

## 6. CHESTER PUBLIC UTILITY DISTRICT

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Chester Public Utility District (Chester PUD) provides domestic water distribution, wastewater collection and treatment, fire protection and ambulance services. In addition, Chester PUD is partially reimbursed from the County for providing street lighting services and also awards and administers a solid waste collection franchise for the area.

### AGENCY OVERVIEW

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#### Background

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Chester PUD was formed in 1947 as an independent special district.<sup>29</sup> It was organized to provide water and wastewater services to the residents of Chester. In 2009, Chester PUD consolidated with Chester Fire Protection District (FPD), and consequently, took on fire protection and ambulance services.

The principal act that governs the District is the Public Utility District Act.<sup>30</sup> The principal act empowers the District to acquire, construct, own, operate, control, or use works for supplying light, water, power, heat, transportation, telephone service, or other means of communication, or means for the disposal of garbage, sewage, or refuse matter.<sup>31</sup> In addition, the District may acquire, construct, own, complete, use, and operate a fire department, street lighting system, public parks and other recreation facilities, and provide for the drainage of roads, streets, and public places.<sup>32</sup> Districts must apply and obtain LAFCo approval to exercise services authorized by the principal act but not already provided (i.e., latent powers) by the district at the end of 2000.<sup>33</sup>

Chester PUD is located on the northwestern shore of Lake Almanor in Plumas County. The District does not border any other water, wastewater or fire providers. West Almanor CSD is located to the south of Chester PUD, and Walker Ranch is to the east.

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<sup>29</sup> State Board of Equalization.

<sup>30</sup> Public Utilities Code §15501-17501.

<sup>31</sup> Public Utilities Code §16461.

<sup>32</sup> Public Utilities Code §16463.

<sup>33</sup> Government Code §56824.10.

### Boundaries

The Chester PUD boundary is entirely within Plumas County. The District's boundaries encompass approximately 1.75 square miles.<sup>34</sup>

Plumas LAFCo and State Board of Equalization records indicate that before the consolidation of Chester PUD and Chester FPD, the two districts underwent multiple annexations. All recorded boundary changes for Chester PUD and Chester FPD are shown in Figure 6-1. The most recent annexation before consolidation for both districts took place in 2006. Since consolidation, there have been no boundary changes for the District.

There is a subarea within the District, which was established as Zone A to define those areas receiving sewer services.

### Sphere of Influence

The SOIs for both, Chester PUD and FPD were first adopted in 1976.<sup>35</sup> Both were further revised in 1983.<sup>36</sup> The latest revision took place in 2006 after completion of MSRs for both districts.<sup>37</sup> For reference, the SOIs that were adopted in 2006 (indicating the anticipated growth area from 2006 to 2011) for each agency are shown in Figure 6-2; however, for the consolidated Chester PUD, as it presently exists, no sphere of influence has been adopted. During this round of SOI updates the Commission will need to adopt an SOI for the consolidated entity.

### Extra-territorial Services

Through automatic aid and mutual aid agreements, Chester PUD provides services outside of its bounds. Chester PUD maintains informal mutual aid agreements with all fire service providers in Plumas County.

Additionally, each fire provider in Plumas County has informally agreed to a service area that extends outside of their LAFCo-approved boundaries, in order to minimize those areas without a defined first responder. In the case of Chester PUD, the District's service area extends beyond the District's bounds along SR 36, Chester Warner Valley Road and Old Red Bluff Road. Chester PUD does not receive property tax revenue in the territory that lies outside of its bounds, and in effect is providing free services to these areas without reimbursement.

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<sup>34</sup> Total agency area calculated in GIS software based on agency boundaries as of July 1, 2011. The data is not considered survey quality.

<sup>35</sup> LAFCo Resolution Numbers 76-04 and 76-03.

<sup>36</sup> LAFCo Resolution Numbers 83-08 and 83-09.

<sup>37</sup> LAFCo Resolution Number 2006-003 and 2006-004.

Chester PUD provides extra-territorial services under an out-of-area service agreement (OASA).<sup>38</sup> An agreement was entered into by Chester PUD, Collins Pine Company and the Almanor Park and Recreation District in 2010 for a 20-year lease of property known as the Truman Collins Sports Complex on a 2.3-acre area needing water, wastewater and fire and EMS services provided by Chester PUD. The Almanor Park and Recreation District, through the Collins Pine Company, filed a Plumas LAFCo application for an OASA and Chester PUD agreed to serve and provide the sports complex area with domestic water and fire and EMS services, and in the future with wastewater.

Areas of Interest

The District did not identify any areas of interest.

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<sup>38</sup> LAFCo File Number 2010-OASA-001.

**Figure 6-1: Chester PUD Boundary History**

<i>Project Name</i>	<i>Type of Action</i>	<i>Year</i>	<i>Recording Agency</i>
<b><i>Chester PUD</i></b>			
Chester PUD	Formation	1947	SBOE
Highway 36 Right-of-way (Annexation #1)	Annexation	1974	LAFCo/SBOE
Vision Lake Subdivision #2	Annexation	1975	LAFCo/SBOE
SOI Adoption	SOI Adoption	1976	LAFCo
Lake Almanor Forest Annex. #2	Annexation	1979	LAFCo/SBOE
Martin Ranch	Annexation	1980	SBOE
Plumas Unified School District	Annexation	1981	LAFCo/SBOE
Chester Airport	Annexation	1981	LAFCo/SBOE
SOI Update	SOI Update	1983	LAFCo
Caulk	Annexation	1983	LAFCo/SBOE
Reorganization with Chester PUD	Reorganization	1984	LAFCo
Formation of Zone A	Formation	1984	SBOE
Higgins Territory	Annexation	1988	LAFCo/SBOE
Almanor Senior Residential Facility	Annexation	1989	LAFCo/SBOE
Higgins Territory	Annexation	1989	LAFCo/SBOE
Higgins/Lazzarini	Annexation	1989	LAFCo/SBOE
Collins Pine Territory	Annexation	1990	LAFCo/SBOE
USFS	Annexation	1999	LAFCo/SBOE
Caltrans Maintenance Facility	Annexation	2003	LAFCo/SBOE
Rouland Parcel	Annexation	2003	LAFCo/SBOE
USFS	Annexation	2003	LAFCo/SBOE
Wildwood Senior Center Parcel	Annexation	2005	LAFCo/SBOE
St. Clair Parcels	Annexation	2005	LAFCo/SBOE
SOI Update	SOI Update	2006	LAFCo
Feather River Partners	Annexation	2006	LAFCo/SBOE
<b><i>Chester FPD</i></b>			
Chester FPD	Formation	1941	SBOE
Unknown	Annexation	1949	SBOE
Unknown	Annexation	1961	SBOE
Vision Lake Subdivision	Annexation	1976	LAFCo/SBOE
SOI Adoption	SOI Adoption	1976	LAFCo
Lake Almanor Forest Annex. #1	Annexation	1979	LAFCo/SBOE
SOI Update	SOI Update	1983	LAFCo
Martin Ranch	Annexation	1983	LAFCo/SBOE
Caulk	Annexation	1984	LAFCo/SBOE
Higgins Territory	Annexation	1988	LAFCo/SBOE
Almanor Senior Residential Facility	Annexation	1989	LAFCo/SBOE
PUSD/FRC	Annexation	1993	LAFCo/SBOE
Rouland Parcel	Annexation	2003	LAFCo/SBOE
Wildwood Senior Center Parcel	Annexation	2005	LAFCo/SBOE
St. Clair Parcels	Annexation	2005	LAFCo/SBOE
SOI Update	SOI Update	2006	LAFCo
Feather River Partners	Annexation	2006	LAFCo/SBOE
<b><i>Consolidated District</i></b>			
Chester PUD and Chester FPD	Consolidation	2009	LAFCo

# Chester Public Utility District

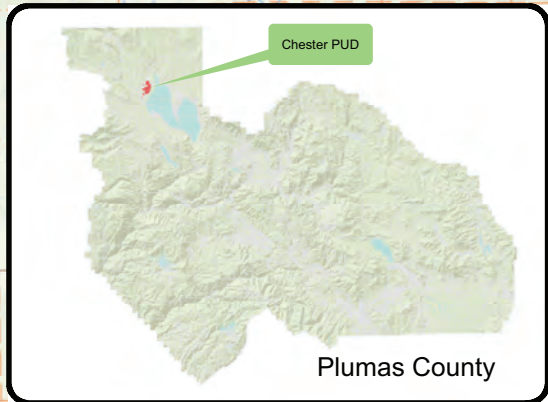
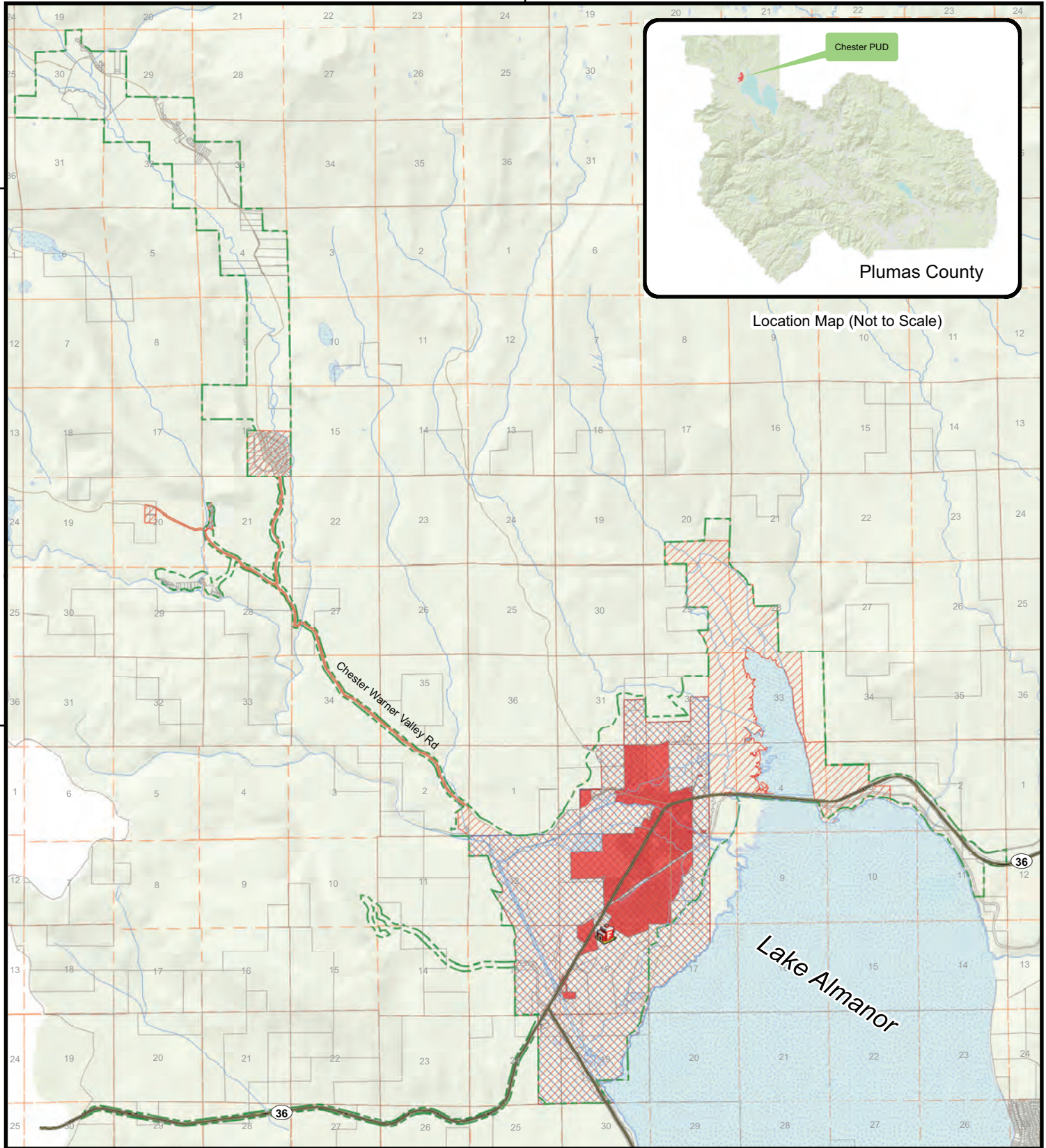
Range 6 East

Range 7 East

Township 30 North

Township 29 North

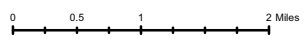
Township 28 North



Location Map (Not to Scale)

## Legend

- Highways
- Major Roads
- Stream / River
- Waterbodies
- Parcels
- Sectional Grid (MDB&M)
- Chester PUD
- Fire Station
- Previous PUD (SOI)
- Previous FPD (SOI)
- Fire Department Service Area



Chester PUD  
Resolution:  
Formed: July 7, 1947

Chester PUD (SOI)  
Resolution: 2006-003  
Adopted: March 13, 2006

Source: Plumas LAFCo Map Created 7/26/2012

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## Accountability and Governance

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Chester PUD is governed by a five-member board of directors who are elected at-large to staggered four-year terms. Following the consolidation, the Board was increased to seven members; however, the Board later went to five members upon expiration of two of the member's terms. Current board member names, positions, and term expiration dates are shown in Figure 6-3. All members of the Board are up for recall at the November 2012 election.

Board meetings are held on the second Tuesday of every month at four in the afternoon at the district office. Agendas are posted at the PUD office, courthouse, and in the newspaper. Minutes are available upon request. The District does not have a website, so its documents are not available online.

**Figure 6-3: Chester PUD Governing Body**

<b>Chester Public Utility District</b>				
<b><i>District Contact Information</i></b>				
<b>Contact:</b>	Ben Thompson, Interim General Manager			
<b>Address:</b>	251 Chester Airport Road, Chester, CA 96020			
<b>Telephone:</b>	530-258-2171			
<b>Email/website:</b>	None			
<b><i>Governing Body</i></b>				
Member Name	Position	Term Expiration	Manner of Selection	Length of Term
Tonu Plakk	Chair	December 2015	Elected	4 years
Dick Withrow	Director	December 2015	Elected	4 years
Ben Thompson	Director	December 2013	Elected	4 years
John Knopp	Director	December 2013	Elected	4 years
Gregg Scott	Director	December 2013	Elected	4 years
<b><i>Meetings</i></b>				
<b>Date:</b>	Second Tuesday of the month at 4 pm.			
<b>Location:</b>	PUD Office			
<b>Agenda Distribution:</b>	PUD Office, courthouse, and in the newspaper.			
<b>Minutes Distribution:</b>	Available upon request.			

In addition to the legally required agendas and minutes, to reach its constituents Chester PUD sends out annual water reports and makes announcements in the newspaper when necessary.

If a customer is dissatisfied with the District's services, complaints may be submitted in person or in writing. The general manager is responsible for handling complaints. Most complaints received by the District are regarding wastewater odor and water pressure. The District reported that it received two complaints in 2010, both of which were concerning wastewater. To address these complaints, Chester PUD has installed an odor reducing device.

Chester PUD demonstrated marginal accountability and transparency in its disclosure of information and cooperation with Plumas LAFCo. While the District had challenges with staffing that resulted in lack of a timely response, the District ultimately responded to the questionnaires and cooperated with the document and interview requests.

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## Planning and Management Practices

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Chester PUD has 12 full-time employees that include one part-time general manager/fire chief, one water/sewer foreman, two operators, 1.5 secretaries, one EMS captain, one fire captain, two to three firefighter medics, and two firefighter EMTs. The assistant chief is a per-diem employee who works part time. Until recently, the general manager/fire chief position was a full-time paid position. When the manager retired in August 2012, the Board chose to fill the position part time with a Board Member, until an adequate replacement can be found.

The general manager oversees both the fire and utility functions of the District. The water and sewer operators report to the foreman who reports to the general manager. The firefighters report to the two captains who also report to the general manager.

The general manager/fire chief evaluates employees annually. The general manager is evaluated by the Board of Directors.

To track staff workload, district employees fill out and submit timesheets. Service calls and personnel responding are tracked in a log book. There are also log books for vehicle maintenance and for water and wastewater facilities maintenance.

Chester PUD does not perform formal evaluations of overall district performance, such as benchmarking or annual reports. The District attempted to institute an annual report regarding fire services; however, there was a general lack of interest and the report was discontinued.

In order to increase efficiency and reduce costs, the District recently consolidated with the Chester Fire Protection District, enabling it to eliminate duplication of administration functions. The District has downsized staff and the fire department has been reduced to one ALS ambulance crew.

The District's financial planning efforts include an annually adopted budget and annually audited financial statements. It was discovered that the District has not made significant changes to its budget over the last several years; as a result, increases in costs over time and the effects of merging the two districts into one have not been reflected in recent budgets.<sup>39</sup> It is recommended that Chester PUD update its budgeting process to reflect the current conditions of the District. Chester PUD does not adopt any other

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<sup>39</sup> Chester PUD, *Audit Report*, 2011, p. 14.

planning documents, such as a master plan or strategic plan. The District plans for capital improvement projects annually in the budget.

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## Existing Demand and Growth Projections

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Designated land uses within the District are primarily residential, suburban, recreational, commercial, timber production, and general agriculture.<sup>40</sup> The District's boundary area is approximately 1.75 square miles.

### Population

There are approximately 2,144 residents within the District, based on census place population in the 2010 Census.<sup>41</sup>

### Existing Demand

The District reported that it had observed little change in the level of service demand in the last few years. One water and one wastewater connection have been added between 2010 and 2011; however, overall demand for water and wastewater services have generally declined, due to an increase in vacancies and water conservation. Total fire service call volume appears to be slightly up in 2011, compared to the previous year.

Peak demand for water and wastewater is usually in July and August. Similarly, the peak demand time for fire services is also in the summer months when the area experiences an influx of tourists and seasonal residents. Calls for medical emergencies are consistently high in volume throughout the year, similar to other fire districts in the region.

### Projected Growth and Development

The agency anticipates little or no growth in population and similarly in service demand within the District in the next few years; however, no formal population projections have been made by the District.

The State Department of Finance (DOF) projects that the population of Plumas County will grow by five percent in the next 10 years. Thus, the average annual population growth in the County is anticipated to be approximately 0.5 percent. Based on these projections, the District's population would increase from 2,144 in 2010 to approximately 2,251 in 2020. It is anticipated that demand for service within the District will increase minimally based on the DOF population growth projections through 2020.

Chester PUD reports that there is little potential for development within its boundaries or in the areas adjacent to the District. There is one planned development just north of

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<sup>40</sup> Plumas County Parcel Application.

<sup>41</sup> Census Place Chester in Plumas County.



Chester within an area that was annexed into the District in 2007. Forty two units were planned, but due to the recession, construction has stalled. Prior to the recession, another development was proposed with a mixture of residential and commercial land uses; however, the area was never annexed into the District.

The District reported that it had capacity to provide adequate services to its current service area and anticipated future growth within its bounds. In order to adequately serve areas outside of its bounds, specifically for fire service, the District needs sufficient funding (i.e., property tax or special assessment) for services which are presently not being reimbursed. While growth in the community of Chester is foreseeable and manageable, there is a need to address growth needs outside of Chester to determine the potential of Chester PUD becoming a regional sanitation treatment agency. The previous MSR noted that Chester PUD is equipped to become the regional sanitation agency in the Almanor basin, but it has not addressed, developed or adopted a plan to get there.

### Growth Strategies

The District is not a land use authority, and does not hold primary responsibility for implementing growth strategies. The land use authority for unincorporated areas is the County.

The County enforces the codes that it has enforcement power over, which does not encompass all State fire codes. The County ensures that new construction meets the requirements of the latest adopted edition of the California Building Standards. The County enforces the County codes that have been adopted in lieu of the California Fire Safe regulations. The County does not have authority to enforce PRC 4291, which requires defensible space around structures; however, the County does have some enforcement authority over vegetation removal around buildings that was adopted prior to PRC 4291. In addition, the Board of Supervisors, through the adoption of the General Plan and county codes, regulates development standards to be followed in processing subdivisions, including fire protection.

The proposals for new developments are sent for review to the appropriate fire provider, if a development is within district's boundaries. The County reported that as SOI maps have not been digitized, it has been challenging to ensure that proposals go to the appropriate district, if a proposed development was within that district's SOI but outside its boundaries. The County and Plumas LAFCo are working together on a process to ensure that all appropriate districts are contacted for review of proposed developments. The County Board of Supervisors recently contracted with a fire prevention specialist; however, this position has no responsibility for code enforcement and building inspections.

The County has several policies in the existing general plan, which impact the fire providers of new developments.

- 1) Turnouts are now required in every new development.<sup>42</sup>
- 2) The County encourages development to be located adjacent to or within areas where fire services already exist or can be efficiently provided.<sup>43</sup>
- 3) The County requires new developments within areas not currently served by a fire provider to be annexed into an existing fire district or create a funding mechanism, such as a CSD, to cover the costs of fire service provision.<sup>44</sup>
- 4) Sustainable timber and biomass production and harvesting as well as intensive forest management practices are encouraged to reduce the danger of catastrophic wildfires.<sup>45</sup>
- 5) There is a minimum requirement of two roadway access points, which are maintained on a year-round basis by the County or the State.<sup>46</sup>
- 6) Minimum public and private road standards: roads providing access to two or more lots have to conform to a two-lane standard of no less than 16-foot traveled way.<sup>47</sup>
- 7) Bridges are required to be designed for an 80,000 pound vehicle load.<sup>48</sup>
- 8) All access roads must be marked with an approved sign; and all lots must be identified by an address.<sup>49</sup>
- 9) All developments within boundaries of a structural fire service provider may be required to contribute to the maintenance of the structural service proportionate to the increase in demand for fire service resulting from the development.<sup>50</sup>
- 10) As a condition of development it is required to provide long-term maintenance of private roads to the standards of original improvements, including roadside vegetation management.<sup>51</sup>

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<sup>42</sup> Plumas County Code of Ordinances, Title 9 Section 9-4.604 (k).

<sup>43</sup> Plumas County, *General Plan*, 1984, pp. 28 & 29.

<sup>44</sup> *Ibid.*, p. 28.

<sup>45</sup> *Ibid.*, p. 32.

<sup>46</sup> *Ibid.*, p. 16.

<sup>47</sup> *Ibid.*,

<sup>48</sup> *Ibid.*

<sup>49</sup> *Ibid.*

<sup>50</sup> *Ibid.*

11)The County encourages biomass thinning programs in high fire risk areas.<sup>52</sup>

The County is in the process of updating its general plan. The suggested new policies in the General Plan update that would impact fire service providers, but had not yet been adopted as of the drafting of this report, include:

12)The County shall review and update its Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map or building permit stage.

13)The County will consult Fire Hazard Severity Zone Maps during the review of all projects. The County will work with fire protection agencies to develop community fire plans and require appropriate building setbacks and fuel modification requirements within fire hazard zones.

14)In order for the new development to be approved, the County must conclude that adequate emergency water flow, fire access and firefighters and equipment are available.

15)New developments have to show that they have adequate access for emergency vehicles to access the site and for private vehicles to evacuate the area.

16)New developments within high and very high fire hazard areas are required to designate fuel break zones that comply with fire safe requirements.

17)The County will work with Forest Service and fire districts in developing fire prevention programs, identifying opportunities for fuel breaks in zones of high and very high fire hazard and educating public.

18)Fire, law enforcement, EMS, resource management, and public health response partners are encouraged to conduct joint training exercises.<sup>53</sup>

The County has not adopted the new standards for development yet. The revised General Plan may be adopted towards the end of 2012. The County zoning code will then go through a revision process in order for the zoning code to implement the General Plan.

In 2007, the Board of Supervisors formed the Emergency Services Feasibility Study Group to “evaluate the funding feasibility of providing uniform and comprehensive emergency services to all of Plumas County.” The Committee attempted to look for opportunities to increase funding for emergency services, but faced a considerable challenge in the difficult economic times. It has been working on mitigating efforts through

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<sup>51</sup> Plumas County Code of Ordinances, Title 9 Section 9-4.601.

<sup>52</sup> Plumas County Code of Ordinances, Title 4 Section 4-2.101.

<sup>53</sup> Plumas County General Plan, Draft Goals, Policies and Implementation Measures, 2010.

building and development standards improvements and the General Plan update process, and encouraging local fire service providers to share resources and realize economies of scale in preparing grant applications, conducting training and engaging in other joint programs. Most recently, the Committee has focused on addressing properties that are located outside of a fire district boundaries and are not properly served, and hiring a fire prevention specialist who will develop strategies and plans to help resolve the out-of-district problem by working with the public, local fire districts, Fire Safe Council, Feasibility Group and the Board of Supervisors and by updating community wildfire protection plans and Firewise Community plans.

During the previous MSR, the District's general manager referred to Chester PUD as being a regional sanitation treatment plant. The MSR noted that there may be a way of regionalizing by reaching out to fledgling sanitation and domestic water agencies in the Almanor basin to provide collaboration, advice and contract services where it has not been done in the past. Further, the District might also adopt a proactive approach with the County to offer itself as the regional agency to go to for actual administrative, treatment, operations and maintenance services to all communities around the Almanor basin. Chester PUD could also work aggressively with the Plumas County Planning Department to make it known that it will extend itself into other territory outside of Chester to raise the level of treatment plant planning, operations and maintenance in the region. If Chester PUD expands its mission beyond Chester toward a regional planning mode, opportunities may evolve into shared contract services among numerous basin communities. The previous MSR noted that the benefits of regionalizing wastewater administration and operations may be a more experienced and trained staff that can efficiently and cost effectively deliver services to the entire Almanor basin.

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## Financing

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The District reported that the current financing level is not adequate for fire services and adequate to deliver water and sewer services. Overall, the District has faced declining water and wastewater revenues, as well as property tax revenues, as a result of the recent recession. Additionally, the District experienced a decline in ambulance revenues over the last few years, most likely attributable to a reduction in service calls in the area. Due to these declining revenues, District expenditures exceeded total income by \$349,399 in FY 10-11. This trend continued in FY 11-12 when the District's expenditures exceed revenues by approximately \$350,000. As a result, the District is making efforts to reduce personnel by not replacing positions as they open up due to attrition or retirement and reduce costs associated with salary and benefits. Additionally, the District has attempted to improve revenues by adjusting ambulance billing.

Chester PUD operates out of the following three enterprise funds: the Water Fund, Sanitation Fund and Fire Fund. The Water Fund accounts for water and street lighting income, expenses, and net assets. The Sanitation Fund accounts for sewer and solid waste related income and expenses. The Fire Fund tracks fire and ambulance related revenues and expenses.

The District's total revenues for FY 10-11 were \$2.7 million. Primary revenue sources included utility sales (33.3 percent), charges for services (48.3 percent), and income from property taxes (17.3 percent). While income from interest, miscellaneous sources, and grants constituted just over one percent of the District's revenues.

The funding for maintenance and operation of the sanitation sewer system and water distribution system is intended to be fully funded by utility charges. The District Board of Directors approves charges for water and wastewater service based upon staff generated budget analysis. The analysis is prepared by the District's general manager. These rates were last updated in 2007. Water service charges depend on the size of the meter at the connection. A single-family residence would pay a monthly rate of \$15.09 and \$0.90 for every 1,000 gallons in excess of 6,000. For wastewater services, every connection is charged a flat rate of \$38.05 regardless of type or size of connection. In FY 10-11, water charges totaled \$351,417 in revenues for the District, and sewer charges totaled \$531,923 in the same year.

District fire and ambulance services are funded primarily by ambulance service charges (\$1.3 million) and augmented by property taxes (\$293,506) and grants (\$13,000).

With regard to street lighting, Plumas County reimburses the District for 25 percent of costs historically. During FY 10-11 the costs incurred for street lighting amounted to \$29,872. Accordingly, the County contributed \$7,468 and Chester PUD incurred the remaining \$22,404 in costs associated with street lighting from its general fund. Street lighting presents an ongoing funding problem for the District. District staff believes that the time may come when streetlights may have to be turned off if a benefit assessment, through voter approval, is not put in place to fund this expense.

Solid waste collection is provided by contract. Chester PUD awards and administers a franchise for refuse collection and solid waste disposal within its territorial boundaries. Under the current contract the franchisee is required to pay Chester PUD an annual franchise fee of \$2,100 in two semi-annual installments of \$1,050. A four-percent surcharge is placed on the monthly solid waste bill; however, this is used to fund Plumas County solid waste administration expenses and is simply a pass-through for Feather River Disposal.

The District's expenditures in FY 10-11 were approximately \$3 million. Expenditures were primarily composed of salaries and benefits (74 percent), depreciation (12 percent), utilities (four percent), and professional services (three percent). Insurance, vehicles and equipment, repairs and maintenance, office supplies, and other expenses made up less than eight percent of expenses.

During the course of Chester PUD's most recent audit, the auditor identified two significant deficiencies to internal fiscal control, both of which were considered material weaknesses.<sup>54</sup> The auditor found that due to the number of personnel assigned to duties that involve access to the general ledger and other accounting records and who also have

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<sup>54</sup> Chester PUD, *Audit Report*, 2011, p. 26.

custody of and responsibility for handling cash and other assets, and inadequate segregation of duties exists. The District responded that due to the small nature of the agency, it is not possible to cost effectively mitigate this finding. Additionally, the auditor found that similar to many other California special districts, Chester PUD does not have policies and procedures in place to ensure complete and accurate financial statements, footnote disclosures, and management's discussion and analysis are prepared in accordance with Generally Accepted Accounting Principles prior to the audit. The District determined that the cost of correcting this weakness is greater than the benefits that would be received.

At the end of FY 10-11, Chester PUD had \$242,748 in debt, consisting of a capital lease payable to Wells Fargo Institutional Securities and a note payable from the Fire Fund to the Sanitation Fund. Originally, the Wells Fargo lease was issued for \$267,000 with 4.25 percent interest and funded the solar bees for the wastewater facility. This loan has since been paid off. The loan to the Sanitation Fund from the Fire Fund was for partial funding of the new building. Both loans were used for wastewater services.

The District has fund balances for fire, water and wastewater services that may be used for contingencies. The Water Fund has unrestricted net assets of \$2.45 million, and the Sanitation Fund has a balance of \$1.3 million, while the fire reserve is minimal with unrestricted net assets of \$74,990 at the end of FY 10-11.

The District participates in the Fire Agency Self Insurance System (FASIS)—a joint power authority (JPA) for insurance.

## WATER SERVICES

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### Service Overview

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Chester PUD provides domestic drinking water services to the residents and commercial establishments within the boundaries of the District. There are approximately 1,197 service connections, all of which are metered.

Additionally, the District provides retail water services under an out-of-area service agreement (OASA) with Almanor Park and Recreation District to Truman Collins Sports Complex.

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### Staffing

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Chester PUD dedicates 1.5 full-time equivalents to water services.

The chief operator maintains a certification level of T2 for treatment systems and D2 for distribution systems, which meets the system requirements.

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### Facilities and Capacity

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The District's water system includes three wells, emergency well-head treatment, and 18 miles of distribution mains.

The District relies entirely on groundwater from the Lake Almanor groundwater basin for its water supply from four wells. The water is considered to be generally of excellent quality, but is most vulnerable to turbidity, lead, copper, total coliforms, fecal coliforms, and terrorist attacks. Lake Almanor Valley basin has locally high levels of copper, lead, iron, manganese, calcium, and boron.<sup>55</sup> The District does not continuously treat the water, but maintains a portable sodium hypochlorite pump system, which can be used at any well site in the event of an emergency.

The water system, which was originally installed in 1967, has undergone numerous improvements and expansions since that time. One of the most recent and notable of the water system improvements was the completion of the new production source Well 4. This well was located outside the present District boundaries. The well was subsequently abandoned due to numerous problems the District experienced with it, and the District is now in the process of drilling Well 5.

The District's three previously existing wells were being utilized to near maximum capacity during the high demand summer period. When growth dictates additional water

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<sup>55</sup> State Water Resources Control Board, *Lake Almanor Valley Groundwater Basin – California's Groundwater Bulletin 118*, 2003, p. 2.

supply is needed, it is worth noting that in 2000 the District had an exploratory well drilled on lands of Sierra Pacific that proved to have a substantial sustained yield. The District purchased a small piece of property where the test well was drilled, and the District will develop a production well on the site as the need demands. Growth will be the determining factor of when to expand district water capacity. The source and funds for expanding well capacity will be derived through exactions and impact fees from the developers seeking services to their new projects.

Waterworks standards require a water system's sources to have the capacity to meet the system's maximum day demand (mdd). The District meets this requirement with 1.98 million gallons per day (mgd) source capacity compared to their highest mdd of 1.772 mg. Waterworks standards require that community systems using only groundwater shall be capable of meeting maximum day demand with the highest capacity source off-line. With Well 02 offline, the system would have 1.936 mgd source and storage capacity, which would be adequate to meet a 1.772 MG demand. When Well 5 is brought online it will provide additional capacity. Presently, it is unknown what the pumping capacity of Well 5 will be.

The District maintains two welded steel storage tanks with a total of 1.0 mg of storage capacity. The tanks were identified as being in good condition. For systems with 1,000 or more service connections, the system shall be able to meet four hours of peak hourly demand with source capacity, storage capacity, and/or emergency source connections. The highest four hour peak demand during the last 10 years (2000-2010) is 443,000 gallons. Four hours of the water system's total source capacity from the wells is 330,000 gallons. Therefore, the additional 113,000 gallons must be available from storage; the District's 1.0 mg of storage more than meets this requirement.

The District's distribution system consists of 18 miles of asbestos cement (85 percent), PVC (14 percent) and steel (one percent) pipelines. The mains are reportedly in good condition. The system is entirely gravity fed.

Based on the OASA that was approved in 2010, Chester PUD appears to have the capacity in its overall system to provide retail water services to the areas outside its jurisdiction, such as the sports complex, without negatively impacting the ability of the District to provide such services to the present constituent users within its own jurisdiction.

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## Infrastructure Needs

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The District did not identify any particular infrastructure needs with regards to the water system.

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## Challenges

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While Chester PUD did not identify any challenges to providing adequate water services, the District has recently faced turmoil, due to notification of a recall election of the



entire board that is to be held in November 2012, and the simultaneous retirement of the general manager.

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## Service Adequacy

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This section reviews indicators of service adequacy, including the California Department of Public Health system evaluation, drinking water quality, and distribution system integrity.

The DPH is responsible for the enforcement of the federal and California Safe Drinking Water Acts and the operational permitting and regulatory oversight of public water systems. Domestic water providers of at least 200 connections are subject to inspections by DPH. During the Department of Public Health's most recent annual inspection in 2011, DPH reported that Chester PUD's system "appears to be well operated and maintained and is in significant compliance with drinking water regulations. Source water monitoring is up-to-date and water quality continues to be excellent with no primary or secondary MCL violations. As noted in the inspection report, the water system has source and storage capacity to meet customer demands."<sup>56</sup> It was noted that the District was overdue for asbestos, lead and copper sampling. Chester PUD reported that it had since brought all sampling up to date.

Drinking water quality is determined by a combination of historical violations reported by the EPA since 2000 and the percent of time that the District was in compliance with Primary Drinking Water Regulations in 2011. Since 2000, the District has had three health violations, all of which were related to coliform, and no monitoring violations. This equates to approximately 2.5 violations per 1,000 connections served. By comparison, the other water providers in the Lake Almanor region of the County had an average of 2.16 violations per 1,000 connections served during that same time frame. The median water service provider in the region was in compliance 100 percent of the time in 2011. The District was in compliance with drinking water regulations 100 percent of the time, which was equal the regional average.

Indicators of distribution system integrity are the number of breaks and leaks in 2011 and the rate of unaccounted for distribution loss. Chester PUD reported approximately 11 breaks and leaks per 100 miles of pipe lines in 2011, while other providers in the region had a median rate of 11 breaks per 100 pipe miles. The District was unable to provide an estimate of what portion of water is lost between the water source and the connections served. By comparison, other providers in the area averaged 12 percent distribution losses.

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<sup>56</sup> Department of Public Health, Annual Inspection Report, 2012, p. 11.

**Figure 6-4: Chester PUD Water Service Adequacy Indicators**

<b>Water Service Adequacy and Efficiency Indicators</b>			
<b>Service Adequacy Indicators</b>			
Connections/FTE	798	O&M Cost Ratio <sup>1</sup>	\$794,149
MGD Delivered/FTE	0.39	Distribution Loss Rate	Unknown
Distribution Breaks & Leaks (2011)	2	Distribution Break Rate <sup>2</sup>	11
Water Pressure	70 - 80 psi	Total Employees (FTEs)	1.5
Customer Complaints CY 2011:    Odor/taste (0), leaks (0), pressure (0), other (0)			
<b>Drinking Water Quality Regulatory Information</b> <sup>3</sup>			
	#	Description	
Health Violations	3	Exceedance of coliform MCL 10/2002, 11/2002, 11/2006	
Monitoring Violations	0		
DW Compliance Rate <sup>4</sup>	100%		
Notes:			
(1) Operations and maintenance costs (exc. purchased water, debt, depreciation) per volume (mgd) delivered.			
(2) Distribution break rate is the number of leaks and pipeline breaks per 100 miles of distribution piping.			
(3) Violations since 2000, as reported by the U.S. EPA Safe Drinking Water Information System.			
(4) Drinking water compliance is percent of time in compliance with National Primary Drinking Water Regulations in 2011.			

**Figure 6-5: Chester PUD Water Service Tables**

<b>Water Service Configuration &amp; Infrastructure</b>				
<i>Water Service</i>	<i>Provider(s)</i>	<i>Water Service</i>	<i>Provider(s)</i>	
Retail Water	Chester PUD	Groundwater Recharge	None	
Wholesale Water	None	Groundwater Extraction	Chester PUD	
Water Treatment	None	Recycled Water	None	
<b>Service Area Description</b>				
Retail Water	Developed parcels within Chester PUD's bounds.			
Wholesale Water	NA			
Recycled Water	NA			
<b>Water Sources</b>		<b>Supply (Acre-Feet/Year)</b>		
Source	Type	Average	Maximum <sup>2</sup>	Safe/Firm
Lake Almanor Valley Groundwater Basin	Groundwater	649.4	2,190	Unknown
<b>System Overview</b>				
Average Daily Demand	0.59	mg	Peak Day Demand	1.772 mg
<b>Major Facilities</b>				
Facility Name	Type	Capacity	Condition	Yr Built
Well 3	Well	250 gpm	Good	1981
Well 1B	Well	400 gpm	Good	1990
Well 2	Well	725 gpm	Good	1967
Well 4	Well	Abandoned	NA	2006
Well 5	Well	Unknown	Excellent	2012
Tank 1	Storage	0.5 mg	Good	1967
Tank 2	Storage	0.5 mg	Good	1995
<b>Other Infrastructure</b>				
Reservoirs	-	Storage Capacity (mg)	1.0 mg	
Pump Stations	0	Pressure Zones	1	
Production Wells	4	Pipe Miles	18	
Other:				
<b>Facility-Sharing and Regional Collaboration</b>				
<b>Current Practices:</b> The District does not practice facility or equipment sharing with regard to water services.				
<b>Opportunities:</b> No further opportunities for facility sharing were identified.				
Notes:				
(1) NA means Not Applicable, NP means Not Provided, mg means millions of gallons, af means acre-feet.				
(2) Total combined pumping capacity of the District's wells.				

<b>Water Demand and Supply</b>							
<i>Service Connections</i>	<i>Total</i>		<i>Inside Bounds</i>		<i>Outside Bounds</i>		
Total	1,197		1,196		0		
Irrigation/Landscape	0		0		0		
Domestic	1,117		1,117		0		
Commercial/Industrial/Institutional	80		79		1		
Recycled	0		0		0		
Other	0		0		0		
<i>Average Annual Demand Information (Acre-Feet per Year)</i>							
	2000	2005	2010	2015	2020	2025	2030
Total	NP	NP	NP	NP	NP	NP	NP
Residential	NP	NP	NP	NP	NP	NP	NP
Commercial/Industrial	NP	NP	NP	NP	NP	NP	NP
Irrigation/Landscape	NP	NP	NP	NP	NP	NP	NP
Other	NP	NP	NP	NP	NP	NP	NP
<i>Supply Information (Acre-feet per Year)</i>							
	2000	2005	2010	2015	2020	2025	2030
Total	NA	698	658	674	691	709	727
Imported	0	0	0	0	0	0	0
Groundwater	NA	698	658	674	691	709	727
Surface	0	0	0	0	0	0	0
Recycled	0	0	0	0	0	0	0
<i>Drought Supply and Plans</i>							
Drought Supply (af)	Year 1: Unknown		Year 2: Unknown		Year 3: Unknown		
Storage Practices	Storage is for treatment and short-term emergency supply only.						
Drought Plan	The district does not have a drought contingency plan.						
<i>Water Conservation Practices</i>							
CUWCC Signatory	No						
Metering	Yes						
Conservation Pricing	Yes						
Other Practices	None						

<b>Water Rates and Financing</b>			
<b><i>Residential Water Rates-Ongoing Charges FY 10-11<sup>1</sup></i></b>			
	<b>Rate Description</b>	<b>Avg. Monthly Charges</b>	<b>Consumption<sup>2</sup></b>
Residential	Flat monthly rate of \$15.09 per residential connection plus \$0.90 per 1,000 gallons in excess of 6,000 gallons per month.	\$17	7,600 gal/month
<b><i>Rate-Setting Procedures</i></b>			
Most Recent Rate Change	4/1/2007	Frequency of Rate Changes	As needed
<b><i>Water Development Fees and Requirements</i></b>			
Fee Approach	Cost of time and materials plus 10 percent		
Connection Fee Amount	\$110		
Development Impact Fee	None		
Notes:			
(1) Rates include water-related service charges and usage charges.			
(2) Water use assumptions were used to calculate average monthly bills. Assumed use levels are consistent countywide for comparison purposes.			

## WASTEWATER SERVICES

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### Service Overview

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Chester PUD provides sanitation sewer collection, treatment and disposal for most of the homes and businesses in Chester; the Forest Subdivision is the only area within the Chester PUD boundaries permitted for on-site individual waste disposal systems i.e., septic tanks and leach fields.

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### Staffing

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Chester PUD dedicates 1.5 full-time equivalents to wastewater services.

The chief operator maintains a certification level of Wastewater Operator Grade II, which meets the requirements of the system.

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### Facilities and Capacity

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Chester PUD's wastewater system consists of a treatment plant, wetlands, and 12 miles of collection mains.

The District owns and operates a municipal wastewater collection, treatment, and disposal facility. The District's original treatment plant was constructed in the early 1950s and underwent a substantial upgrade in 1980. The District reported that the treatment plant is considered to be in good condition. The treatment system consists of a bar screen for large solids removal, an influent parshall flume for influent wastewater flow measurement, six facultative wastewater treatment ponds, effluent chlorination with a serpentine chlorination chamber and effluent parshall flume, and dechlorination when effluent is discharged to Lake Almanor (currently allowed from October 1 to May 31).

During the recreation season discharge prohibition period, June 1 to September 30, wastewater is not dechlorinated and is discharged to a series of three constructed wetlands of six acres near the wastewater ponds. Discharge from the wetlands ponds to the Lake is prohibited. Wastewater discharge to Lake Almanor does not take place every year and wastewater is seldom discharged before December of any given year. Since April 2004, the District has discharged to the Lake during four months in 2005 and six months in 2006, but not in 2007, 2008, or 2009.

The District is regulated by Waste Discharge Requirements (WDR) Order Number R5-2009-0078 and NPDES Permit Number CA0077747. The treatment facility has a permitted capacity of 0.5 million gallons per day (mgd) average dry weather flow (ADWF) and a design capacity of 0.75 ADWF. In 2011, ADWF was 0.64 mgd, which equates to 128 percent of the facility's permitted capacity and 85 percent of the facilities design capacity.

Chester PUD has had challenges in meeting effluent disinfection requirements, but generally only during times discharge to the Lake is not occurring. To help address the issue, the District added aerators to each of the ponds in November of 2008, as their engineer believes the added aeration and mixing will improve disinfection performance during the cold winter months. The cost of the aerator addition was approximately \$200,000 after energy efficiency credits were rebated. According to the Regional Water Quality Control Board (RWQCB), since the aerator addition, disinfection has markedly improved.

Chester PUD's collection system consists of 12 miles of entirely clay mains. The collection system, also constructed in the 1950s, has considerable shortcomings. There is a significant quantity of extraneous water entering the pipes, a condition known as infiltration and inflow (I/I).

The District has embarked on an ambitious program to replace this deteriorated collection system over the course of twenty years. In order to accomplish this, a rate increase was implemented in 2002, which would provide the income necessary to replace one mile of line every other year. Due to a handful of protests during the rate review process the Board determined to phase the increase over a five-year period to lessen the rate shock. This of course will have the consequence of lengthening the number of years in which to bring the project to completion. The first phase of the replacement project was funded and completed during FY 04-05. The District incurred expenses in excess of \$630,000 to replace approximately 3,700 lineal feet of sewer main as well as laterals and manholes. Another mile was replaced in 2011. The District Board intends to continue the replacement project as funds become available.

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## Infrastructure Needs

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As previously discussed, the District faces significant I/I in its collection system. The District has an ADWF of approximately 0.64 mgd (during high tourist seasons), yet inflows to the plant have been known to exceed 1.5 mgd under wet weather conditions. The I/I is thought to result from periodic high groundwater and collection system defects, such as broken and settling pipes, leaking joints, and unsealed connections. The District has been subject to several cease and desist orders regarding illegal discharges that have resulted from the significant I/I. Chester PUD's solution, only partly implemented to date, is to replace the entire sewage collection system. There are no plans at this time for when this is likely to occur. To date, about 15 percent of the collection system has been replaced.

The RWQCB reported that Chester PUD has taken meaningful steps to reduce I/I. These included replacing about 10 percent of the 11-mile collection system in 2001, augmenting land disposal capacity by constructing three wetland ponds, and increasing user fees to fund future collection line replacements. These measures appear to have been beneficial, as only one illegal discharge has occurred since the wetlands ponds were completed in 1999—in the 2005/2006 rainy season, during which heavy rainfall was exacerbated by a rapid snowmelt). Until the defective portions of the collection system have been replaced as planned, the potential remains, during very wet years, for surface water discharge during the recreation season.

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## Challenges

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The primary challenge to providing adequate services that was identified by the District is the high I/I in the collection system, which has already been discussed.

Additionally, the District has recently faced turmoil, due to notification of a recall election of the entire board that is to be held in November 2012, and the simultaneous retirement of the general manager.

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## Service Adequacy

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This section reviews indicators of service adequacy, including regulatory compliance, treatment effectiveness, sewer overflows and collection system integrity.

The District had no violations between the period from January 1, 2009 to December 31, 2011. By comparison, other wastewater providers in the Lake Almanor region of the County averaged one violation per 1,000 population served. However, it should be noted that Chester PUD has faced challenges with compliance with discharge requirements in the past. The District has consistently operated under Cease and Desist Orders since 1987. Most recently, in 2004, a Cease and Desist order was adopted, due to I/I problems in the collection system, violations of effluent percentage removal limitations for BOD and total suspended solids, and effluent coliform violations. The order required the District to repair the collection system. Due to partial compliance with the order's requirements, the order was rescinded in 2009 and a new order was adopted requiring continued improvements to the system. Additionally, in 2008, the District was issued an Administrative Civil Liability Order as chlorine levels exceeded maximum concentration limits. The District was fined \$3,000.

Wastewater treatment providers are required to comply with effluent quality standards under the waste discharge requirements determined by RWQCB. The District reported that in 2011, it was never out of compliance with effluent quality requirements. Other wastewater providers in the Lake Almanor region of Plumas County were not out of compliance in 2011.

Wastewater agencies are required to report sewer system overflows (SSOs) to SWRCB. Overflows reflect the capacity and condition of collection system piping and the effectiveness of routine maintenance. The sewer overflow rate is calculated as the number of overflows per 100 miles of collection piping. Chester PUD reported one overflow during the period from 2009 thru 2011, and consequently the overflow rate is nine. Other providers in the region averaged an SSO rate of three per 100 miles of collection piping.

There are several measures of integrity of the wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices. The District's high tourist population during the summer makes it hard to calculate a peaking factor that is indicative of the true amount of I/I that is entering the system. Based on average dry weather flow and the known highest flow into the system during wet



weather, the peaking factor is 2.3, which is moderate; however, it is clear that the system suffers from high I/I as previously discussed.

**Figure 6-6: Chester PUD Wastewater Service Adequacy Indicators**

<b>Wastewater Service Adequacy and Efficiency</b>			
<b>Regulatory Compliance Record, 2009-11</b>			
Formal Enforcement Actions	1	Informal Enforcement Actions	0
<b>Enforcement Action Type</b>		<b>Description of Violations</b>	
Cease and Desist Order (R5-2009-0080)		Severe I/I	
<b>Total Violations, 2009-11</b>			
Total Violations	0	Priority Violations	0
<b>Service Adequacy Indicators</b>			
Treatment Effectiveness Rate <sup>2</sup>	100%	Sewer Overflows 2009 - 2011 <sup>3</sup>	1
Total Employees (FTEs)	1.5	Sewer Overflow Rate <sup>4</sup>	9
MGD Treated per FTE	0.427	Customer Complaints CY 11: Odor (2), spills (0), other (0)	
<b>Source Control and Pollution Prevention Practices</b>			
Chester PUD does not practice any source control of pollution prevention.			
<b>Collection System Inspection Practices</b>			
The District annually CCTVs approximately 0.5 miles of the collection system.			
Notes:			
(1) Order or Code Violations include sanitary sewer overflow violations.			
(2) Total number of compliance days in 2011 per 365 days.			
(3) Total number of overflows experienced (excluding those caused by customers) from 2009 to 2011 as reported by the agency.			
(4) Sewer overflows from 2009 to 2011 (excluding those caused by customers) per 100 miles of collection piping.			

**Figure 6-7: Chester PUD Wastewater Profile**

<b>Wastewater Service Configuration and Demand</b>					
<b>Service Configuration</b>					
Service Type	Service Provider(s)				
Wastewater Collection	Chester PUD				
Wastewater Treatment	Chester PUD				
Wastewater Disposal	Chester PUD				
Recycled Water	None				
<b>Service Area</b>					
Collection:	Town of Chester with the exception of the Forest Subdivision which is on septic				
Treatment:	Town of Chester with the exception of the Forest Subdivision which is on septic				
Recycled Water:	None				
<b>Service Demand</b>					
Type	Connections (2011) Total	Inside Bounds	Outside Bounds	Flow (mgd) Average	
Total	1,197	1,197	0	1.00	
Residential	1,117	1,117	0	NP	
Commercial/Industrial	80	79	1	NP	
<b>Historical and Projected Demand (ADWF in millions of gallons per day) <sup>2</sup></b>					
2005	2010	2015	2020	2025	
NP	1.3	1.4	1.5	2.0	
Note:					
(1) NA: Not Applicable; NP: Not Provided.					
(2) Projections are as reported by the District.					

<b>Wastewater Infrastructure</b>			
<b>Wastewater Collection, Treatment &amp; Disposal Infrastructure</b>			
<b>System Overview</b>			
Treatment level: Secondary			
Disposal method: Lake Almanor from October 1 to May 30, man-made wetlands at other times.			
<b>Facility Name</b>	<b>Capacity</b>	<b>Condition</b>	<b>Year Built</b>
Treatment Plant	0.5 mgd ADWF	Good	1950
<b>Collection &amp; Distribution Infrastructure</b>			
Sewer Pipe Miles	12	Sewage Lift Stations	4
<b>Treatment Plant Daily Flow (mgd)</b>			
<b>ADWF (mgd)</b>	<b>% of ADWF Capacity in Use</b>	<b>Peak Wet (mgd)</b>	<b>Peaking Factor</b>
0.64	128%	1.5	2.34
<b>Infiltration and Inflow</b>			
The system suffers from significant I/I, which the District is in the midst of trying to minimize by completing replacing the entire collection system. Each year the District replaces sections of the system as it can find funding.			
<b>Infrastructure Needs and Deficiencies</b>			
The most significant infrastructure need is the replacement of the collection system to minimize significant I/I and bring the system into compliance with RWQCB requirements.			
<b>Wastewater Facility Sharing</b>			
<b>Facility Sharing Practices</b>			
The District does not practice facility sharing with regard to wastewater services.			
<b>Facility Sharing Opportunities</b>			
During the previous MSR, the potential of Chester PUD becoming a regional wastewater provider was identified. The previous MSR noted that the benefits of regionalizing wastewater administration and operations may be a more experienced and trained staff that can efficiently and cost effectively deliver services to the entire Almanor basin. To date, the District has made no efforts toward regionalization.			

<b>Wastewater Rates and Financing</b>			
<b><i>Wastewater Rates-Ongoing Charges FY 11-12<sup>1</sup></i></b>			
Connection Type	Rate Description	Charges	Demand <sup>2</sup>
Residential	Flat monthly fee of \$38.05 per connection	\$38.05	250 gpd
<b><i>Rate-Setting Procedures</i></b>			
Last Rate Change	4/1/2007	Frequency of Rate Changes	As needed
<b><i>Wastewater Development Fees and Requirements</i></b>			
Fee Approach	Cost of time and materials plus 10 percent		
Connection Fee Amount	NP		
Development Impact Fee	None		
Notes:			
(1) Rates include wastewater-related service charges and strength and flow charges.			
(2) Wastewater use assumptions by customer type were used to calculate average monthly charges. Assumed use levels are 250 gallons per home per day, and are consistent countywide for comparison purposes.			

## FIRE AND EMS SERVICES

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### Service Overview

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Chester PUD provides structural and wildland fire suppression, emergency medical, emergency rescue, hazardous material response, fire inspection, airport crash and rescue, issuance of burn permits, and ambulance services (added in 2005). Prior to consolidation with Chester PUD, Chester FPD was an independent special district that had operated since 1941.

Chester FPD has been providing ambulance services since 2005. The District's primary operation area is the same as the response area previously served by the Seneca HD ambulance service. In 2005, Chester FPD and Seneca HD agreed to transfer provision of ambulance services from Seneca HD to Chester FPD. The ownership of all the inventory and equipment related to ambulance services was also transferred to Chester FPD at that time. Chester FPD, as a new ambulance service provider, was assigned to the Seneca District Hospital as its base hospital. With consolidation, ambulance services were transferred to Chester PUD. The primary response area for ambulance services provided by Chester PUD stretches eastward to the Lassen County line on SR 36, westward to Morgan Summit on SR 36 and SR 172, northward to Lassen National Park including SR 89 to the general area of Summit Lake and area accessible on the "10 Road" including Swain Mountain to the Plumas County line, and southward to the intersection of SR 147 on SR 89, CR A-13, SR 147 from the Lassen County line to the intersection of SR 89, and SR 32 to the Tehama/Butte County line.

The District provides fire and EMS services under an out-of-area service agreement with Almanor Park and Recreation District to Truman Collins Sports Complex.<sup>57</sup>

Chester PUD has a contract with Lassen National Forest to provide personnel for an Incident Management Team (IMT). The District loans out its part-time firefighters and receives reimbursement for their participation.

Chester PUD contracts with a billing company for its ambulance services.

### Collaboration

The District has an automatic aid agreement with West Almanor CSD. The two Districts respond within each other's boundary areas when needed.

Chester PUD provides ambulance services within automatic response areas which includes Canyon Dam, Lake Almanor Peninsula,<sup>58</sup> Westwood, and Mineral. Chester PUD

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<sup>57</sup> 2010-OASA-001.

responds with its first-out unit into this area when requested by fire or law enforcement dispatch.

The District maintains informal mutual aid agreements with all fire service providers in Plumas County, and with CalFire and USFS. Chester PUD is a member of the Almanor Fire Chiefs' Association, Plumas County Fire Chiefs' Association and Special District Association.

### Dispatch and Communications

The County Sheriff is the Public Safety Answering Point (PSAP); consequently, most land line emergency calls (9-1-1 calls) are directed to the Sheriff. Most cell phone emergency calls (9-1-1 calls) are answered by CHP and redirected to the Sheriff. The Sheriff provides dispatching for most fire providers in the County except for those in the northern part of the County (including Chester PUD), which are served by the Susanville Interagency Fire Center (SIFC). SIFC is an Emergency Operations Command Center composed of four cooperating agencies: the U.S. Forest Service, National Park Service, Bureau of Land Management, and California Department of Forestry and Fire Protection. The Forest Service also has its own dispatch. SIFC has a first responder map, which it uses to identify what provider to dispatch to an incident. All territory within the County has a determined first responder; although, many areas lie outside the LAFCO-approved boundaries of the districts and lack an officially designated fire provider.

Radio frequencies are shared with other fire agencies; and communications are interoperable. The District reported that having dispatch through SIFC is costly. Chester PUD indicated that it is interested in getting dispatched through the Sheriff's Office.

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## Staffing

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Chester PUD has 21 sworn personnel—one part-time fire chief who is also a Chester PUD board member, two captains, two firefighter medics, two firefighter EMTs, three part-time per-diem firefighters and 11 volunteers. Captains, firefighter medics and firefighter EMTs are full-time employees. Volunteers do not get compensated. The median age of the firefighters is 35, with a range from 23 to 63.

Chester PUD tries to recruit more paid firefighters and volunteers through word of mouth. The District is currently revamping its recruitment strategy, due to a change in leadership.

According to the California State Fire Marshal, all paid, volunteer and call firefighters must acquire Firefighter I certification; however, there is no time limit as to how long they may work before attaining certification. Firefighter I certification requires completion of the 259-hour Firefighter I course, which includes training on various fireground tasks,

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<sup>58</sup> The Peninsula Fire District provides primary fire and ambulance service to Lake Almanor Peninsula; however, the area lies within Seneca HD's tax district. Chester PUD is obligated to respond when requested by fire, law enforcement, or private individuals. PFD will also be dispatched to all calls from private individuals.

rescue operations, fire prevention and investigation techniques, and inspection and maintenance of equipment. In addition to this course, Firefighter I certification also requires that the applicant have a minimum of six months of volunteer or call experience in a California fire department as a firefighter performing suppression duties.<sup>59</sup> Chester PUD has nine firefighter I, six firefighter II, seven EMT I, five firefighter medic, and certified personnel.

All of the District's paid personnel must undergo two hours of training daily. For volunteers, the mandatory minimum is two drills and one Saturday per month. Chester PUD requires its paid personnel to complete 220 hours of training per year; volunteers are required to complete 156 hours with opportunities to participate in training with paid firefighters. It was reported by the District that it is a challenge to demand 220 hours from volunteers, as required by State Firefighter Training (SFT) standards.

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## Facilities and Capacity

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Chester PUD operates one fire station. The Chester PUD station, acquired in 2009 and reported to be in good condition, is located at 251 Chester Airport Road. The station is staffed from eight in the morning till eight in the evening by two captains, two EMT I personnel and two firefighter medics.

Station 1 is used as a fire station and the Chester PUD administrative office. It houses two Aircraft Rescue and Firefighting vehicles (ARFFs), three command vehicles, one snowmobile, four engines, and three ambulance vehicles.

The District's water reserves are represented by a one-million gallon water tank and three wells.

Currently, it appears that the District's facilities, equipment and staff afford the capacity to provide adequate services within its boundary area.

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## Infrastructure Needs

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In FY 10-11, Chester PUD acquired a new ambulance vehicle. There is the possibility of staffing the new ambulance on a full-time basis and placing it on the west shore of Lake Almanor for other fire departments.

The District reports that it does not need any new facilities, facility upgrades or vehicles at this time.

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<sup>59</sup> State Fire Marshal, Course Information and Required Materials, 2007, p. 44

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## Challenges

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One of the challenges reported by Chester PUD is medical dispatch. The District expressed a need to find a hospital that is capable of handling medical emergency calls from dispatch by SIFC until the ambulance has arrived at the scene. Medical dispatch personnel aid the caller in assisting the affected person until trained personnel arrive. A similar problem exists for Peninsula FD, which also provides ambulance services.

Another challenge is that Chester PUD has been losing some revenue on its ambulance services. The District believes this is due to a reported decrease in tourism in Chester area. The District also reported that some portions of the ambulance service area were inaccessible during the winter.

Opportunities for improvement to fire services identified by Chester PUD include enhancing collaboration efforts with other fire providers through automatic aid and joint training.

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## Service Adequacy

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While there are several benchmarks that may define the level of fire service provided by an agency, indicators of service adequacy discussed here include ISO ratings, response times, and level of staffing and station resources for the service area.

Fire services in the communities are classified by the Insurance Service Office (ISO), an advisory organization. This classification indicates the general adequacy of coverage. Communities with the best fire department facilities, systems for water distribution, fire alarms and communications, and equipment and personnel receive a rating of 1. Chester PUD has an ISO rating of four. The District was last evaluated in 1995.

The guideline established by the National Fire Protection Association (NFPA) for fire response times is six minutes at least 90 percent of the time, with response time measured from the 911-call time to the arrival time of the first-responder at the scene. The fire response time guideline established by the Center for Public Safety Excellence (formerly the Commission on Fire Accreditation International) is 5 minutes 50 seconds at least 90 percent of the time.<sup>60</sup>

Emergency response time standards vary by level of urbanization of an area: the more urban an area, the faster a response has to be. The California EMS Agency established the following response time guidelines: five minutes in urban areas, 15 minutes in suburban or rural areas, and as quickly as possible in wildland areas. The District's response zones include the rural and wilderness classifications. The District tracks the response time for each incident. According to Chester PUD, it takes the District an average of three minutes to respond within its boundaries and 5.4 minutes outside of the boundaries. CalFire tracks

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<sup>60</sup> Commission on Fire Accreditation International, 2000.



response times for each incident Chester PUD is dispatched to within its boundaries. It was reported that the District's average response time in 2011 was 3.5 minutes. The percentage of response times under five minutes was 94. An area that Chester PUD could improve upon is collaborating with CalFire on data exchange, which would enhance efficiency and consistency.

The service area size<sup>61</sup> for each fire station varies between fire districts. The median fire station in Lake Almanor Area serves approximately 37 square miles. WACSD and PAFPD serve the most expansive area, with 99 square miles served per station on average. Densely populated areas tend to have smaller service areas. For example, the average service area for Peninsula FD is five square miles. By comparison, the fire station in Chester PUD serves approximately 16 square miles.

The number of firefighters serving within a particular jurisdiction is another indicator of level of service; however, it is approximate. The providers' call firefighters may have differing availability and reliability. A district with more firefighters could have fewer resources if scheduling availability is restricted. Staffing levels in Lake Almanor area vary from 31 call firefighters per 1,000 residents in PFD service area to 59 in WACSD and PAFPD. By comparison, Chester PUD maintains approximately 45 firefighters per 1,000 residents.

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<sup>61</sup> Service area refers to the area that the agency will respond to, based on a first responder map used by the Sherriff's office.

**Figure 6-8: Chester PUD Fire Service Profile**

<b>Fire Service</b>					
<b>Facilities</b>					
<b>Firestation</b>	<b>Location</b>	<b>Condition</b>	<b>Staff per Shift</b>	<b>Vehicles</b>	
Chester Station	251 Chester Airport Road, Chester, CA	Good	2 captains, 2 EMTs, 2 FF Medics. Staffed 8 AM till 8 PM.	2 ARFF, 3 command, 1 snowmobile, 4 engines, 3 ambulances.	
<b>Facility Sharing</b>					
<b>Current Practices:</b> Chester PUD fire department shares offices with other Chester PUD service administrations.					
<b>Future opportunities:</b> There is a possibility to staff second ambulance on a full time basis and put it on the west shore for other departments. There is also a possibility of a long-term contract with USFS.					
<b>Infrastructure Needs and Deficiencies</b>					
No infrastructure needs were identified.					
<b>District Resource Statistics</b>		<b>Service Configuration</b>		<b>Service Demand</b>	
Staffing Base Year	2011	Configuration Base Year	2011	Statistical Base Year	2011
Fire Stations in District	1	Fire Suppression	Direct	Total Service Calls	489
Stations Serving District	1	EMS	Direct	% EMS	83%
Sq. Miles Served per Station <sup>1</sup>	16.0	Ambulance Transport	Direct	% Fire/Hazardous Material	9%
Total Staff <sup>2</sup>	21	Hazardous Materials	Direct	% False	2%
Total Full-time Firefighters	6	Air Rescue/Ambulance Helicopter	Enloe, PHI	% Misc. emergency	1%
Total Call Firefighters	11	Fire Suppression Helicopter	USFS, CalFire	% Non-emergency	3%
Total Sworn Staff per Station <sup>3</sup>	21	Public Safety Answering Point	Sheriff	% Mutual Aid Calls	2%
Total Sworn Staff per 1,000	45	Fire/EMS Dispatch	SIFC	Calls per 1,000 people	379
<b>Service Adequacy</b>			<b>Service Challenges</b>		
Response Time Base Year	2011	Medical dispatch and funding were challenged identified by Chester PUD.			
Average Response Time (min) <sup>4</sup>	3.5	<b>Training</b>			
Percentage of response times under 5 min	94%	Paid firefighters train 2 hours a day. Volunteers do 2 mandatory drills and 1 Saturday a month. All paid firefighters are required to train for 220 hours per year; volunteers are required 156 hours per year.			
ISO Rating	4 (1995)				
<b>Mutual &amp; Automatic Aid Agreements</b>					
The District has automatic aid agreement with WACSD and mutual aid agreements with all fire providers in the County, including CalFire and USFS.					
Notes:					
1) Primary service area (square miles) per station.					
2) Total staff includes sworn and non-sworn personnel.					
3) Based on ratio of sworn full-time and call staff to the number of stations. Actual staffing levels of each station vary.					
4) Response time are provided for incidents responded to by the District within its boundaries.					

## LIGHTING SERVICES

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### Service Overview

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Chester PUD has authority, as one of several powers granted a PUD through the State's Public Utility Code, to provide street lighting in the community. The role Chester PUD plays in this is determination of placement of the lights and payment of the monthly energy costs associated with the operation of each light. Chester PUD provides lighting services within the District's boundaries. The District determines placement of the lights and payment of the monthly energy costs associated with the operation of each light.

The Plumas County Road Department has for a number of years (contingent on funding availability) agreed that it would pay 25 percent of the street lighting cost to any Plumas County street lighting district making that request. The amount has been paid entirely through a portion of the ad valorem taxes that the district receives. The latest tax shift, in addition to the ERAF shift that has been in place since 1990, is making it increasingly difficult for the District to fund this service. The District staff believes that the time may come when streetlights may have to be turned off if a benefit assessment, through voter approval, is not put in place to fund this expense.

## SOLID WASTE SERVICES

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### Service Overview

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Chester PUD awards and administers a franchise for refuse collection and solid waste disposal within its territorial boundaries. The current franchisee under contract with the District is Feather River Disposal, a subsidiary of Waste Management. This franchise gives the franchisee the exclusive right to collect refuse within these boundaries. After collection, the franchisee deposits the waste at the Plumas County owned transfer station, which in turn is transported and ultimately disposed of at the Lockwood, Nevada landfill.

The Chester PUD Board determines and sets the rates that the franchisee is allowed to charge residents within the Chester PUD boundaries. The franchisee may petition the District for rate adjustments at reasonable times on the basis of unusual changes in costs of doing business arising from revised laws or regulations of governmental agencies or increases in disposal site fees over which the franchisee has no control. The Board enacted a four percent surcharge to be placed on the monthly solid waste bill; however, this will be used to fund Plumas County solid waste administration expenses and will simply be a pass-through for Feather River Disposal.

Under the current contract; the franchisee is required to pay Chester PUD an annual \$2,100 franchise fee in two semi-annual installments of \$1,050 each. The District does not know when the franchise agreement expires. The district manager attends meetings and sits on committees associated with solid waste and all costs incurred related to those obligations are funded via the franchise fee.

## CHESTER PUD DETERMINATIONS

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### Growth and Population Projections

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- ❖ The estimated permanent population of Chester Public Utility District (PUD) is 2,144 based on Census 2010 data.
- ❖ Based on Department of Finance population projections for the County, the District's population would increase to approximately 2,251 in 2020.
- ❖ Peak demand for district services occurs in the summer months when the area experiences an influx of tourists and seasonal residents.
- ❖ There has been no growth and little change in the level of service demand in the last few years. Similarly, minimal change in service demand is anticipated in the next few years until the economy recovers.

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### The Location and Characteristics of Disadvantaged Unincorporated Communities Within or Contiguous to the Agency's SOI

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- ❖ The population threshold by which Plumas LAFCo will define a community is yet to be determined. Specific disadvantaged unincorporated communities and characteristics of the communities will be identified when appropriate as other areas are to be annexed to the District.

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### Present and Planned Capacity of Public Facilities and Adequacy of Public Services, Including Infrastructure Needs and Deficiencies

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- ❖ Based on response times, staffing levels, and cost of services, Chester PUD appears to have adequate capacity to provide adequate fire and EMS services. An area that Chester PUD could improve upon is collaborating with CalFire on data exchange, which would enhance efficiency and consistency.
- ❖ The District reports that it does not need any new fire facilities, facility upgrades or vehicles at this time.
- ❖ Chester PUD's water system appears to have sufficient capacity to meet waterworks standards and adequately serve the needs of the community.
- ❖ The District did not identify any particular infrastructure needs with regard to the water system.

- ❖ During peak demand periods in the summer, flows exceed the wastewater system's permitted capacity but are within the design capacity of the treatment facility. It is recommended that Chester PUD ensure that it is operating within the adopted permit requirements.
- ❖ The District faces significant infiltration and inflow (I/I) in its collection system. The District has been subject to several cease and desist orders regarding illegal discharges that have resulted from the significant I/I. Chester PUD's solution, only partly implemented to date, is to replace the entire sewage collection system. There are no plans at this time for when this is likely to occur. To date, about 15 percent of the collection system has been replaced.
- ❖ Similar to most other districts in the region, Chester PUD does not have a capital improvement plan to preplan for future capital needs and the necessary funding for those improvements. It is recommended that the District develop a long-term plan for all services provided, in order to financially prepare for equipment replacement and other infrastructure needs.

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### Financial Ability of Agencies to Provide Services

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- ❖ The District reported that the current financing level is not adequate for fire services and adequate to deliver water and sewer services. Overall, the District has faced declining water and wastewater revenues, property tax revenues, and ambulance revenues as a result of the recent recession.
- ❖ Over the last two fiscal years (FYs 11 and 12), expenditures have exceeded revenues by approximately \$350,000 per year. As a result, the District is making efforts to reduce personnel and salary and benefits and enhance revenues by adjusting ambulance billing.
- ❖ During the course of Chester PUD's most recent audit, the auditor identified two significant deficiencies to internal fiscal control. The auditor found that due to the number of personnel assigned to duties that involve access to the general ledger and who also have a responsibility for handling cash and other assets, an inadequate segregation of duties exists. Additionally, the auditor found that similar to many other California special districts, Chester PUD does not have policies and procedures in place to ensure complete and accurate financial statements, footnote disclosures, and management's discussion and analysis are prepared.
- ❖ It was discovered that the District has not made significant changes to its budget over the last several years; as a result, increases in costs over time and the effects of merging the two districts into one have not been reflected in recent budgets. It is recommended that Chester PUD update its budgeting process to reflect the current conditions of the District.

- ❖ The District has not updated water and wastewater rates since 2007. It is recommended that Chester PUD review its rates to ensure that they adequately cover existing operation and maintenance costs as well as any future capital needs.

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### Status of, and Opportunities for, Shared Facilities

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- ❖ Chester PUD allows the use of its offices for public information meetings.
- ❖ There may be an opportunity for the District to share specialized equipment and services with nearby water and wastewater providers.
- ❖ A potential for collaboration and facility sharing may be Chester PUD becoming a regional treatment facility and service provider by reaching out to fledgling sanitation and domestic water agencies in the Almanor basin to provide advice and contract services where it has not been done in the past. Further, the District might also adopt a proactive approach with the County to offer itself as the regional agency to go to for actual administrative, treatment, operations and maintenance services to all communities around the Almanor basin.

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### Accountability for Community Service Needs, Including Governmental Structure and Operational Efficiencies

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- ❖ Chester PUD demonstrated marginal accountability and transparency in its disclosure of information and cooperation with Plumas LAFCo. While the District had challenges with staffing that resulted in lack of a timely response, the District ultimately responded to the questionnaires and cooperated with the document and interview requests.
- ❖ While Chester PUD conducts outreach in addition to legally required agendas and minutes, it is a recommended practice that a District the size of Chester PUD enhance accountability by maintaining a website where all district information is readily available to constituents.