which is owned and maintained by Shasta County and the City of Anderson respectively.

Mitigation Measures 3.7-1 and 3.7-2 require development of a Stormwater Pollution Prevention Plan (SWPPP) and receipt of a new or updated NPDES permit, respectively. These measures would ensure that the proposed project complies with regulations regarding stormwater runoff.

Because the project site contains and reuses stormwater collected onsite, and because construction activities are subject to stormwater BMP's and mitigation, implementation of the proposed project would not require new or expanded stormwater facilities. This impact is **less than significant** and no additional mitigation is required.

Impact 3.11-4: Implementation of the proposed project would not result in new or expanded water entitlements (Less than Significant)

As discussed in Section 3.7, Hydrology and Water Quality, of this Draft EIR, the proposed project would be expected to result in less than significant impacts to groundwater supplies and recharge.

The project site is currently served by existing wells on the property and, based on information in the report prepared by Lawrence and Associates, would continue to be fully served by the onsite wells, implementation of the proposed project would not require new or expanded water entitlements. This impact is **less than significant** and no mitigation is required.

Impact 3.11-5: Implementation of the proposed project would not result in failure to comply with applicable Federal, State, and local regulations regarding solid waste (Less than Significant)

As described above, solid waste is currently transported by Sierra Pacific Industries by truck to the Anderson Landfill. This would continue following implementation of the proposed project.

As a cogeneration facility, the proposed project uses the byproducts of on-site sawmill operations as fuel for the cogeneration plant. This reduces the amount of waste that may otherwise be generated by the project site.

The existing cogeneration facility generates approximately 4,300 tons/year of ash, which has been utilized on the adjoining agricultural fields as a soil amendment. When ash is added to the adjacent agricultural fields, it is trucked along existing private dirt roads using an SPI truck. The ash is deposited on the fields, spread uniformly, wetted with water and disked into the soil. Under the existing agricultural crop rotation, it has not been necessary for SPI to truck ash to the Anderson Landfill.

The proposed facility would generate approximately 11,155 tons/year of ash. Ash from the proposed facility would either be disked into the adjacent agricultural fields as a soil amendment, used as an amendment in bagged soil and compost products, as a cement amendment, or it would be sent to the Anderson Landfill. The project applicant estimates fewer than one (1) truck trip per month to dispose of ash at the landfill would be required.

The Anderson Landfill has a capacity of 1,850 tons per day. As such, the Anderson Landfill would have adequate capacity to accept the ash generated by the proposed project.

As of March 16, 2008, the facility still had a remaining capacity of 11,914,025 cubic yards of its maximum capacity of 16,840,000 cubic yards (CIWMB, 2009). The amount of boiler ash trucked to the Anderson Landfill is not substantial enough to cause the facility to exceed its daily permitted capacity or significantly alter the anticipated lifespan of the landfill.

Transportation of the boiler ash to the Anderson Landfill is subject to air quality mitigation measures, including the requirement that loads be covered (see Section 3.2, Air Quality, for more information). The Anderson landfill is subject to oversight by the California Integrated Waste Management Board, which includes monthly inspections to ensure compliance. The project

applicant is responsible for compliance with all Federal, State, and local regulations regarding solid waste. This impact is **less than significant** and no additional mitigation is required.