

Big Rock Community Services District

Municipal Service Review

Del Norte

Local Agency Formation Commission

Adopted

November 30, 2015

Del Norte Local Agency Formation Commission

Commissioners

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Acknowledgements

LAFCo staff would like to thank the contributors to this Municipal Service Review. Input instrumental in completing this report was provided by the Big Rock CSD Board President Craig Bradford. This report would not have been possible without the District's assistance.

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INTRODUCTION

This report is prepared pursuant to legislation enacted in 2000 that requires Local Agency Formation Commissions (LAFCo) to conduct a comprehensive review of municipal services and update the spheres of influence (SOI) of all agencies under LAFCo's jurisdiction. This service review focuses on Big Rock Community Services District (CSD).

Service Review Determinations

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.) requires LAFCo to review and update spheres of influence not less than once every five years and to review municipal services prior to or in conjunction with sphere updates. The requirement for service reviews arises from the identified need for a more coordinated and efficient public service structure to support California's anticipated growth.

Effective January 1, 2008, Government Code Section 56430 requires LAFCo to conduct a review of municipal services provided in the county by region, sub-region or other designated geographic area, as appropriate, for the service or services to be reviewed, and prepare a written statement of determination with respect to each of the following topics:

- Growth and population projections for the affected area;
- The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence (effective July 1, 2012);
- Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies (including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence);
- Financial ability of the agency to provide services;
- Status of, and opportunities for, shared facilities;
- Accountability for community service needs, including governmental structure and operational efficiencies; and
- Any other matter affecting or related to effective or efficient service delivery, as required by Commission policy.

Uses of This Report

The service review process provides LAFCo with a tool to study current and future public service conditions and to evaluate organizational options for fostering orderly growth and development, promoting the efficient delivery of services, and encouraging the preservation of open space and agricultural lands. The potential uses of this report are described below.

Update Spheres of Influence

LAFCo will use this report as a basis to update the sphere of influence of the District. Markedly, spheres of influence designate the territory that LAFCo believes represents the affected agencies' appropriate future jurisdictions and service areas. All boundary changes, such as annexations, must be consistent with the affected agencies' spheres of influence with limited exceptions.

Consider Jurisdictional Boundary Changes

LAFCo is not required to initiate any boundary changes based on service reviews. However, LAFCo, local agencies, or the public may subsequently use this report together with additional research and analysis, where necessary, to pursue changes in jurisdictional boundaries.

Resource for Further Studies

Other entities and the public may use this report for further studies and analysis of issues relating to water services in Del Norte County. The District may use this report to support grant applications.

Review Methods

The agency reviewed as part of this service review process demonstrated full accountability in disclosure of information and cooperation with LAFCo. The following information was considered in the service review:

- Agency-specific data: responses to LAFCo Requests for Information, budgets, fee schedules, maps, and district plans.
- Demographic data: U.S. Census Bureau; Department of Finance.

Information gathered was analyzed and applied to make the required determinations for each agency. All information gathered for this report is filed by LAFCo for future reference.

BIG ROCK COMMUNITY SERVICES DISTRICT

Overview

The Big Rock CSD provides water service to the unincorporated community of Hiouchi, located approximately ten miles northeast of Crescent City on Highway 199. The community of Hiouchi is situated within the Six Rivers National Forest and the Smith River National Recreation Area. This community is just upriver from the Hiouchi Flat area of the Jedediah Smith State Park and is serving the Redwood National Park Hiouchi Visitor Center on Highway 199.

Formation

The Big Rock CSD was formed as a California special district by Resolution of the Del Norte County Board of Supervisors on September 6, 1966 for the following purposes:

- a. To supply the inhabitants of the District with water for domestic use, irrigation, sanitation, industrial use, fire protection, and recreation.
- b. The collection, treatment or disposal of sewage, waste and storm water of the District and its inhabitants.
- c. The collection or disposal of garbage or refuse matter.
- d. Protection against fire.
- e. Public recreation by means of parks, playgrounds, swimming pools or recreational buildings.
- f. Street lighting.
- g. Mosquito abatement.
- h. The equipment and maintenance of a police department or other police protection to protect and safeguard life and property.

Boundary and Sphere of Influence

The Big Rock CSD covers approximately 520 acres with the annexation of the Hiouchi Flat area of Jedediah Smith Redwoods State Park and the boundary correlation for Redwood National Park Hiouchi Information/Visitor Center. The District is surrounded by the Smith River on three sides. Figure 1 shows the District Boundary. The Sphere of Influence is coterminous with the District boundary.

Figure 1. District Boundary

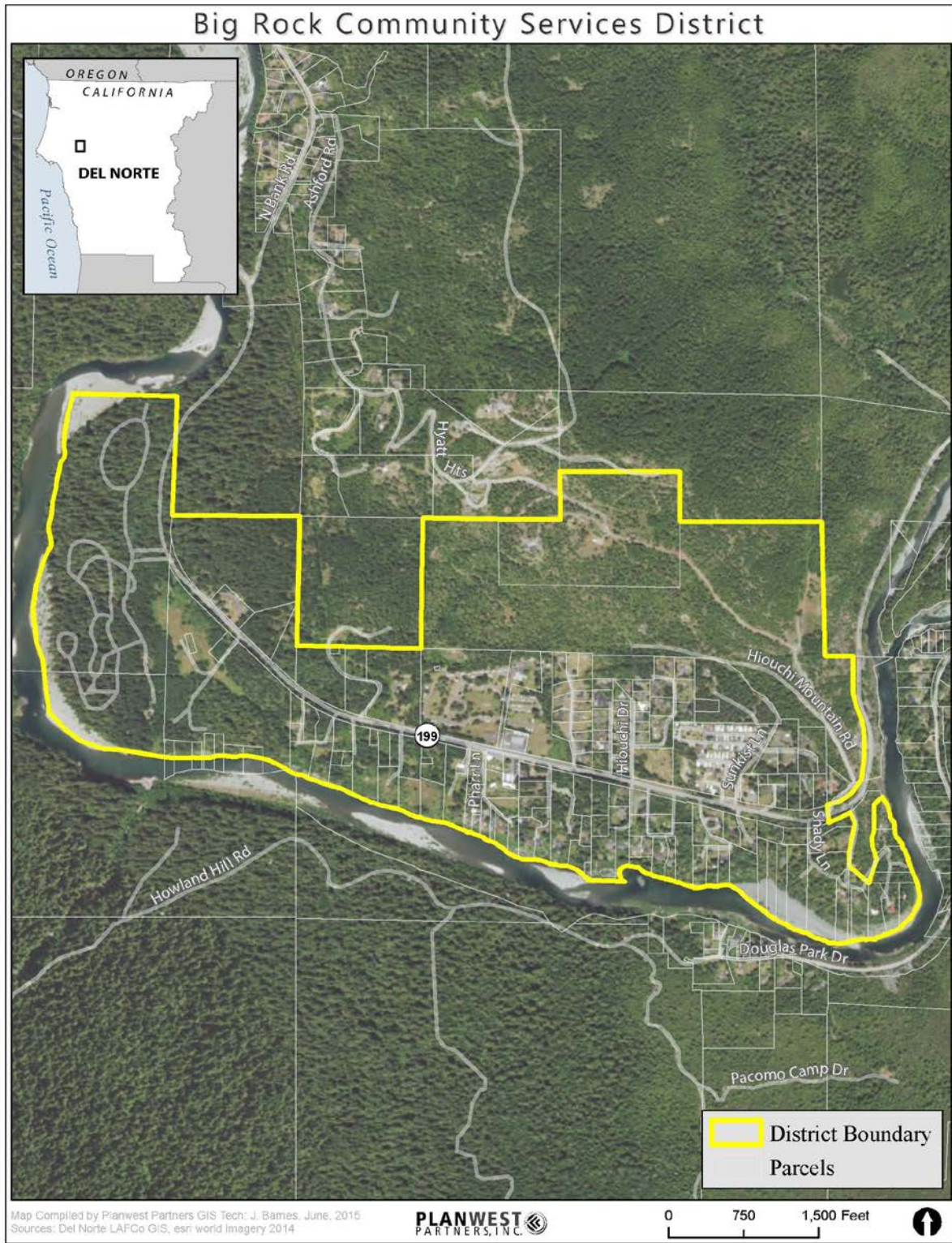


Table 1: Big Rock CSD Agency Profile

Formation	
Agency Name	Big Rock Community Services District
Date of Formation	September 6, 1966
Enabling Legislation	Community Service District Law, CA Government Code 61000
Contact	
Contact	Craig Bradford, President, Board of Directors/Trustees
Alternate Contact	Sandy Moreno, Secretary
E-mail	craigsbradford@gmail.com
Website	n/a
District Office	2680 U.S. Highway 199, Crescent City, CA 95531
Mailing Address	Big Rock CSD P.O. Box 453 Crescent City, CA 95531
Phone/ Fax	Phone: (707) 458-9933 Fax: (707) 458-3096
Services	
Services Provided	Water
Areas Served	Hiouchi

Accountability and Governance

The Big Rock CSD is governed by a five-member Board of Directors/Trustees that is elected by District residents to serve four-year terms. When vacancies occur out of the election cycle, board members may be appointed to fill empty seats in accordance with California Government Code. The Board meets on the third Thursday of each month. Meeting agendas are posted at the Hiouchi Hamlet at least 72 hours prior to the meeting. In addition, the District's constituency is noticed semiannually by newsletter regarding new developments, and meeting times and places. Table 2, shows the existing Board members, terms and positions.

Table 2: Big Rock CSD Board of Directors/Trustees

Board Member	Title	Term Expiration
Craig Bradford	President, Acting Treasurer	12/1/2018
Clif Shepard	Vice President	12/1/2016
Art Aten	Director/Trustee	12/1/2016
Alan Porteous	Director/Trustee	12/1/2018
Charles Swenson	Director/Trustee	12/1/2016

The District employs two part-time and one volunteer staff, and no full-time staff. District staff members are available by phone and appointment Tuesdays through Fridays, 9 a.m. to 5 p.m. The primary District contact person is Sandy Moreno, Secretary, (707) 464-7769. District staff can be reached on holidays, after hours, and weekends, by calling the General Manager at (707) 218-8250.

Population and Land Use

Land Use

The Big Rock CSD generally contains rural residential and commercial development, and resource lands including the Jedediah Smith Redwood State Park Campground and the Redwood National Park Hiouchi Visitor Center. The Del Norte County General Plan (2003) and Zoning Code guides land use decisions within the unincorporated portion of Del Norte County including the community of Hiouchi. The District also contains State/Federal park lands.

County Population and Growth

According to the Census, the total population in Del Norte County was 27,507 in 2000 and 28,610 in 2010. The population grew in Del Norte County at a rate of 4.0 percent between 2000 and 2010, or at an annual growth rate of 0.4 percent.

District Population and Growth

There are approximately 197 homes and businesses within District boundaries. Drinkable water is distributed to approximately 100 connections and accounts; other consumers that are not subject to the District's ordinances draw potable water from private wells or use surface water for irrigation.

The District monitors permanent water connections to active customers on a monthly basis, which includes master meters for the Madrone Mobile Home Park and the Hiouchi RV Resort. The former has 60 permanent sub-meters that are continuously active, and the latter has an average of 31 active permanent RVs and permanent houses on their properties on a year-around basis. The Redwoods National Park that was annexed in 2010 has 6 permanent residences. Due to seasonal tourism and recreational uses, the District estimates that the summer population exceeds 2,000.

The District visits each connection somewhat frequently, and generally estimates 3.3 individuals (aged people, adults, and children) per household over the range of 197 households, for a District population of approximately 650. The District will likely continue to develop at or less than the current county-wide rates of 0.4 percent per year, putting the District population at approximately 690 in 2030.

Disadvantaged Unincorporated Communities

LAFCo is required to evaluate water service, sewer service, and structural fire protection within disadvantaged unincorporated communities as part of this service review, including the location and characteristics of any such communities. A disadvantaged unincorporated community (DUC) is defined as any area with 12 or more registered voters where the annual median household income is less than 80 percent of the statewide annual median household income (pursuant to Government Code Section 56033.5 and Water Code Section 79505.5).

According to the 2008-2012 American Community Survey 5-Year Estimates, the California median household income (MHI) is \$61,400. The Del Norte countywide MHI is \$39,626, which places it at 65% of the California MHI. With only one incorporated city, Crescent City, most of the County's population exists in unincorporated communities that qualify as "disadvantaged".

The California Department of Water Resources has mapped communities that are at or below 80 percent of the annual median household income by using census data for each county. According to this data, the communities of Smith River, Hiouchi, Gasquet, Klamath, and parts of the incorporated City of Crescent City are classified as disadvantaged within Del Norte County.

The Big Rock CSD provides one of the three basic services - water service – to areas that are considered disadvantaged. Smith River Fire Protection District provides fire protection services within all of Big Rock CSD. There are no sewer services within District boundaries, residents rely on private septic systems.

Services & Infrastructure

Services Provided

The Big Rock CSD provides water service to its customers. The District applied to the SWRCB in 2007 to change its “domestic” (official water use) categorization to “municipal.” In 2012 and after 43 years of supplying water under annual permits, the SWRCB granted a permanent license (#13849) to the District for “diversion and use of water.” During a Statewide reorganization in 2014 of the State Water Resources Control Board (SWRCB) and the California Department of Public Health, the Big Rock CSD was classified as a non-urban municipal water supplier.

Water Demand

Hiouchi is a resort community where water demand varies dramatically with the seasons. In the past, water pumped from the river was relatively close to the District's 40,406,524-gallon diversion limit. Prior to the reorganized Board of Directors/Trustees taking office in 2007, the annual water-loss rate fluctuated around 53 percent, causing the District to divert nearly its maximum allowable volume from the river. The new Board invested in high-tech leak studies in early 2008, which reduced the loss rate down to 6 percent. Since then, the Big Rock CSD has invested a great deal of effort to find and repair system leaks.

In May 2008, the District made its annual report to the SWRCB in the “Progress Report by Permittee for 2008” and indicated a total volume diverted in 2008 as only 26,591,699 gallons. This means that the Big Rock CSD operated at 75 percent of its diversion limit in 2008. Despite having to support two major wildfire campaigns that summer, the Big Rock CSD was able to claim a savings of 10,078,248 gallons due to (a) a diligent replacement program for aging meters and (b) aggressive actions to repair water leaks. In its annual Progress Report every year after 2008, the Big Rock CSD has claimed a credit for the amount of water conserved toward the water authorized under the District’s permit. Indeed, the District has saved between 10 and 19 million gallons of water per year through intentional conservation actions merely borne out of good management practices.

Drinking water management in 2015 took a new road for all suppliers in California. The local supplier-consumer relationship since Governor Brown declared two drought emergencies is now being driven statewide via emergency conservation measures monitored under the stringent eye of the SWRCB. In comparison to the remarkable water savings standard achieved beginning in 2008, the Big Rock CSD's daily production average in February 2015 dropped from 47,094 gallons in February 2009 to 31,691 gallons for the same month of 2015. Additionally, consumption dropped from 85,063 gallons in April 2009 to 49,633 gallons in April 2015. The population served over those 6 years did not change significantly. Landscapes in Hiouchi have gone from vibrant green to brown. However, despite the careful management of drinking water becoming an increasingly vital attribute for the community in the eyes of the SWRCB, the best practices of any district board can fall by the wayside when an emergency strikes. Emergencies can occur that unexpectedly cause significant water loss beyond any agency's control. When the Big Rock CSD must provide water from its hydrants to federal, state and county fire suppression agencies fighting wildfires throughout the region, for instance, the excess demand can rise to 180,000 gallons or more over a three-month period (as was the case in 2008). During the challenging wildfire season in 2015, the District sold potable water to commercial operators and fire crews visiting from several other states, all of whom were legitimately participating in the campaign firefighting operations underway in Del Norte County.

Although rare, distribution pipeline failures also can cause the loss of sometimes 500,000 gallons or more of treated water before they can be discovered and repaired. Such was the case during the last week of December 2013, when an inaccessible pipeline fracture inside the Redwood National Park in Hiouchi caused a system-wide shortage of 448,725 gallons before it could be located. Although the responsible party in every case is asked to financially compensate the Big Rock CSD for such occurrences, the volume of water lost might exceed the District's annual or monthly diversion limit associated with its SWRCB license. The Board of Directors/Trustee's therefore continues to "bank" (claim a credit) with the SWRCB for the amounts of water it conserves each year in the hope that State penalties for temporarily excessive diversion rates or volumes in declared/undeclared emergencies could be mitigated. The Board would oppose any attempt to reduce its diversion limit based on such savings, for the Big Rock CSD is located geographically in the middle of extensive pristine forests that often experience large campaign wildfires. After all, fire protection is one of the District's key obligations within its sphere of influence.

Infrastructure Overview

The Big Rock CSD collects its water from a single well located adjacent to the Smith River. The District's water distribution system consists of the following:

- Backup booster pump
- 130 water meters and associated concrete service boxes
- Three master meters and one concrete vault
- One 4-wheel-drive vehicle
- SCADA water management system and data-linked, secured website

- Two stationary emergency generators at different locations with propane fields
- Water treatment facility secured within a separate room of the main pump house
- Two Redwood water storage tanks with a total capacity of 150,000 gallons
- 4.2 miles of main water pipelines (8, 6, and 4-inch)
- Transmission and distribution pipelines (6.9 miles of 2-inch lines)
- River well hosting 2 submersed river pumps, two independent electricity management systems, three raw-water collection galleries embedded in the bottom of the Smith River, and one heavy overhead pump lift
- Office equipment and parts inventory
- Heavily secured main and hillside pump houses
- 15 wet and dry-cell fire hydrants
- Razor wire security fencing (200 feet)
- Long-distance emergency radio communications system and two FCC-licensed operators

The District's total storage capacity is 150,000 gallons, including one 100,000-gallon Redwood tank and one 50,000-gallon Redwood tank. The Big Rock CSD replaced its two submersed river pumps in October 2008 and was reclassified as a groundwater system. Because the pumps' operating schedules are alternated, they should not have to be replaced for another 13 years. In July 2009, the Big Rock CSD added a newer small pump at the large storage tank (used to push water further uphill into the 50,000-gallon tank) due to the existing primary pump's mature age.

Infrastructure Needs and Deficiencies

- The 100,000-gallon Redwood storage tank is 44 years old and leaking. It sits on an unstable earthen pedestal on a steep side of Hiouchi Mountain that has been undermined by natural water seeps and surface water erosion. Two competent engineering opinions assert that even a moderate earthquake (5.5 Richter Scale) could cause the pedestal to collapse, sending the entire volume of water and associated debris downhill through a populated neighborhood, across U.S. Highway 199, and accelerating through several more homes on its way toward damming the Smith River. Federal and State grants amounting to \$1.8 million were secured to excavate the hillside and construct a granite ledge upon which a new steel bolted 100,000-gallon storage tank is to be mounted. The California Environmental Quality Act process was completed in June 2015 with a mitigated negative declaration that received no challenges from the public. The District now awaits a National Environmental Protection Act assessment to satisfy the Federal Emergency Management Administration (FEMA), which is one of the two grantors. Ground breaking for this Hillside Stabilization Project (HSP) is scheduled for March 2016. Ten months is needed for completion after start of construction. This is a potential public safety/public health hazard of the highest priority, for failure of the hillside is imminent.
- A large detention/percolation pond must be built at a lower elevation from the new water storage tank to mitigate increased surface water runoff after completion of the HSP Project.
- Approximately 7 acres of land must be acquired to complete the HSP Project. Negotiations are presently underway with two landowners. Over five acres of this property lie inside a Conservation Easement jointly belonging to the County of Del Norte and one of the

aforementioned owners. Once fee-simple ownership is acquired, the District will petition the County of Del Norte to condemn that portion of the Conservation Easement. In light of heightened threats, the U.S. Department of Homeland Security now requires all municipal water systems, especially those that are rural, to secure themselves from public access.

- The 50,000-gallon Redwood storage tank is 19 years old and not leaking. However, it rests on a relatively stable earthen pedestal at a higher location on the mountainside from the 100,000-gallon tank. Land acquisition associated with the HSP Project will enable the District to address replacement and/or added volume with future grant funding.
- The steep access roads to both storage tanks need to be reengineered and surfaced with granite grinds. The HSP Project's scope of work includes improvement of one of these roads. Surface water diversion culverts must be installed beneath both roads.
- A joint redevelopment initiative of the Redwood National Park and Jedediah Smith Redwoods State Park requires Big Rock CSD drinking water, which is not currently provided to either park by the District. The Board of Directors/Trustees shared its distribution concept with both superintendents, and the added infrastructure to support "Alternative C" to the edge of the conjoined park property would be relatively easy to install. The Board looks forward to working on this project. The District currently collects, treats, and stores sufficient water volume to satisfy an approximate annual demand of 1.8 to 2.2 million additional gallons. The District's diversion limit from the Smith River would not become an issue in this case.
- The District needs to arrange separate Memoranda of Understanding with the Smith River Fire Protection District (SRFPD) and the Redwoods National Park to install (a) a 30-foot-tall, long-range radio communications antenna alongside the Hiouchi Fire Station and (b) a radio base station in the office. This initiative is included in the Big Rock CSD's Catastrophic Disaster Plan, which applies to any event that could isolate the Township of Hiouchi from electrical power, deny use of the adjoining U.S. Highway, and cause loss of access to the Camp 6 Repeater situated on the mountainside above the Township of Gasquet. A 45 kw generator fueled by a large propane tank would enable 100 watts of radio transmission capability and also power the entire building, which is presently designated as an Incident Command Post during most significant emergencies. The District plans to man the radio station via its own human resources.
- The District depends upon the SRFPD's Hiouchi Fire Station as a place for public meetings and as an emergency operations center for the community as described above. The space provided is inadequate for both purposes.
- The Big Rock CSD soon must replace its aging four-wheel-drive utility truck.
- The District's pipeline infrastructure is 44 years old and beginning to fail in several places. All water mains should be replaced over the coming 11 years.
- The District's SCADA system should be upgraded within three years to incorporate technology advancements.
- Although dramatically improved since the last MSR was published, the District's capital reserve is insufficient to replace the general infrastructure within a five-year time frame,

which means that the water collection, distribution, and storage subsystems collectively remain relegated to a “break and repair” future.

Planned Upgrades & Studies

On October 1, 2011, the Big Rock CSD utilized a committee comprised exclusively of local residents and business owners to study and implement by recommendation to the Board of Directors/Trustees a new rate schedule with an increasing-block, rate strategy to discourage excessive water use by consumers. The committee also recommended an automatic three percent rate increase every year thereafter, yet the Board compassionately chose from 2012 through 2014 not to impose such increases every year in consideration of visible economic stress throughout the more disadvantaged sections of the community. In good conscience the Board of Directors/Trustees simply could not continue to relax the automatic feature of the rate schedule for 2015/2016. It therefore increased the rates across all meter sizes and consumer types in the amount of three percent, effective as of October 1, 2015. This important study and revenue upgrade initiative is further discussed in the section entitled “Service Rates.”

The Board of Directors/Trustees has begun the application process for another State grant that would assuage many of the District’s infrastructure needs and deficiencies identified in the previous section. In the meantime, the District relies upon the County of Del Norte’s Office of Emergency Services for pass-through hazard mitigation plan grants issued by FEMA. The District’s close working relationship with GHD in Eureka has paid dividends with respect to environmental studies, project planning, FEMA connections, and grant funding. In addition, the County of Humboldt provides valuable assistance to the District in its role as the State Department of Water Resources fiduciary for grant funding.

See the previous section regarding the planned and funded NEPA assessment and Hillside Stabilization Project.

Other Service Providers

Public Service Agencies

The District lies within the SRFPD’s local Area of Responsibility and also within the State Responsibility Area protected by the California Department of Forestry and Fire Protection (Cal Fire). The County of Del Norte continues to provide general governance and public services, including law enforcement and coroner services (Sheriff Department), throughout the Big Rock CSD’s place of use. The County also furnishes limited County park and road maintenance services for the District. However, only one street in the Township of Hiouchi qualifies as a County road (Hiouchi Drive). All others and the associated street signage fall under the responsibility of private parties to maintain. The California Department of Transportation (CalTrans) is responsible for the condition of U.S. Highway 199 that bisects the Township of Hiouchi from east to west for more than one mile and serves as only one of three official Emergency Evacuation Routes for Del Norte County. National Park Service Rangers assigned to the Redwoods National Park within the Big Rock CSD’s place of use and surrounding national recreation areas act as stewards of the

resources in their care through resource protection and proactive law enforcement. Likewise, California State Park Rangers are fully sworn California State Police Officers who perform a wide variety of general law enforcement activities, search and rescue operations, and emergency medical response. California Highway Patrol Officers regularly operate inside the District. Public utilities providers support the Big Rock CSD via coordination through USA Digs. In accordance with the District's and County's Catastrophic Disaster Plans, FEMA may provide emergency resupply operations to the District via helicopter during major events that isolate the Township of Hiouchi. Emergency communications to external agencies in such cases would be provided by qualified Big Rock CSD radio operators. All of the services noted in this paragraph currently exist.

Shared Facilities & Services

The Big Rock CSD uses the Smith River FPD's Hiouchi Fire Station as a place for public meetings and as an emergency operations center for the community. According to the District, the space provided is inadequate for both purposes.

Agencies and Contractors Needing Water

First responders, particularly firefighters, are inherently admired by most communities, and the Township of Hiouchi is no exception. The Big Rock CSD will provide potable water from any of its 15 non-metered fire hydrants, free of charge, to legitimate fire protection agencies that intend to engage fire emergencies located within a one-mile radius of the Hiouchi Hamlet (Big Rock CSD Ordinance 2008-1). *Permission from a District official is not required in such cases.* The District only asks each agency to report the amount of water used on each occasion, for the Big Rock CSD is accountable to the SWRCB for every gallon of water diverted from the Smith River and can be penalized for misappropriation. Under the right circumstances any authorized firefighter may operate a District hydrant at any time of the day or night inside the Township of Hiouchi, but the aforesaid condition must be met. Otherwise, certain water *purchase* arrangements between a firefighting agency in question and the District must be established prior to drawing water from a hydrant.

CalTrans, other non-emergency public service agencies, and contractors must coordinate water draws from the District prior to arrival. The District's fire hydrants may not be used as a central water-replenishment source by *unauthorized* consumers. No one may take District water from any source other than a fire hydrant, unless permitted to do so on or near private property by a metered resident or metered business.

The Big Rock CSD will not tolerate water theft. Taking water from a District hydrant without proper authorization is considered a punishable crime. Warnings to that effect are posted on each fire hydrant. Approved contractors may purchase water from certain designated hydrants on a one-time basis or with a long-term agreement in place, but only District personnel may operate hydrant valves in each and every case. Other than accommodating authorized firefighters under the conditions stated above, any person(s) who drafts water from a District fire hydrant in the absence of the appropriate District official would violate Big Rock CSD Ordinance 2008-1 or Ordinance 2009-1 and become subject to immediate arrest. District

hydrant operators are available around the clock to assist legitimate water consumers with their respective needs.

These policies became necessary to protect the Township of Hiouchi from abuse by “mobile parties” that historically took large volumes of water without permission. If mobile parties are not regulated, they can cause (a) water hammer damage to the community’s valves and pipelines, (b) the Big Rock CSD to exceed its water diversion limit from the Smith River, and (c) the depletion of both water storage tanks, resulting in serious damage and cross-contamination from negative pressure in the District’s water distribution pipelines. The health and safety of the District’s residents and businesses are at stake when unauthorized access to its fire hydrants occurs. As described above, mobile parties now must undertake contractual arrangements with the District, obtain permission to use metered and non-metered water, and use official District hydrant operators for water draws.

Budget

The primary sources of revenue for the District are water sales, property tax distributions, and investment income. Expenditures typically include labor, equipment purchases and maintenance, and utilities. As of FYE June 30, 2015, the District’s accounts payable and taxes payable were \$7,413. Loans payable amounted to \$106,376. Total outstanding debt was \$113,789. Given the current repayment schedule, \$11,828 of the debt will expire in 2017, and \$97,548 will expire in 2033. Table 3 below shows the Big Rock CSD’s FY 2015/16 Budget Summary.

Table 3. Big Rock CSD FY 2015/16 Budget Summary

Water	FY 2014/15 Budget
Total Operating Revenue	\$ 124,550
Total Operating Expenses	\$ 93,035
Total Operating Balance	\$ 31,515
Total Non-Operating Revenue	\$ 503,790
Total Non-Operating Expenses	\$ 20,795
Total Non-Operating Balance	\$ 482,995
NET INCOME	\$ 514,510

Total anticipated capital expenditures by the end of the current fiscal year sum to \$436,236. If the District is not able to attract grant funding to absorb its capital costs over this period, net income by the end of the fiscal year would amount to \$78,274.

As previously indicated the current Hillside Stabilization Project is separately capitalized by one federal grant in the amount of \$997,779 and one State grant in the amount of \$875,221 for total grant funding of \$1,803,000. The HSP should be complete by January 2017. The Big Rock CSD carries no financial liability for the project.

Service Rates

Big Rock CSD Ordinance 2009-1, as amended, establishes water service policy, rules, and regulations. The most recent amendment to increase water rates was approved by the Board of Directors/Trustees on September 17, 2015 and became effective on October 1, 2015.

Monthly Water Rates

The monthly minimum rates shown here include the first three hundred (300) cubic feet (ft³) of water as measured at the meter for each connection.

Table 4. Big Rock CSD Fee Schedule

¾-inch meters (residential)	\$55.62
1-inch meters (residential)	\$75.15
¾-inch meters (commercial)	\$55.62
1-inch meters (commercial)	\$75.15
2-inch meters (commercial)	\$232.49
4-inch meters (all)	\$717.81

- o Rates for water used in excess of the 300 ft³ included in the minimum charge and up to 2,000 ft³ are \$1.65 for each 100 ft³ of water. (One cubic foot of water equals 7.48 gallons.)
- o Rates for water used in excess of 2,000 ft³ are \$3.86 per 100 cubic feet.
- o Water rates will automatically increase 3% annually to accommodate index growth.
- o The fee to re-establish service after a disconnection is \$50.00.

Mobile Water Buyers

The Big Rock CSD provides potable water to commercial and government agency mobile parties that enter into binding written agreements to draw water from the District's only non-metered source, meaning a fire hydrant. A mobile party requiring more than a single water draw will pay a lower rate than a mobile party that needs only one draw. A deposit may be required based on individual circumstances. A District official must be present at each draw, or taking water from a community fire hydrant is considered to constitute water theft. Mobile water consumers generally will be charged at the 4-inch meter rate. However, different rate schedules are possible, based on how often a mobile consumer opts to draw District water. In every case the Big Rock CSD reserves the right to refuse hydrant water to any mobile water consumer without disclosing the reason(s) for rejection. Details of varying mobile customer rates, the attendant rules, and available contractual arrangements may be requested by contacting Secretary Sandy Moreno at (707) 464-7769.

MUNICIPAL SERVICE REVIEW DETERMINATIONS

This chapter addresses the requirements of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56430). As part of the municipal service review process, LAFCo is required to make written statements of determinations in each of the categories listed below.

Growth and population projections

The Big Rock CSD has a permanent resident population of approximately 650. The District will likely continue to develop at or less than the current county-wide rates of 0.4 percent per year, putting the District population at approximately 690 in 2030. Some District residents currently draw potable water from private wells or use surface water for irrigation.

The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the Sphere of Influence

The bulk of Del Norte County's population exists in unincorporated communities that qualify as disadvantaged including the community of Hiouchi. Big Rock CSD provides one of the three basic services - water service – to areas that are considered disadvantaged.

Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies

The District submitted a FEMA Disaster Mitigation Template several years ago requesting funds to correct the following system deficiencies. Completed items are noted:

- (a) Replace both wood storage tanks with steel tanks and relocate about 100 feet to rest on granite substructure; (The District's HSP is underway and funded by federal and state grants.)
- (b) Replace all 15 fire hydrants with dry-barrel systems; (Only two wet-barrel hydrants remain, and they are not located on well-trafficked roads. No further work is necessary.)
- (c) Replace the aged water mains;
- (d) Improve road access to critical system assets; (One of the two roads in question will be improved during the HSP.)
- (e) Purchase 0.5 acre of U.S. Government land and construct a secure facility to house a community EOC, a vehicle and Big Rock CSD emergency response equipment, and an emergency generator; (The National Parks Service is unwilling to approve this concept.)
- (f) Purchase two satellite radios with a 5-year service contract; and
- (g) Purchase a 45 kw emergency generator to power both river pumps, plus a 15 kw emergency generator to operate a small pump between the two water storage tanks. (A 45 kw generator with a propane fuel field was installed at the Main Pump House. The District also installed a 30 kw generator at the 100,000-gallon water storage tank along

with a number of propane tanks. Both generators function efficiently and have justified their existence during several long periods of electrical power failure.)

The District's water system has sufficient capacity to serve the Hiouchi Flat area of the Jedediah Smith Redwoods State Park and is currently serving the Redwood National Park's Hiouchi Visitor Center. The Big Rock CSD is pursuing water system upgrades, including water tank replacements in order to meet long-term service needs within the District.

The District currently provides adequate water service to its existing connections. Aside from facilitating the Redwood National Park's redevelopment plan with an offer to supply drinking water, municipal water system growth potential in Hiouchi might be limited to modernization and improved reliability, rather than geographic expansion. The Township of Hiouchi is bounded on all sides by parks, a Conservations Easement, and the Smith River.

Financial ability of agencies to provide services

The Big Rock CSD's outstanding debt is \$113,789. With the current repayment schedule, \$11,828 of the debt will expire in 2017, and \$106,376 will expire in 2033. The principal sources of revenue include water sales, property tax distributions, and investment income. Primary expenditures include labor, equipment purchases and maintenance, and utilities. Big Rock CSD water service rates were reviewed and adjusted in 2011 and in 2015. The replacement of aging infrastructure appears to be the Big Rock CSD's main financial challenge for the future.

Status of, and opportunities for, shared facilities

The Big Rock CSD depends upon the SRFPD's satellite fire station as a place for public meetings and EOC operations. The small space provided is inadequate for both purposes.

The Big Rock CSD's administrative office is located in Crescent City, 12 miles from the District's center of operations and far beyond its place of use. An office located in Hiouchi would improve customer service.

Accountability for community service needs, including governmental structure and operational efficiencies

The Big Rock CSD's Board of Directors/Trustees assembles regularly in public meetings. The five Board members are elected by District residents and hold four-year terms of office. The special district in Hiouchi is operating effectively and appears to have sufficient governance structure and operational capacity. The University of California, Davis, has used a tool over past years called the "TMF Tune Up" to help municipal water systems determine institutional effectiveness in terms of technical, managerial, and financial capacities. The Big Rock CSD earned a score of 95% in *managerial* capacity. The District's *financial* capacity is growing at an impressive rate. Only *technical* improvements are needed.

Any other matter related to effective or efficient service delivery, as required by commission policy

There are no further matters to report related to the municipal water service provided by the Big Rock CSD.

SPHERE OF INFLUENCE

Sphere of Influence Status

Currently the Big Rock CSD's boundary and SOI are coterminous, and both were expanded concurrently for annexation purposes in 2011. Given the Smith River boundary to the south, national and state boundaries to the east and west, and steep topography and resource lands to the north, it was determined that there are no adjacent areas planned for growth that would warrant being added to the CSD Sphere of Influence.

SPHERE OF INFLUENCE DETERMINATIONS

Sphere of Influence Status

Big Rock CSD's boundary and SOI are coterminous, and both were expanded concurrently for annexation purposes in 2011. Given that the Smith River runs along the southern boundary, National and State park lands are located to the east and west of the District, and steep topography and resource lands to the north, there are no adjacent areas planned for growth that would warrant being added to the CSD SOI at this time. The District currently has no expansion plans and does not anticipate serving areas outside of the current District boundary. Based on the results of the adopted MSR (November 2015), no expansion or reduction to the Big Rock CSD's SOI are recommended.

Present and planned land uses in the area, including agricultural and open-space lands.

Big Rock CSD generally contains rural residential and limited commercial development, and resource lands including the Jedediah Smith Redwood State Park Campground and the Redwood National Park Hiouchi Visitor Center. The Del Norte County General Plan (2003) and Zoning Code guides land use decisions within the unincorporated portion of Del Norte County including the community of Hiouchi. Little change in actual or designated land uses within the District is anticipated over the next 20 years.

Present and probable need for public facilities and services in the area.

The Big Rock CSD is meeting current water needs of its customers. Some District residents currently draw potable water from private wells or use surface water for irrigation. The Big Rock CSD does not anticipate considerable growth within the District, or a significant increase in service demands as a result of population growth. No out-of-district services are provided, nor have any services outside the District boundary been requested. The Township of Hiouchi is bounded on all sides by parks, a conservations easement, and the Smith River.

Present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

The District provides adequate services and has the capacity to provide the necessary water services to its customers. The Big Rock CSD is pursuing water system upgrades, including water tank replacements in order to meet long-term service needs within the District. The District has sufficient water treatment capacity available and does not appear, in the current timeframe or in the foreseeable future, to be in short water supply. The District has no plans to significantly increase capacity.

Adopted April 25, 2016

Existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

The District provides water service to the community of Hiouchi; a resort community where water demand varies dramatically with the seasons. The Hiouchi Flat area of Jedediah Smith Redwoods State Park and the Redwood National Park's Hiouchi Visitor Center are located within the District.

For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere.

The bulk of Del Norte County's population exists in unincorporated communities that qualify as disadvantaged including the community of Hiouchi. Big Rock CSD provides one of the three basic services - water service – to areas that are considered disadvantaged. There are no sewer services within District boundaries, residents rely on private septic systems. Structural fire protection services are the responsibility of the Smith River Fire Protection District.