# 7. CLIO PUBLIC UTILITY DISTRICT

Clio Public Utility District (CPUD) supplies domestic water to the township of Clio. A Municipal Service Review and Sphere of Influence update were initiated in 2008, but never completed.[110] This is the first Municipal Service Review for CPUD.

## AGENCY OVERVIEW

### Background

CPUD was formed in 1950 as an independent special district.[111] It was organized to provide water services to the residents of the township of Clio.

The principal act that governs the District is the Public Utility District Act.[112] 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.[113] 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.[114] 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.[115]

CPUD is located in the eastern part of Plumas County. Clio is situated in Mohawk Valley about five miles southeast of Graeagle, on SR 89; it is bordered by the Middle Fork Feather River to the south and west. Adjacent service providers include Graeagle FPD and C-Road CSD.

[110] LAFCo Resolution 2008-003.

[111] State Board of Equalization.

[112] Public Utilities Code §15501-17501.

[113] Public Utilities Code §16461.

[114] Public Utilities Code §16463.

[115] Government Code §56824.10.

*Boundaries*

CPUD boundary is entirely within Plumas County. The District's boundaries encompass approximately 212 acres or 0.3 square miles.[116] In 1990, the detachment of Valley Ranch Investments property was initiated but later discontinued.[117] There have been no annexations to or detachments from the District since its formation.

*Sphere of Influence*

The Sphere of Influence for the District was adopted in 1976 and last updated in 1983.[118] The SOI area is significantly larger than the boundary area constituting seven square miles versus 0.3 square miles with the bounds.

The District's SOI extends outside of the District's bounds south to the Sierra County border, and does not include territory within the District's bounds in the north, as shown in Figure 7-1. The present SOI indicates that LAFCo intended eventual detachment of the area outside the SOI but inside the District's bounds.

*Extra-territorial Services*

There are no connections outside of the District's boundaries and the District does not provide any extra-territorial services.

*Areas of Interest*

One area of interest for the District is the part of its boundary area in the north that is outside of its SOI. As previously mentioned, this issue will be reviewed during the current cycle of SOI updates.

Although CPUD has latent powers to provide fire services, it currently does not do so. Graeagle FPD provides extra-territorial fire services in Clio and charges service fees for responding to incidents outside of its bounds. There is the potential the Clio area to be annexed by GFPD; in the meantime, GFPD is currently working on an out-of-area service agreement with Clio.

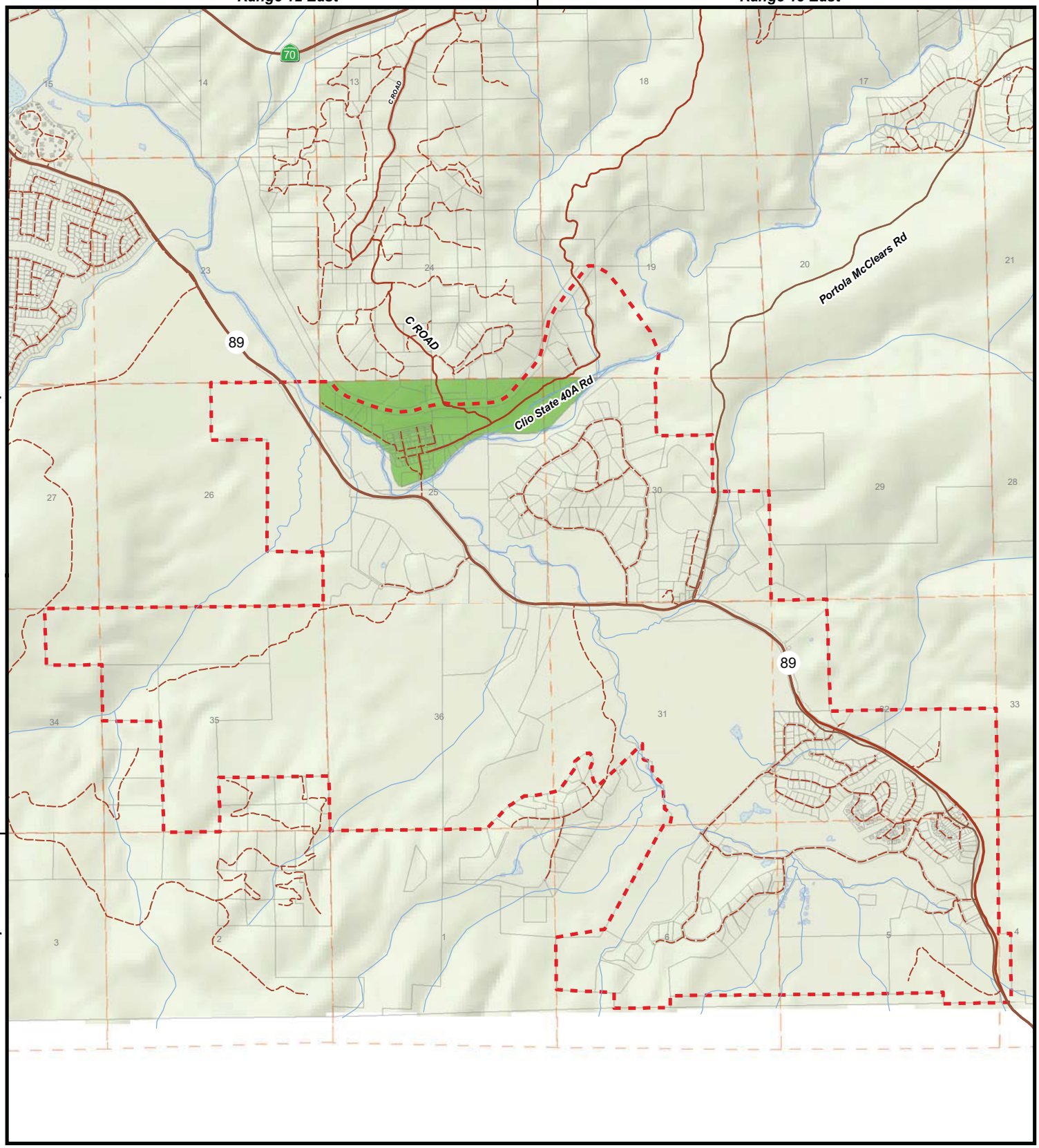
[116] Total agency area calculated in GIS software based on agency boundaries as of July 1, 2011. The data is not considered survey quality.

[117] LAFCo Resolution 1990-3.

[118] LAFCo Resolution 83-31.

7-1

# Clio Public Utility District




## Legend

- Major Roads
- CA State Highway
- Streets
- Stream / River
- Waterbodies
- Parcels
- Sectional Grid (MDB&M)
- Clio Public Utility District CSD
- Clio Public Utility District (SOI)

0 0.25 0.5 1 Miles

N W E S

Clio Public Utility District
Resolution:
Adopted: 9/25/1950

Clio Public Utility District (SOI)
Resolution: 83-31
Adopted:

Source: Plumas LAFCo Map Created 5/4/2011

## Accountability and Governance

CPUD is governed by a five-member board of directors who are to be elected at-large to staggered four-year terms. There hasn't been a contested election in at least the last eight years. There are currently five members. Current board member names, positions, and term expiration dates are shown in Figure 7-2.

Board meetings are held as needed; there is not set date or time. The members meet at least three times a year at the President's house. Agendas are posted at the post office. Minutes are available upon request. The District does not have a website, so its documents are not available online.

**Figure 7-2: Clio PUD Governing Body**

| Clio Public Utility District | | | | |
|---|---|---|---|---|
| ***District Contact Information*** | | | | |
| **Contact:** | Bob Raymond, President | | | |
| **Address:** | 250 Main Street, Clio, CA 96106 | | | |
| **Telephone:** | 530-836-1339 | | | |
| **Email/website:** | brpaints@hotmail.com | | | |
| ***Board of Directors*** | | | | |
| **Member Name** | **Position** | **Term Expiration** | **Manner of Selection** | **Length of Term** |
| Bob Raymond | President | December 2013 | Elected | 4 years |
| Ken Newsted | Director | December 2013 | Elected | 4 years |
| Mark Callahan | Director | December 2011 | Elected | 4 years |
| Matt Williams | Director | December 2013 | Appointed | 4 years |
| Phil Kaznowski | Director | December 2011 | Appointed | 4 years |
| ***Meetings*** | | | | |
| **Date:** | Three times a year and as needed. No exact schedule. | | | |
| **Location:** | President's place of residence. | | | |
| **Agenda Distribution:** | Posted at the post office. | | | |
| **Minutes Distribution:** | Available upon request. | | | |

In addition to the required agendas and minutes, the District does public outreach through annual newsletters. The District also contacts its constituents on an as-needed basis (i.e. in case of a drought). In the event of an emergency, there is a telephone tree to contact all CPUD customers.

The District does not have an official system through which complaints may be submitted. If a customer is dissatisfied with the District's services, they may contact a board member or bring it to the Board's attention at a meeting. Any board member can handle a routine repair or emergency item. If an issue is more serious, the Board votes on its resolution. A majority of complaints are about leaky pipes at the main water box. The District reported that there were four complaints in 2009.

Clio PUD demonstrated accountability and transparency in its disclosure of information and cooperation with Plumas LAFCo. The District responded to the questionnaires and cooperated with the document requests.

## Planning and Management Practices

CPUD is primarily a volunteer District. All administrative tasks are fulfilled by the Board of Directors. There is one unpaid operator who is also a member of the Board; he holds an operator's license and volunteers about eight hours of his time per month. The District contracts with an outside company for water testing.

The District does not track its staff workload or evaluate its personnel or the contractor. CPUD does not perform formal evaluations of overall district performance, such as benchmarking or annual reports.

The District's financial planning efforts include an annually adopted budget. The District's financial statements are not audited. The District provided a balance sheet and the Special Districts Financial Transactions Report for FY 09-10. Capital improvement projects are planned for on an annual basis. The District adopts a Water Quality Emergency Notification Plan, which was last updated in 2005.

## Existing Demand and Growth Projections

Designated land uses within the District are primarily residential.[119] The District's boundary area is approximately 0.03 square miles.

### *Population*

The District has a small system that serves 49 connections. Based on an average household size throughout the County of 1.9 people, the estimated population of CPUD is 93. A majority of the population is full-time residents.

### *Existing Demand*

The District reported that it had observed little change in the level of service demand in the last few years. Only one connection has been added between 2006 and 2011.

### *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.

[119] Plumas County Parcel Application.

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 93 in 2010 to approximately 98 in 2020. It is anticipated that demand for service within the District will increase minimally based on the DOF population growth projections through 2020.

CPUD reports that there is little potential for development within its boundaries or in the areas adjacent to the District. There is only one 13-acre block that is undeveloped, but there are currently no potential developers in the area. Presently, CPUD is reportedly using approximately 60 percent of its water source capacity, and since there is little anticipated growth this capacity should be sufficient for some time. The District did not identify any areas within its future growth area to which it would be difficult to provide an adequate level of service with regards to potable water service; however, the District did identify the need to improve fire flows to serve any growth in demand.

*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.

CPUD proposes that its Sphere of Influence be coterminous with its boundaries.

There is the potential for annexation into Graeagle FPD for fire services.

## Financing

The District reported that the current financing level was adequate to deliver services. No constraints or challenges to financing were identified.

The District's total revenues for FY 09-10 were $27,653. Revenue sources included income from rates (56 percent), income from property taxes (43 percent) and interest income and homeowners property tax relief (one percent). The District charges water rates of $25 per connection per month regardless of water use.

The District's expenditures in FY 09-10 were $10,311. Expenditures were composed of transmission and distribution (90 percent) and administration (ten percent). CPUD has minimal expenses since it is operated by volunteers.

Capital improvements are planned for on an annual basis. CPUD reported that it addressed much the system's deferred maintenance in 2010.

The District does not have a formal or informal reserve policy at this time. However, at the end of FY 09-10, it had a fund balance equivalent to ten years of operating expenses.

The District does not participate in any joint power authorities (JPAs) or joint financing mechanisms.

# WATER SERVICES

## Service Overview

The District provides retail water services in the form of groundwater extraction and conveyance to connections. While CPUD does not presently provide treatment, the District has the capability to chlorinate the groundwater. An independent company provides water testing to the District through a contract.

CPUD's water system is operated by one of the board members who volunteers approximately eight hours of his time every month. The operator holds a D1 certification for distribution systems, which meets the needs of the system.

## Facilities and Capacity

District water system facilities include a water tank, a chlorination system, and four miles of distribution pipelines.

The District relies entirely on groundwater from two points of diversion from the Mohawk Chapman Springs. At this time, only one of the two diversion points (the lower spring) is being utilized. This is due to bacteriological problems associated with the upper spring. The lower spring is estimated to have a flow rate of approximately 250 gpm.

The District maintains water rights to natural groundwater springs, commonly referred to as the Mohawk Chapman Springs. The District's rights are reportedly pre-1914 water rights. There is no documentation that limits the District's use of the spring water. The springs are on U.S. Forest Services land.

Water flows two miles from the springs to the 12,000-gallon water tank. From the storage tank, water flows two miles into town. During the Plumas County Public Health Agency's most recent inspection of the District's system in 2005, the storage tank was identified as being in good condition. While the storage tank provides adequate storage capacity for the daily demands on the system, the storage is insufficient to sustain adequate fire flows.

Located next to the storage tank is a chlorination station that was built as a result of several coliform MCL exceedances between 2001 and 2003. It was discovered that the upper spring was the source of previous bacteriological failures; consequently, the upper spring has been taken off-line. The spring is to remain off-line until either additional repairs of the spring eliminate the bacterial intrusion or the system is able to continuously disinfect the water supply, which is the purpose of the chlorinator. As flows from one spring are sufficient to provide adequate water to cover demand, both the chlorinator and second spring are offline. Bacteriological samples in 2010 were negative for coliform.

The District does not track the amount of water from the spring or the amount delivered to the connections, as there are no flow meters throughout the system. Flow

meters were installed at the new chlorine injection site; however, the chlorine injector is offline and the flow meters are not in use. Consequently, the District was unable to provide the amount of water supplied or provided in 2010.

The District owns and maintains four miles of pipelines that were identified as being generally in good condition. The actual age of the distribution system is unknown, but parts of the distribution system are estimated to be approximately 50 years old. The distribution system has a mix of both PVC (20 percent) and Transite (80 percent) pipeline. As a section breaks, the Transite portions are replaced by PVC. The District reported that loss from the distribution system itself is assumed to be minimal in lieu of flow meters to accurately calculate what actual losses are.

## Infrastructure Needs

The residents in Clio are considering annexation into a fire district; however prior to annexation, the water system needs to be improved to meet fire flow requirements. In order to meet fire flow needs for a residential fire, the District needs to be able to provide 750 gpm for a period of two hours and meet domestic water demands. A commercial fire requires 1,250 gpm for two hours and the ability to meet domestic water demands at the same time. The District is unable to meet either of these requirements.

Plans to increase fire flow include enlarging the four inch pipe into town to a six inch pipe and additional storage tanks. The District has no plans to install the pipe presently, and has not estimated the approximate cost of the improvement.

## Challenges

The District reported that the most significant challenge to service was access to the system during the winter, as snow limits access.

## Service Adequacy

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

**Figure 7-3: CPUD Water Service Adequacy Indicators**

| Water Service Adequacy and Efficiency Indicators | | | |
|---|---|---|---|
| ***Service Adequacy Indicators*** | | | |
| Connections/FTE | 980 | O&M Cost Ratio[1] | $41,977 |
| MGD Delivered/FTE | 4.4 | Distribution Loss Rate | Unknown |
| Distribution Breaks & Leaks (2010) | 0 | Distribution Break Rate[2] | 0 |
| Water Pressure | 60+ psi | Total Employees (FTEs) | 0.05 |
| Customer Complaints CY 2010: | Odor/taste (0), leaks (0), pressure (0), other (4) | | |

| ***Drinking Water Quality Regulatory Information*** [3] | | |
|---|---|---|
| | **#** | **Description** |
| Health Violations | 4 | Exceedance of Coliform MCL (2001, 2002 and 2003) |
| Monitoring Violations | 1 | Violation of routine monitoring for coliform (2002) |
| DW Compliance Rate[4] | 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 2010.

The County Public Health Agency 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 of 199 connections or less. These systems are subject to inspections by the County Public Health Agency. During the Agency's most recent inspection in 2005, the Agency noted that CPUD was behind on a significant number of chemical tests as well as lead and copper tap sampling.

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 2010. Since 2000, the District has had four health violations due to coliform exceedances in 2001, 2002 and 2003, and one monitoring violation for coliform in 2002. This equates to approximately 102 violations per 1,000 connections served. By comparison, the other water providers in the eastern region of the County had an average of 21 violations per 1,000 connections served during that same time frame. The median water service provider in the region was in compliance 96 percent of the time in 2010. The District was in compliance with drinking water regulations 100 percent of the time, which was above the regional average.

Indicators of distribution system integrity are the number of breaks and leaks in 2010 and the rate of unaccounted for distribution loss. The District reported approximately zero breaks and leaks per 100 miles of pipe lines in 2010, while other providers in the region had a median rate of 12 breaks per 100 pipe miles. The District estimated that it loses approximately 10 percent of water between the water source and the connections served; although this is only an approximation as the District does not have any flow meters to track the amount of water flowing into and out of the system. By comparison, other providers in the area averaged seven percent distribution losses.

**Figure 7-4: CPUD Water Service Tables**

| Water Service Configuration & Infrastructure | | | | | |
|---|---|---|---|---|---|
| ***Water Service*** | ***Provider(s)*** | | ***Water Service*** | ***Provider(s)*** | |
| Retail Water | CPUD | | Groundwater Recharge | None | |
| Wholesale Water | None | | Groundwater Extraction | CPUD | |
| Water Treatment | CPUD | | Recycled Water | None | |
| ***Service Area Description*** | | | | | |
| Retail Water | The District serves all developed lots within the boundaries of the District. | | | | |
| Wholesale Water | NA | | | | |
| Recycled Water | NA | | | | |
| ***Water Sources*** | | ***Supply (Acre-Feet/Year)*** | | | |
| **Source** | **Type** | **Average[2]** | | **Maximum[3]** | **Safe/Firm** |
| Mohawk Chapman Springs | Groundwater | 150 gpm | | 250 gpm | Unknown |
| ***System Overview*** | | | | | |
| Average Daily Demand | 0.04265 mgd | Peak Day Demand | Unknown | | |
| ***Major Facilities*** | | | | | |
| **Facility Name** | **Type** | **Capacity** | | **Condition** | **Yr Built** |
| Storage Tank | Storage | 12,000 gpm | | Good | 1960s |
| Chlorine Injection Building | Treatment | 400 gpm | | Excellent | 2006 |
| ***Other Infrastructure*** | | | | | |
| Reservoirs | - | Storage Capacity (mg) | 0.012 | | |
| Pump Stations | 0 | Pressure Zones | 1 | | |
| Production Wells | 0 | Pipe Miles | 4 | | |
| ***Facility-Sharing and Regional Collaboration*** | | | | | |
| **Current Practices:** The District does not presently practice faclity sharing with other agencies or organizations. | | | | | |
| **Opportunities:** There may be an opportunity for the District to share equipment with other nearby water providers. | | | | | |
| Notes:<br>(1) NA means Not Applicable, NP means Not Provided, mg means millions of gallons, af means acre-feet.<br>(2) District reported that it is using approximately 60 percent of the system's capacity.<br>(3) Maximum reported flow from the springs by the District. | | | | | |

## Water Demand and Supply

| *Service Connections* | *Total* | *Inside Bounds* | *Outside Bounds* |
|---|---|---|---|
| Total | 49 | 49 | 0 |
| Irrigation/Landscape | 0 | 0 | 0 |
| Domestic | 47 | 47 | 0 |
| Commercial/Industrial/Institutional | 2 | 2 | 0 |
| Recycled | 0 | 0 | 0 |
| Other | 0 | 0 | 0 |

*Average Annual Demand Information (Acre-Feet per Year)* [1]

| | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
|---|---|---|---|---|---|---|---|
| Total | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |

*Supply Information (Acre-feet per Year)* [2]

| | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
|---|---|---|---|---|---|---|---|
| Total | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Imported | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Groundwater | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Surface | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Recycled | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

*Drought Supply and Plans*

| | | | |
|---|---|---|---|
| Drought Supply (af)[3] | Year 1: No Change | Year 2: No Change | Year 3: No Change |
| Storage Practices | Storage is for short-term emergency supply only. | | |
| Drought Plan | The District does not have a drought plan. | | |

*Water Conservation Practices*

| | |
|---|---|
| CUWCC Signatory | No |
| Metering | No meters |
| Conservation Pricing | No |
| Other Practices | None |

Notes:

(1) Connections are not metered.

(2) The District does not track the flow from the springs.

(3) The District has not estimated available supply during a three year drought. During past droughts, the District reported that it has experienced little difference in spring levels.

# Water Rates and Financing

## *Residential Water Rates-Ongoing Charges FY 10-11* [1]

| | Rate Description | Avg. Monthly Charges | Consumption[2] |
|---|---|---|---|
| Residential | Flat monthly fee regardless of amount or type of use. | $ 25.00 | 7,600 gal/month |

## *Rate-Setting Procedures*

| | | | |
|---|---|---|---|
| Most Recent Rate Change | 4/1/06 | Frequency of Rate Changes | As needed |

## *Water Development Fees and Requirements*

| | |
|---|---|
| Fee Approach | Fees are set to cover operations, but do not cover major capital expenditures. |
| Connection Fee Amount | $1,500 per single family home |

| *Water Enterprise Revenues, FY 09-10* | | | *Operating Expenditures, FY 09-10* | |
|---|---|---|---|---|
| **Source** | **Amount** | **%** | | **Amount** |
| Total | $27,653 | 100% | Total | $10,311 |
| Rates & charges | $15,405 | 56% | Administration | $1,076 |
| Property tax | $11,825 | 43% | O & M | $9,235 |
| Grants | $0 | 0% | Capital Depreciation | NR |
| Interest | $303 | 1.1% | Debt | $0 |
| Connection Fees | $0 | 0% | Purchased Water | $0 |
| Other | $120 | 0% | Other | $0 |

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.

# CLIO PUD DETERMINATIONS

## Growth and Population Projections

- The estimated population of CPUD is 93. A majority of the population is full-time residents.
- There has been minimal 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.
- There is one small undeveloped block, but currently no potential developers.

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

- The District does not track the amount of water from the spring or the amount delivered to the connections, as there are no flow meters throughout the system. Consequently, there is no way to determine what percent of the system's capacity is presently in use. To date, there have reportedly been no issues with demand exceeding available flows.
- It is recommended that the District install meters to track flows from the water supply, as well as the amount delivered to customers.
- The residents in Clio are considering annexation into a fire district; however prior to annexation, the water system needs to be improved to meet fire flow requirements. Plans to enhance fire flow include enlarging the four inch pipe into town to a six inch pipe and additional storage tanks.
- Capital improvement projects are planned for on an annual basis.

## Financial Ability of Agencies to Provide Services

- The current financing level is adequate to deliver services. No constraints or challenges to financing were identified.
- CPUD has minimal expenses since it is operated by volunteers. The District should be prepared to cover costs of personnel should volunteers no longer be able to staff the system.
- CPUD's rates for water service were last updated in 2006 and are the lowest in the region among other water providers. It is recommended that CPUD evaluate and

update its rates to ensure that they are sufficient to cover operating and capital costs.

## Status of, and Opportunities for, Shared Facilities

- The District currently does not share its facilities with other service providers.
- There may be an opportunity for the District to share specialized equipment with nearby water providers.

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

- CPUD demonstrated accountability and transparency by disclosing financial and service related information in response to LAFCo requests. However, as the District does not track water flows, it was unable to provide related requested information.
- The District could enhance accountability and transparency to its constituents by holding board meetings at a public meeting space and building a website; however, given the small number of district constituents and its location, these options may not be feasible.
- A governmental structure option for Clio PUD is annexation into Graeagle FPD for fire services.