

---



---

## 5.0 GARBERVILLE SANITARY DISTRICT

---



---

### TABLE OF CONTENTS

5.1 District Background.....	5-3
Agency Overview .....	5-3
District Principal Act.....	5-3
Formation and Development.....	5-3
Boundary and Sphere of Influence .....	5-5
Annexation History .....	5-5
Out of Agency Service Connections .....	5-7
Land Use and Zoning.....	5-11
Growth and Population.....	5-14
Disadvantaged Unincorporated Communities .....	5-14
Hazards.....	5-15
5.2 Municipal Services .....	5-17
Water Services .....	5-17
Wastewater Services.....	5-27
Other Service Providers .....	5-31
5.3 Governance & Finance.....	5-32
Governance .....	5-32
Staffing .....	5-33
Accountability and Transparency .....	5-33
Financial Summary .....	5-33
5.4 Garberville Sanitary District MSR Determinations .....	5-42
5.5 Garberville Sanitary District SOI Determinations .....	5-45

### List of Figures

Figure 5-1: GSD Boundary and Sphere of Influence .....	5-4
Figure 5-2: GSD Annexation Areas (2014) .....	5-6
Figure 5-3: GSD Outside Agency Services .....	5-9
Figure 5-4: General Plan Land Use Designations .....	5-13
Figure 5-5: Water System Pressure Zone.....	5-23
Figure 5-6: GSD Wastewater Treatment Plant Diagram.....	5-30

**List of Tables**

Table 5-1: Contact Information..... 5-3  
Table 5-2: Land Use Designations within GSD Boundary..... 5-12  
Table 5-3: Pressure Zones ..... 5-22  
Table 5-4: Board of Directors ..... 5-32  
Table 5-5: Annual Profit and Loss Summary ..... 5-36  
Table 5-6: GSD Audit Summary ..... 5-37  
Table 5-7: Total Net Position Summary ..... 5-38

## 5.1 DISTRICT BACKGROUND

### Agency Overview

The Garberville Sanitary District (hereinafter referred to as "GSD" or "District") provides water and wastewater services to the community of Garberville, located along U.S. Highway 101 and bordered by the South Fork of the Eel River. Garberville is the center of commercial activity for the south county region and is located on the ancestral tribal lands of the Sinkyone people.

**Table 5-1: Contact Information**

<b>Primary Contact</b>	Ralph Emerson, General manager
<b>E-mail</b>	remerson@garbervillesd.org
<b>Address</b>	919 Redwood Drive, Garberville, CA 95542
<b>Phone</b>	707-923-9566
<b>Website</b>	<a href="http://www.garbervillesd.org">www.garbervillesd.org</a>

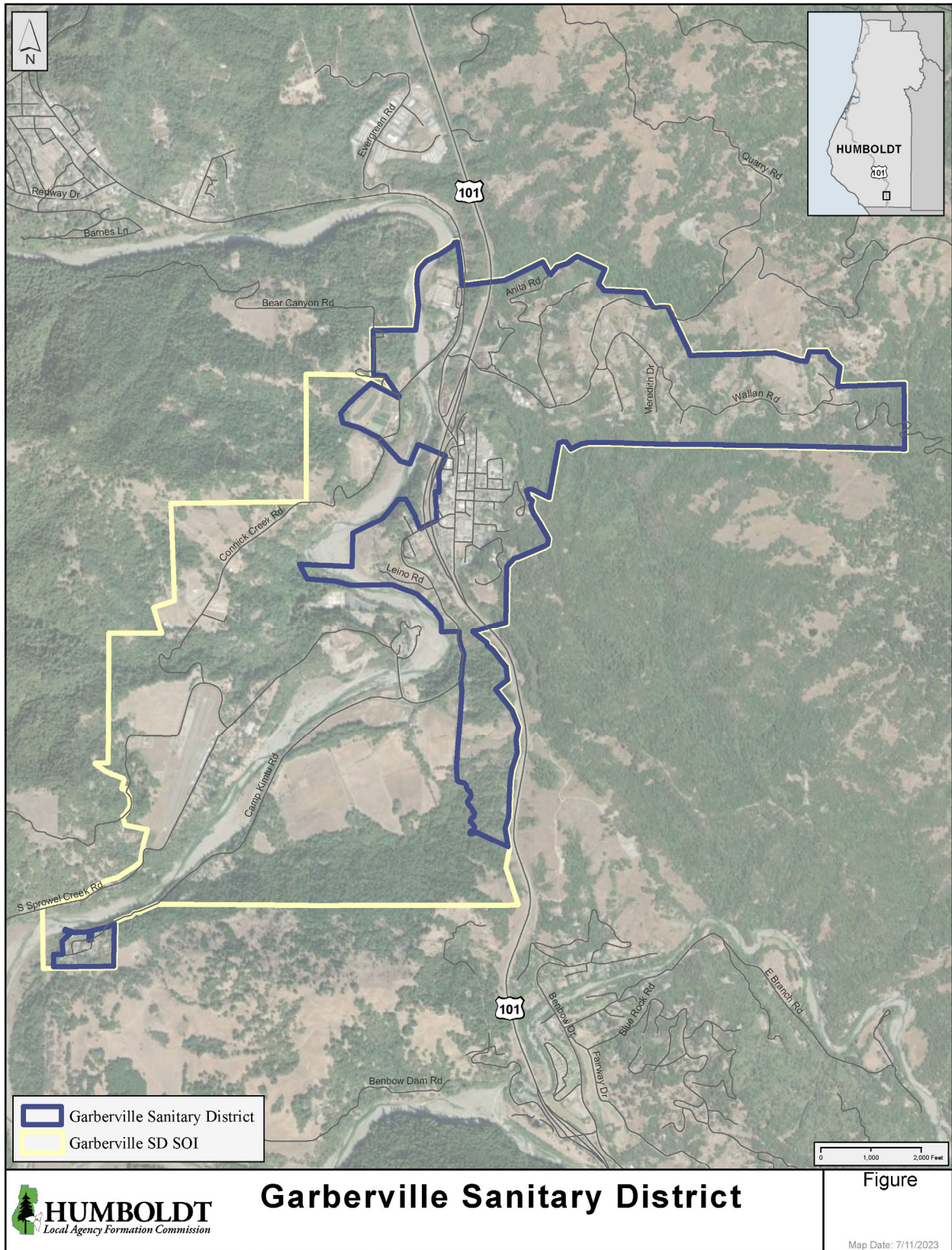
### District Principal Act

The District's principal act is the Sanitary District Act of 1923 (Health and Safety Code Section 6400 *et seq.*) which authorizes Sanitary Districts to provide a number of services related to waste management and disposal within their boundaries. This includes operation of garbage disposal sites, wastewater collection and treatment systems, stormwater systems, and water recycling and distribution related to other services. GSD is currently authorized to provide water and wastewater services only. Other services, facilities, functions or powers enumerated in the District's principal act but not identified in the formation resolution are "latent," meaning that they are authorized by the principal act under which the District is formed but are not being exercised. Latent powers and services activation require LAFCo authorization as indicated in Government Code §56824.10-14.

### Formation and Development

GSD was formed in 1932 to provide sewer services to the community. In November 2004, the District acquired the Garberville Water Company (GWC), a privately held water company, and began providing water services. Since then, the District has indicated that active powers are water and wastewater services. Other services, facilities, functions, or powers enumerated in the District's principal act but not currently provided are "latent," meaning that they are authorized by the principal act under which the District is formed but are not being exercised as determined by the Commission. Latent powers and services activation require LAFCo authorization in accordance with Government Code §56824.10 *et seq.*

Figure 5-1: GSD Boundary and Sphere of Influence



## Boundary and Sphere of Influence

The District's boundary encompasses 966 acres (1.5 square miles) and includes the town of Garberville along Redwood Drive and Highway 101 and parcels along Alderpoint Road, Wallan Road, Bear Canyon Road, and portions of Sprowel Creek Road. Within the District there are approximately 416 parcels consisting of mostly low and medium density residential and commercial uses in the downtown area and lower density residential and resource-related uses in the surrounding areas. The District's current SOI encompasses an additional 1,258 acres beyond the District boundary, including areas surrounding Connick Creek Road, Sprowel Creek Road, and Camp Kimtu Road. The SOI was last updated in March 2013. At this time, no adjustments to the SOI are proposed. See Figure 5-1 for the District boundary and SOI.

## Annexation History

The Garberville Sanitary District has revised its borders several times since its founding. The original service area of the sewer treatment plant was expanded during the annexation of the Meadows Subdivision Unit #1 in June 1977, which added 69 lots on approximately 427 acres (LAFCo Resolution No. 77-8<sup>1</sup>), with additional annexations receiving approval from LAFCo in April 1995 (Horvath Annexation; LAFCo Resolution No. 95-01<sup>2</sup>) and March 2002 (County Yard, Maple Lane and Sunnybank Lane; LAFCo Resolution No. 02-02<sup>3</sup>). In November 2004, GSD purchased the assets of the Garberville Water Company (GWC), a privately held water company, and the Public Utilities Commission approved service area of the GWC was significantly larger than the GSD jurisdictional boundary. In July of 2014, GSD received LAFCo approval for an annexation of 75 Assessor's parcels in 5 areas to remedy the discrepancy between areas served and the jurisdictional boundary (LAFCo Resolution No. 14-05<sup>4</sup>). Below is a description of the annexation areas (See Figure 5-2).

### Area 1: Bear Canyon Road and Redwood Drive (163 acres)

This annexation area included existing water connections along Bear Canyon Road, Redwood Drive, and Bushnell Lane, as well as the District's Wastewater Treatment Plant (WWTP). A total of 17 parcels were annexed, with ~~6-six~~ parcels designated by the District for water and sewer service and the remaining 11 parcels designated by the District for water-only service. Out of these 11 parcels, ~~7-seven~~ had existing water service, ~~2-two~~ were likely undevelopable, and ~~2-two~~ developable parcels did not have service.

### Area 2: Hillcrest Drive Area (31 acres)

This annexation area included a total of ~~9-nine~~ parcels designated within the District's water and sewer service area. Among them, ~~7-seven~~ already had water service, one was designated GSD's water tank site, and another was vacant and unsuitable for development. ~~8-Eight~~ of the APNs were potential sewer customers. The remaining undeveloped parcel proposed for water and sewer service had available water infrastructure.

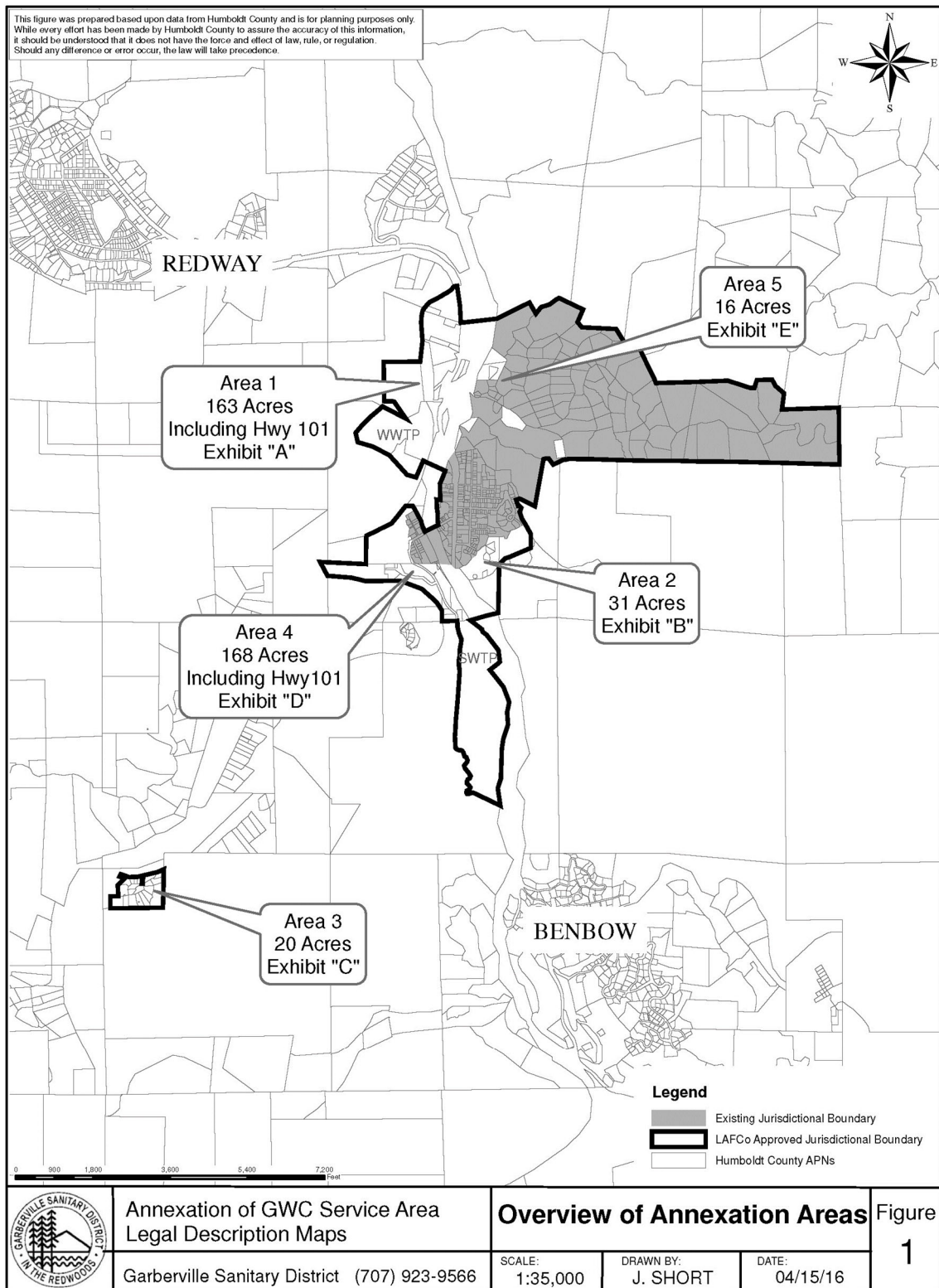
<sup>1</sup> Certificate of Completion for Meadows Subdivision Unit #1 recorded November 16, 1978.

<sup>2</sup> Certificate of Completion for Horvath Annexation recorded August 27, 1996.

<sup>3</sup> Certificate of Completion for County Yard, Maple Lane and Sunnybank Lane Annexation recorded December 23, 2002.

<sup>4</sup> Certificate of Completion for the Annexation of Garberville Water Company Serviced Properties recorded May 12, 2016.

**Figure 5-2: GSD Annexation Areas (2014)**



Area 3: Kimtu Meadows Subdivision (20 acres)

This annexation area included non-contiguous territory consisting of the Kimtu Meadows Subdivision located two miles southwest of Garberville. All of the annexed parcels (24 total) were designated within the District's water-only service area. 20 of the parcels are developed with residential uses and have existing water service whereas the remaining four parcels contain the decommissioned water supply infrastructure for the Kimtu Mutual Water Company (Kimtu MWC) and are very small and likely undevelopable.

Prior to annexation, GSD received LAFCo approval in July 2010 for an out-of-agency water service extension to address health and safety concerns for the residents of the Kimtu MWC (LAFCo Resolution No. 10-06). KMWC consistently failed to meet safety standards, resulting in a mandatory "Boil Water Advisory" issued by the California Department of Public Health. To address this issue, the State of California awarded a \$1.8 million grant under Proposition 50 to the Kimtu MWC. The project involved extending a new 8" water line along Kimtu Road and Sprowel Creek Road to provide clean and safe water to the Kimtu Meadows Subdivision.

Construction of the waterline extension was completed in July 2012, connecting the 20 parcels in the Kimtu Meadows Subdivision to the District's water system. Following the completion of the project, ownership of the infrastructure, warranties, and easements were transferred from the Kimtu MWC to the District. The Kimtu MWC discontinued water diversion and treatment, and the District began providing service to the Kimtu Meadows Subdivision parcels. As part of the 2014 annexation project, GSD requested LAFCo revisit the conditions adopted for the extension of services to the Kimtu Meadows Subdivision in LAFCo Resolution No. 10-06, which had included conditions to assure that extending the waterline would not induce growth. LAFCo Resolution No. 14-06 amended the conditions included in Resolution No. 10-06, thereby allowing the District to serve parcels located in their jurisdictional boundary, including parcels within the Leino Road/Sprowel Creek Road annexation area (see description below). The remaining condition outlined in LAFCo Resolution No. 14-06 relates to any future connections outside the District boundary:

*Any future connections to the Garberville Sanitary District waterline extended to serve the Kimtu Meadows Subdivision shall be submitted to Humboldt LAFCo for review and approval, in conjunction with an application for a change of organization or reorganization or an application for a new or extended service by contract or agreement pursuant to California Government Code Section 56133, prior to the connection being made.*

Area 4: Leino Lane / Sprowel Creek Road (168 acres)

This annexation area included 17 parcels situated along Leino Lane and Sprowel Creek Road that were designated for water service only by the District. Of the 17, 10 parcels receive water service, while seven parcels currently lack service.

Among these seven parcels, three are likely undevelopable with the remaining four parcels being vacant with the potential for development, each capable of supporting a single-family residence. The APNs on Leino Lane are currently served by a 2" water main off the end of the waterline in Riverview Drive. A stubout was installed during the Kimtu waterline installation to eventually serve the Leino Lane parcels. One of GSD's Capital Improvement Projects is to install a new line in Leino Lane that will be connected to the stubout at some point in the future. This upgrade is aimed to enhance water supply capacity and meet the needs of the residents in the area.

Area 5: Bear Creek Road/Bushnell Lane/Alderpoint Rd (16 acres)

This annexation area consisted of eight parcels scattered within or adjacent to the Meadows Subdivision within the north part of the existing District. All eight parcels were designated for both water and sewer services. Four APNs are likely undevelopable, and one is the Cal Fire station. Two were specified as "exceptions" in the LAFCo approved annexation in 1978. Three along Bushnell Drive were not included in the 2002 annexation because they did not have sewer service extended to them, although all three were provided with water service.

As part of the annexation project, GSD served as Lead Agency and prepared an Initial Study/Mitigated Negative Declaration (SCH 2012032025), for which LAFCo served as Responsible Agency.

## **Out of Agency Service Connections**

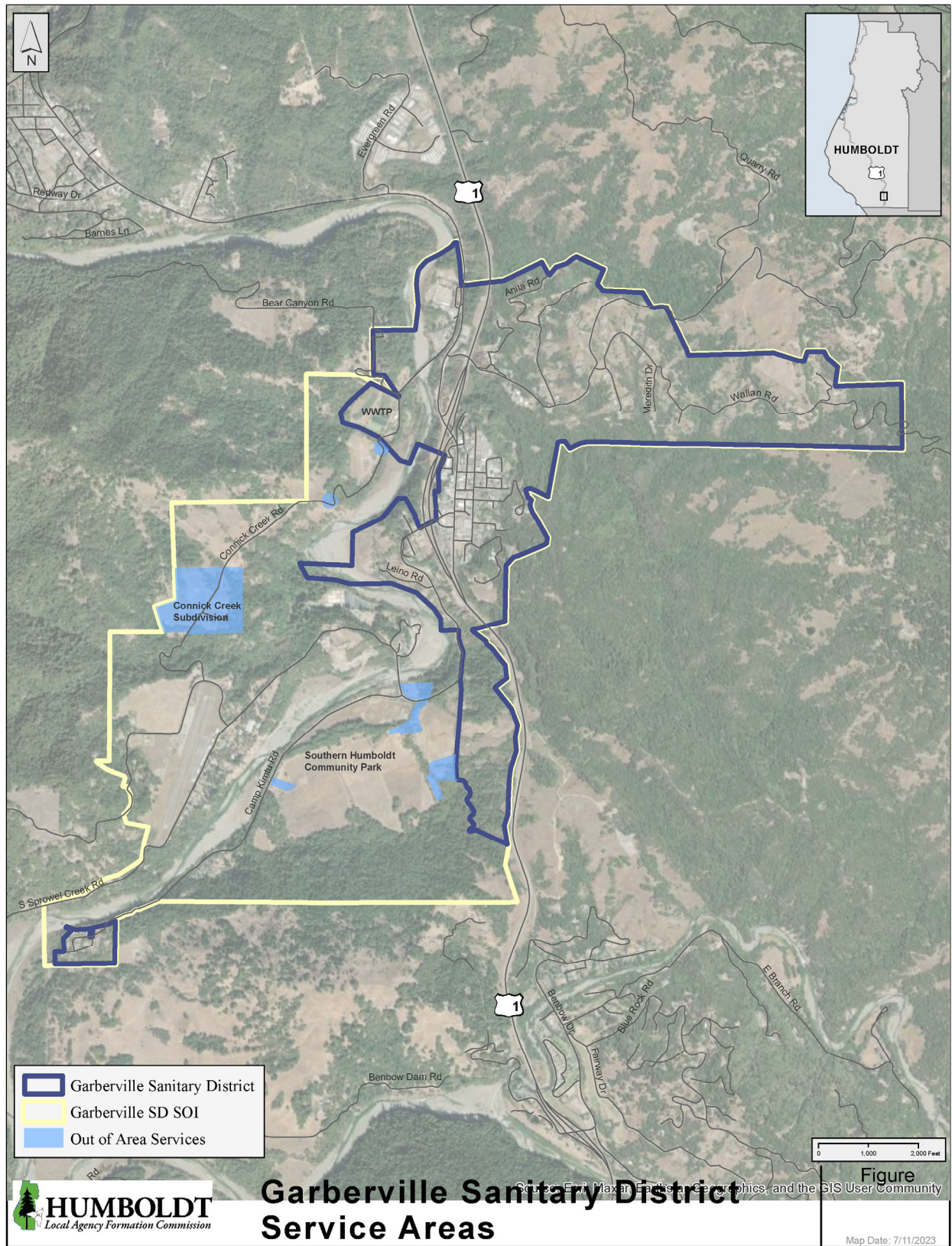
GSD currently provides services outside the District boundary to two main areas: Connick Creek Subdivision and the Southern Humboldt Community Park. These outside agency services are described below (see Figure 5-3).

Connick Creek Subdivision

As part of the 2014 Annexation project, LAFCo approved the Connick Creek Subdivision area, including 10 existing metered locations which are served on a private waterline as an outside agency service, rather than annex these properties to the District.

The Connick Creek Subdivision Association, originally a single APN 213-096-005, received a commitment from the Garberville Water Company (GWC) as part of a will serve letter dated October 16, 1991, to provide domestic water to nine 5-acre lots through a meter located east of the Eel River on Thomas Lane. The subdivision owners were previously responsible for constructing and maintaining waterlines from their subdivision to Thomas Lane. Later, the subdivision owners approached GWC to propose utilizing GWC's private waterline, which crosses the South Fork of the Eel River on an aerial span from the Thomas Lane location to the WWTP. This agreement was recorded on February 2, 1998, as Instrument Number 1998-2664-11. APN 213-096-005 was subsequently subdivided and resulted in eight parcels. Those APNs are 222-156-014 through -021.

Figure 5-3: GSD Outside Agency Services



In 2010, the Connick Creek Subdivision Association approached the District about installing individual meters to each of the APNs. This agreement identified 11 water connections (~~8-eight~~ within the Connick Creek subdivision, ~~1-one~~ adjacent to the Connick Creek subdivision [APN 222-156-012], and ~~2-two~~ along the private water line [APN 223-156-025]) of which 10 have meters set, with two parcels having more than one meter (residential and agriculture). Water is billed according to the total volume recorded by the master meter and split between the parcels based on their individual meters with one customer paying for the overage. This agreement was officially recorded on October 8, 2010, as Instrument #2010-22217-9, ~~recorded on October 8, 2010.~~

The agreement reiterates that the waterline from the master meter to the subdivision is privately owned and maintained. The subdivision is responsible for all water that is delivered through the master meter regardless of how much water is delivered to each individual parcel. GSD also retains the right to turn off service to the subdivision if there is evidence of a substantial leak or other issue with the private system.

#### Southern Humboldt Community Park

The Southern Humboldt Community Park (SHCP) is a 405-acre park<sup>5</sup> located in Southern Humboldt County approximately 1 mile west of Garberville along Sprowel Creek Road (APN 222-091-015). In September 2019, GSD received LAFCo approval for an extension of water services outside the District boundary to designated areas and uses at the SHCP (LAFCo Resolution No. 19-05). As originally proposed, a new ¾" meter would be installed off the existing 8" waterline constructed adjacent to Tooby Ranch Road for the purposes of supplying potable water using existing onsite waterlines to the existing residences and outbuildings at the SHCP property and to public water fountains for public users of the park. As part of the outside agency services authorization, LAFCo approved an Addendum to the Initial Study/Mitigated Negative Declaration prepared for GSD Annexation Project (LAFCo Resolution No. 19-04).

As part of the service extension, GSD petitioned the State Water Resources Control Board Division of Water Rights to modify the Place of Use on License Number 2404 and Permit Number 20789 to add 18 acres of the SHCP property. The Petitions for Change in Place of Use were approved by the SWRCB on June 21, 2022, and Order WR 2022-0152 was entered. The Order contained additional requirements for the provision of water service to SHCP. These conditions are as follows:

---

<sup>5</sup> SHCP is currently utilized for passive recreation activities including river access, hiking, and biking. In 2017, SHCP completed the process of rezoning portions of the property from Agricultural Exclusive to Public Facilities to pursue future enhancements to the park. This process resulted in County Board of Supervisors Resolution No. 17-36 which added the Public Recreation land use designation and Ordinance No. 2572 which added the Public Facilities zoning. Humboldt County prepared an EIR for this action (SCH 2010092037).

1. Right holder shall attach to each year's annual report of licensee a diagram of the water-conveyance infrastructure that conveys water diverted under this right within the Southern Humboldt Community Park and a map of the places within the park where such water is used, sufficient to demonstrate that no water diverted under this right and delivered to Southern Humboldt Community Park is used anywhere outside the authorized place of use specified in this license.
2. The total amount of water right holder's deliveries to the Southern Humboldt Community Park under this right and the right pursuant to Application 29981 shall not exceed 3,000 cubic feet per month during two months of any 12-month period and shall not exceed 2,000 cubic feet per month during the remaining months of any such period. Right holder shall attach a table to each year's annual report of licensee that lists (in cubic feet) the amount of water right holder delivered to the Southern Humboldt Community Park during each month of the year covered by the annual report.

More recently, the SHCP determined that constructing new waterlines for the potable water service would ensure that there's no possibility for cross contamination between the new potable water and the existing irrigation water that they use on the property. In coordination with GSD, a location just east of the Park's driveway immediately adjacent to Sprowel Creek Road ([instead of the originally proposed connection from Tooby Ranch Road](#)) was determined to be the best place for setting the Park's water meter for these new waterlines. GSD notified LAFCo staff in September of 2022, documenting the final details for installation of the water service including the change in meter location [along Sprowel Creek Road](#) off the 8" waterline that was constructed as part of the Kimtu Meadows Water Service Extension project. To document the new meter location, GSD and SHCP executed an Updated Water Service Agreement on June 27, 2023. [LAFCo subsequently adopted Resolution No. 23-04, thereby amending LAFCo Resolution No. 19-05 to document the changes including the Updated Water Service Agreement.](#)

## Land Use and Zoning

Land uses in the District are subject to the Humboldt County General Plan and Zoning Regulations (Humboldt County Code Title III, Division 1)<sup>6</sup>. GSD encompasses the Garberville portion of the Garberville/Redway/Benbow/Alderpoint ("GRBA") Community Planning Area and ~~is~~ subject to the land use policies contained in the GRBA Plan, adopted June 30, 1987, in addition to the Framework Plan and Zoning Regulations. Land uses within the GSD boundary are shown below in Table 5-2.

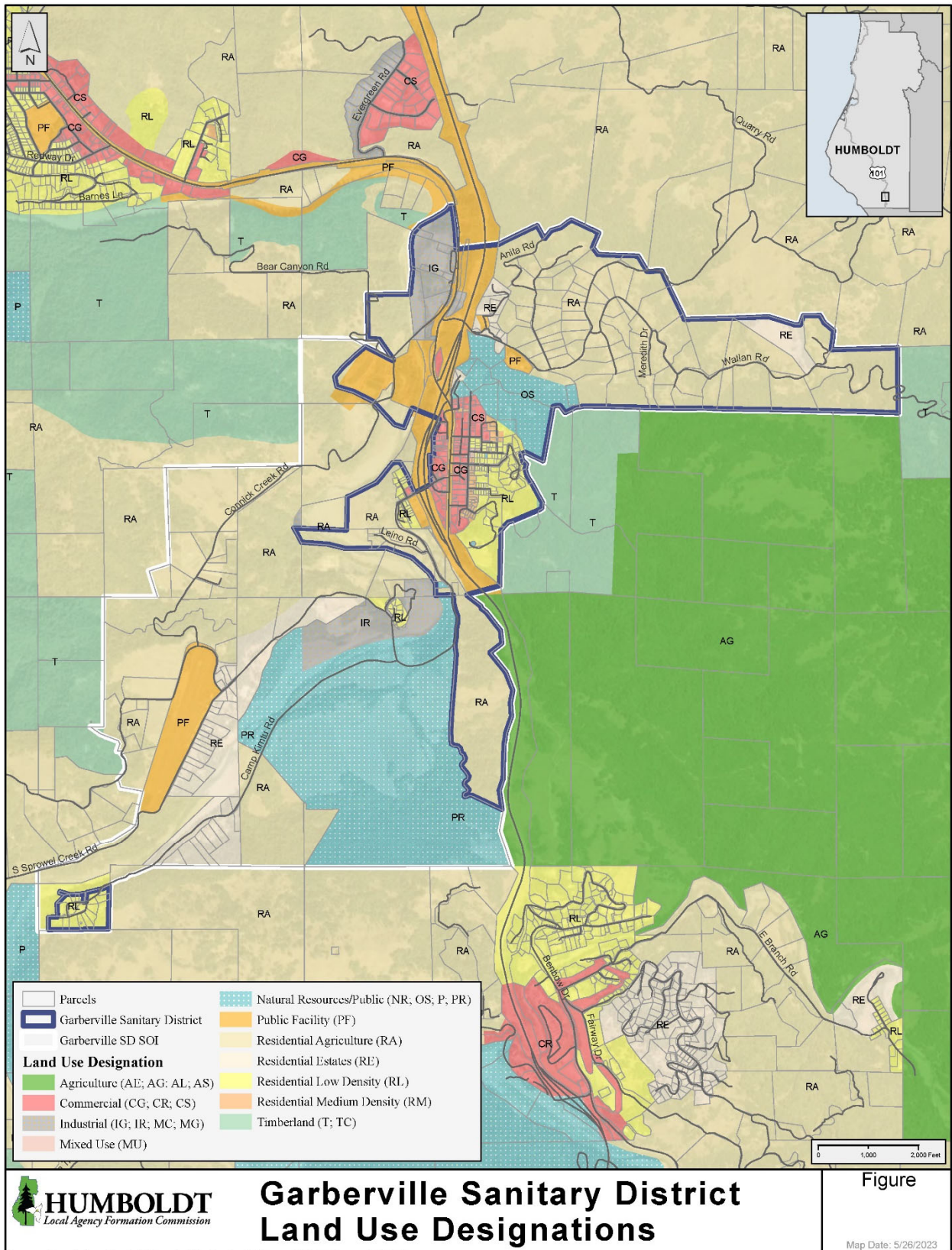
<sup>6</sup> Title III Div. 1 Planning | Humboldt County Code. (n.d.). Humboldt County Code. <https://humboldt.county.codes/Code/31>

Approximately 59% of land within the GSD boundary is planned as some form of Residential Agriculture. The next largest designation is Public Facility at 13% which includes areas such as the Highway 101 corridor, GSD wastewater treatment facility, CAL FIRE station, and county service yard. Overall, the land uses in the area encourage low density development with limited land available for higher density development that may lead to a higher demand for services.

**Table 5-2: Land Use Designations within GSD Boundary**

<b>General Plan Land Use Designations</b>	<b>Area (acres)</b>	<b>Percent (%)</b>
Agricultural Grazing (AG)	0.14	0.01%
Commercial General (CG)	33.41	3.45%
Commercial General and Airport Combining Zone (CG,AP)	0.19	0.02%
Commercial Services (CS)	7.35	0.76%
Industrial General (IG)	43.67	4.52%
Industrial Resource and Airport Combining Zone (IR,AP)	0.12	0.01%
Mixed Use (MU)	0.66	0.07%
Open Space (OS)	63.75	6.59%
Public (P)	0.33	0.03%
Public and Airport Combining Zone (P,AP)	0.69	0.07%
Public Facilities (PF)	120.06	12.42%
Public Facilities and Airport Combining Zone (PF,AP)	2.24	0.23%
Residential Agriculture 5-20 (RA5-20)	228.73	23.65%
Residential Agriculture 5-20, Airport Combining Zone (RA5-20,AP)	44.30	4.58%
Residential Agriculture 10 and Airport Combining Zone (RA10,AP)	11.83	1.22%
Residential Agriculture 20-160 (RA20-160)	85.57	8.85%
Residential Agriculture 20-160, Airport Combining Zone (RA20-160,AP)	0.96	0.10%
Residential Agriculture 40 (RA40)	197.02	20.37%
Residential Estates 1-5 (RE1-5)	16.69	1.73%
Residential Estates 2.5-5 (RE2.5-5)	14.19	1.47%
Residential, Low Density (RL)	61.08	6.32%
Residential, Low Density and Airport Combining Zone (RL,AP)	25.58	2.65%
Residential, Multiple Family (RM)	7.41	0.77%
Residential Suburban (T)	1.02	0.11%
<b>Subtotal</b>	<b>966.99</b>	<b>100.00%</b>

Figure 5-4: General Plan Land Use Designations



## Growth and Population

The District is located next to the South Fork Eel River and just south of Redway. According to the US Census Bureau decennial census, the population of the Garberville Census Designated Place (CDP) was 818 in 2020. However, the boundary of the CDP is larger than the District boundary. Based on 2020 Census data within the District's boundary, GIS analysis estimates that the current population is around 700-720 individuals. Since accurate population data can be difficult to obtain in remote rural areas, this report will utilize an estimated population figure of 710. The unincorporated areas of Humboldt County have an approximate annual growth rate of 0.2 percent<sup>7</sup>. Utilizing this growth rate and an estimated District population of 710, the population of GSD could grow to over 865 over the next ten years. Based on the historical and estimated population growth for the area, it is unlikely the District will grow substantially over the next five to ten years.

It is important to note that Southern Humboldt is well known to have a substantial amount of unhoused individuals and seasonal agricultural workers tied to the local cannabis industry that are likely not represented in census data. The Humboldt Housing and Homeless Coalition identified 52 unsheltered individuals in Garberville and 151 in neighboring Redway as part of the 2022 Point In Time Survey<sup>8</sup>. Additionally, seasonal farm workers in Southern Humboldt may make up ~~to~~ 10% or more of the local workforce depending on the season<sup>9</sup>.

It is recommended that the District look into conducting a District specific population and income survey as necessary to provide more accurate population estimates for the area.

## Disadvantaged Unincorporated Communities

~~A D~~Disadvantaged Unincorporated ~~Communities~~Community (DUC) in the State of California ~~are is~~ defined as an inhabited territory that constitutes all or a portion of a community with an annual median household income (MHI) that is less than 80% of the statewide annual median household income. The Department of Water Resources (DWR) also identifies Severely Disadvantaged Communities (SDAC) which are defined as below 60% of the statewide MHI<sup>10</sup>. The estimated 2021 MHI for Garberville is \$24,357<sup>11</sup> which is 29% of the 2021 California MHI of \$84,097<sup>12</sup> which means the District qualifies as a Severely

<sup>7</sup> Humboldt County: Housing Element Appendix G Table B - Recent Population Trends. Accessed April 13, 2022 from <https://humboldt.gov/DocumentCenter/View/5081/Appendix-G-Housing-Element-Appendix-PDF?bidId=>

<sup>8</sup> Humboldt Housing and Homeless Coalition. (n.d.). *HHHC 2022 Point-in-Time count*. [humboldt.gov.org. https://humboldt.gov/DocumentCenter/View/107776/20220621---HHHC-Point-in-Time-Count-2022](https://humboldt.gov/DocumentCenter/View/107776/20220621---HHHC-Point-in-Time-Count-2022)

<sup>9</sup> Krissman, F. (2016). *America's Largest Cannabis Labor Market*. Humboldt State University's Anthropology Department, and Humboldt Institute for Interdisciplinary Marijuana Research. Retrieved May 31, 2023, from <https://hiimr.humboldt.edu/sites/default/files/hiimr/docs/MjLaborMarket.pdf>

<sup>10</sup><https://norcalwater.org/efficient-water-management/efficient-water-management-regional-sustainability/disadvantaged-communities/#:~:text=A%20Severely%20Disadvantaged%20Community%20is,no%20more%20than%2010%2C000%20persons.>

<sup>11</sup><https://www.census.gov/searchresults.html?q=Garberville+&page=1&stateGeo=none&searchtype=web&cssp=SERP&charset=UTF-8>  
<https://data.census.gov/cedsci/table?t=Income%20%28Households,%20Families,%20Individuals%29%3AIncome%20and%20Poverty&q=1600000US0628154&tid=ACSSY2020.S1903>

<sup>12</sup> [https://www.waterboards.ca.gov/drinking\\_water/services/funding/documents/srf/mhi.pdf](https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/mhi.pdf).

Disadvantaged Community. Northwest of the District is Redway which had a 2021 MHI of \$62,786<sup>13</sup> which is 75% of the California MHI, and also qualifies it as a DUC.

DUCs are assessed for three primary services: water, wastewater, and fire/emergency response. GSD provides water and wastewater services to the area. Fire protection and emergency response is provided by Garberville Fire Protection District (FPD). Should any nearby areas be proposed for annexation, careful consideration should be given to the boundary location in order to ensure potentially disadvantaged areas are receiving vital services.

## Hazards

The region is vulnerable to a host of hazards and natural disasters such as earthquakes, floods, winter storms, landslides, droughts, and fires. The District has prepared an Emergency Operations Plan ([www.garbervillesd.org/emergency-operations-plan](http://www.garbervillesd.org/emergency-operations-plan)). This plan acknowledges the many agencies that work together and coordinate effectively in the event of an emergency including Caltrans, CAL FIRE, Sheriff's Office, PG&E, Humboldt County Road Department, the Southern Humboldt Community Hospital District, and the Garberville Fire Protection District, ~~are all~~ of which ~~all are~~ located within the GSD boundary.

## Earthquakes

The District is located within the Garberville-Briceland fault zone. The faults lie to the east, west, north, and south of the District. This puts the District at risk of experiencing earthquakes. The soil within the District has low to high soil instability. The soil stability can dictate how catastrophic an earthquake may be. Due to the low potential for liquefaction in the area and its distance from major fault zones, it is unlikely that a minor earthquake would have a substantial impact on district service. However, the extent of damage to utilities during earthquakes can vary widely depending on factors such as the magnitude of the earthquake, the proximity to the epicenter, the quality of infrastructure, and preparedness measures in place<sup>14</sup>. If a major earthquake were to occur, underground pipelines may rupture or break, leading to water leaks or sewage spills. Damage to treatment plants, storage tanks, and pumping stations can also occur, affecting the delivery and quality of water and wastewater services<sup>15</sup>.

On December 20, 2021, an earthquake with an initial magnitude of 5.7 took place near Petrolia. The earthquake was able to be felt as far north as Big Lagoon all the way to the

<sup>13</sup> United States Census Bureau, Median Income in the Past 12 Months (In 2020 Inflation-Adjusted Dollars). Accessed on April 13, 2022 from

<https://data.census.gov/cedsci/table?t=Income%20%28Households,%20Families,%20Individuals%29%3AIncome%20and%20Poverty&q=1600000US0660088&tid=ACST5Y2020.S1903>

<sup>14</sup> Humboldt County, Humboldt County Web GIS. Accessed April 19, 2022 from

<https://webgis.co.humboldt.ca.us/HCEGIS2.0/>

<sup>15</sup> EPA Office of Water. (2018, March). *Earthquake Resilience Guide for Water and Wastewater Utilities*. EPA. <https://nepis.epa.gov/Exe/ZyNET.exe/P100V1AT.txt?ZyActionD=ZyDocument&Client=EPA&Index=2016+Thru+2020&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX+DATA%5C16THRU20%5CXTI%5C00000008%5CP100V1AT.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75q8%2Fr75q8%2Fxl50y150q16%2Fi425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results+page&MaximumPages=1&ZyEntry=1>

south near Willits and Fort Bragg. The District experienced light damage but strong shaking<sup>16</sup>. Another large 6.4 magnitude earthquake occurred on December 20, 2022. The earthquake knocked out power to much of Humboldt County and was felt as far away as Crescent City.- Reports from the public indicated moderate shaking around Garberville with light damage<sup>17</sup>.

### Flooding

A 100-year flood zone lies along the west border of the District. This hazard zone shows that the District has a one percent chance of an annual flood occurring in any given year. The GSD Emergency Preparedness Plan indicates that the Flood Stage for the Eel River at Garberville occurs at 33ft. At this water level, road closures, slides and flood damage may occur<sup>18</sup>. On January 1, 1997, a flood of 33.64 feet occurred along the South Fork Eel River. Since the water was measured above 33 feet, the flood was considered a minor flood. The next significant floods occurred on January 17, 2016, peaking at 27.09 ft, on January 11, 2017 at 32.47-ft and on February 27, 2019, at 29.99 feet<sup>19</sup>.

### Landslides

The District is surrounded on all sides by historic landslides, a few of which overlap into the District's boundary<sup>14</sup>. Regionally, landslides have been documented and which have had a significant impact on transportation, emergency services, and more including a 2011 slide, five miles north of Garberville, that closed the north and southbound lanes of Highway 101 and took seven months for Caltrans to fully repair<sup>20</sup>.

According to the USGS, the occurrence of wildfires can cause substantial changes in the hydrology of a watershed to the extent that relatively mild rainstorms can result in hazardous flash floods and debris flows<sup>21</sup>. When a wildfire occurs, it can burn vegetation and organic matter that act as natural barriers and absorbent surfaces. The loss of this vegetation exposes the soil to the erosive force of rainfall. Without the protective cover of vegetation, rainwater can rapidly run off the burned landscape, leading to increased surface runoff and reduced infiltration into the soil. Should a wildfire occur in the vicinity of the District, it can be expected that the cascading effects may significantly increase the likelihood of landslides and may necessitate emergency erosion control measures depending on location and vulnerability<sup>22</sup>.

---

<sup>16</sup> USGS, M 6.2 – 7km N of Petrolia, CA. Accessed April 19, 2022 from

<https://earthquake.usgs.gov/earthquakes/eventpage/nc73666231/executive>

<sup>17</sup> USGS Earthquake Report, M6.4 – 15km WSW of Ferndale, CA: Did You Feel It? Accessed from earthquake.usgs.gov on June 23, 2023.

<sup>18</sup> Garberville Sanitary District. (n.d.). Emergency Operations Plan. Retrieved August 16, 2021, from <https://www.garbervillesd.org/emergency-operations-plan>

<sup>19</sup> USGS, South Fork Eel River Near Miranda. Accessed on April 19, 2022 from

[https://water.weather.gov/ahps2/hydrograph.php?gage=mrnc1&hydro\\_type=2&wfo=eka](https://water.weather.gov/ahps2/hydrograph.php?gage=mrnc1&hydro_type=2&wfo=eka)

<sup>20</sup> The Press Democrat. (2011, November 19). *Hwy. 101 landslide repair finished near Garberville*. [The Road Warrior. https://roadwarrior.blogs.pressdemocrat.com/13583/hwy-101-landslide-repair-finished-near-garberville/](https://roadwarrior.blogs.pressdemocrat.com/13583/hwy-101-landslide-repair-finished-near-garberville/)

<sup>21</sup> Emergency Assessment of Post-Fire Debris-Flow Hazards. U.S. Geological Survey. (n.d.). [https://landslides.usgs.gov/hazards/postfire\\_debrisflow/](https://landslides.usgs.gov/hazards/postfire_debrisflow/)

<sup>22</sup> Northern Arizona University . (n.d.). Fire effect on Soil. <https://www2.nau.edu/~gaud/bio300w/frsl.html>

## Drought

GSD has a Drought Contingency Plan that will go into effect during drought conditions as identified by the State of California, Humboldt County, or Garberville Sanitary District. Customers will be required to conserve water, including, but not limited to gallons per day water usage and may be fined for gallons of water used above the maximum allowance if they do not comply:

- 1st Phase of the Drought Conservation will require all customers to voluntarily reduce water consumption and prohibits agricultural irrigation. (Three days at 10cfs) in the South Fork of the Eel River.
- 2nd Phase will be a stop to all outdoor watering for everything except animals, vegetables or fruit (three days at 7cfs).
- 3rd Phase will require even addresses to use water on even days and odd addresses to use water on odd days only using water on specific days, designated by GSD (three days at 5cfs).
- 4th Phase requires all customers to only use water for health and safety, with no outside watering (three days at 4cfs).

## Wildfire

Garberville is located on the banks of the South Fork of the Eel River in a densely forested area which creates a higher risk for wildfire. The majority of the District is within the Caltrans designated "very high severity fire hazard zone" with a high severity zone located to the east<sup>14</sup>. Approximately 0.6 miles east of the District's border, the Saw fire occurred in 2017 off Alderpoint Road and Lower Sawmill Road. The fire burned approximately 85 acres<sup>23</sup>. South of the District, the Buck Fire began on July 29, 2015, and burned about 16 acres<sup>24</sup>. Wildfires can have multiple impacts on water districts such as direct damage to facilities, loss of pressure, increased siltation in intake facilities from burn scar runoff, poor water quality, and more.

## **5.2 MUNICIPAL SERVICES**

---

### **Water Services**

In 2004, the community voted to acquire the assets of the Garberville Water Company (GWC), a private water system owned by the Hurlbutt family. The Garberville Sanitary District Board of Directors approved the provision of water service within its jurisdictional boundary, on July 13, 2004, by Resolution 2004-02 (on file with Humboldt LAFCo). The sale of the GWC to the District was effective November 18, 2004. The District began operating the system on November 18, 2004, and started monthly billings. The District has owned, operated, maintained, and managed the water system ever since.

### Water Source and Treatment

The District currently receives its water from two active sources: Well 1 known as "Tobin Well" located in downtown Garberville, and an infiltration gallery on the South Fork of the

---

<sup>23</sup> CalFire, Saw Fire Incident. Accessed April 19, 2022 from <https://www.fire.ca.gov/incidents/2017/8/3/saw-fire/>

<sup>24</sup> CalFire, Buck Fire Incident. Accessed April 20, 2022 from <https://www.fire.ca.gov/incidents/2021/6/6/buck-fire/>

Eel River<sup>25</sup>. The District also has an inactive legacy water source which is a second well known as "Miller Well" that has not been used in over 10 years (as of the 2022 Water Source Capacity report). Prior to GSDs acquisition of the water system, GWC had rights to a point of diversion on an unnamed creek. However, this water source was not transferred to GSD<sup>26</sup>.

The District holds a water diversion license (license number 3404) and a permit (permit number 20789) from the State Water Resources Control Board, granting them the authority to appropriate water from the South Fork of the Eel River. This permit allows the District to divert a maximum of 0.595 cubic feet per second (267 gallons per minute) from the river throughout the year. In addition, the District has a fixed license that permits an additional diversion of 0.155 cubic feet per second. Overall, the total maximum instantaneous diversion allowed is 0.75 cubic feet per second (336 gallons per minute).

At permit face value, this translates to a maximum daily diversion of approximately 484,700 gallons and an annual diversion of 177 million gallons, assuming the availability of suitable pumps and treatment facilities<sup>27</sup>. However, in actuality, the annual diversion quantity cannot exceed the maximum water diverted during the "permit development period", which was equal to 80 million gallons.

The South Fork of the Eel River infiltration gallery functions as the main water source for GSD. Water is pumped from the South Fork Eel River via a 640 foot 8-inch perforated pipe at approximately 320 gpm. Upon collection, the water flows into a 3-foot diameter concrete collection chamber with a depth of 12 feet. At the bottom of the collection chamber is an 8-inch double-strength steel pipe fitted with a single check valve. This pipe serves as the conduit, guiding the water toward the two submersible pumps located on the east side of the river which are housed within a concrete-shielded pumping structure. In 2015, the piping system was retrofitted to upgrade the existing 4-foot diameter corrugated metal pipe located on the east side of the river. The pipe was also extended to a height of 55 feet, ensuring that the top portion remains outside the river flow during potential 100-year flood events and mitigates the potential impact of flood events on the system.

The two submersible pumps have a capacity of 25 horsepower each and supply a maximum flow rate of up to 350 gpm. The flow from these pumps is directed into a 6-inch raw water pipeline, which serves as a conduit for transporting the untreated water to the surface water treatment plant (SWTP) located on Tooby Ranch Road. The extension of the 4-foot corrugated metal pipe housing, along with the submersible pumps and the

---

<sup>25</sup> Humboldt County. (2019, August 20). 2019 Housing Element Implementation Legacy and Community Detail. 2019 Housing Element Implementation. <https://humboldt.gov.org/2448/2019HousingElement#:~:text=2019%20Housing%20Element%20Adopted%20Aug.&text=The%20Housing%20Element%20was%20adopted,Humboldt%20County's%202019%20Housing%20Element.>

<sup>26</sup> Short, J. (2022, March 22). 2021 Annual Water Source Capacity Report. Garberville Sanitary District. Retrieved May 31, 2023, from [https://www.garbervillesd.org/files/0fc8c8f66/2021+Water+Source+Capacity+Report\\_ToBoard+2022+0524.pdf](https://www.garbervillesd.org/files/0fc8c8f66/2021+Water+Source+Capacity+Report_ToBoard+2022+0524.pdf)

<sup>27</sup> Humboldt County. (2019, August 20). 2019 Housing Element Implementation Legacy and Community Detail. 2019 Housing Element Implementation. <https://humboldt.gov.org/2448/2019HousingElement#:~:text=2019%20Housing%20Element%20Adopted%20Aug.&text=The%20Housing%20Element%20was%20adopted,Humboldt%20County's%202019%20Housing%20Element.>

raw water pipeline ensures a reliable and efficient transfer of raw water from the collection point to the SWTP.

The current treatment plant was constructed in 2014 with a new filter system and has a capacity of 480 gpm. Coagulant is injected into the raw water prior to entering the 5,500-gallon baffled flocculation tank. Water then flows through duplex mixed media filters before being treated with chlorine prior to entering the distribution system. The plant filters are backwashed infrequently during the summer when river water is typically less turbid, and more often during the winter months when river water is typically carrying more sediment. After filtration, the water is treated with sodium hypochlorite and then progresses through a baffled above ground chlorine contact tank, which was constructed after the previous in-ground chlorine chamber ruptured, a project independent from the 2014 treatment plant construction project.

The water treatment facility ensures that the produced water meets or surpasses State requirements for drinking water and Surface Water Treatment Regulations. The levels of turbidity and residual free chlorine in the treated water are within the allowable limits set by regulations. Additionally, the existing system is designed to provide adequate pressure across the four pressure zones within the District.

The District's secondary water source is Tobin Well which is a shallow (45 ft) well with a 6 ft diameter concrete casing located in a small pump-house on Pine Lane in Garberville. In 2014, GSD updated the Tobin Well by installing new variable speed pumps with level control designed to pump up to 100 gpm, which is an increase from a reported 45 gpm ~~in 2013~~ with the former pumping system in 2013. To regulate the pumping process and maintain a desired water surface, the pumps are controlled by the water level in the well by a variable speed controller. A 100-foot cable is used in conjunction with the controller to maintain optimum water level. Despite the availability of automation, it is noted that the automated pumping cycle times are often too short, resulting in minimal use of the feature. Ground water is treated minimally with chlorine as a disinfectant.

The water treatment plant has a permanent backup generator, which has the capacity to provide full electrical backup of the treatment plant during utility outages. The raw water pump station also has a permanently installed backup generator. No other pump stations have a stationary backup generator. The District has a single trailer-mounted generator that the operations staff moves from location to location to back up the other pump stations in the system during power outages.

#### Storage Tanks & Replacement Projects

The District currently has four main storage tanks with a total capacity of 400,000<sup>28</sup> gallons as listed below:

1. Hurlbutt Tank is a 180,000 gallon partially in-ground concrete tank with a wood roof structure constructed around 1940 in Hurlbutt Orchard. The Hurlbutt Tank is the main and oldest finished water storage tank in operation. It serves as the primary

---

<sup>28</sup> With the Robertson Tank permanently out of service, the District has a total current finished water storage capacity of 400,000 gallons.

storage from treatment plant. All water in the system is stored in this tank prior to being pumped to higher elevation zones.

2. Wallan Tank is a 20,000 gallon wooden tank constructed in 1978 located in the Wallan Road zone. The Wallan Tank is leaking, and the District lowered its operating water surface elevation (WSE) in order to minimize leakage. The District also installed a vertical polyethylene tank adjacent to the Wallan Tank to serve as temporary backup until a replacement tank can be installed.
3. Robertson Tank is a 50,000 gallon partially in-ground concrete tank with a wooden roof constructed in 1921 located in the Robertson zone that served the Arthur Road pressure zone. The Robertson Tank supplied this zone until spring 2022 when the District removed the tank from service due to tank failure and slope stability issues adjacent to the tank ~~and~~. The District installed a pressure reducing valve (PRV) at the intersection of Alderpoint Rd and Arthur Rd so this zone could be served by Alderpoint Tank.
4. Alderpoint Road Tank is a 200,000 gallon above-ground welded-steel tank at the top of the District's eastern boundary constructed in 2015 replacing an older 300,000-gallon redwood tank in the same location<sup>29</sup>.

According to the GSD 2022 Water Source Capacity Report, the Hurlbutt, Wallan, and Robertson main storage tanks are in various states of disrepair and must be replaced in the near future. Hurlbutt Tank was inspected and cleaned in 2013, at which time it was identified as needing replacement due to its age, structural integrity, construction materials, and leakage through cracks in the concrete that allow water to leak into the surrounding soils. The Wallan Tank has large irregular holes due to rotting wood which leads to leaks. Historically the holes were drilled and filled, which allowed for the tank's useful life to be extended. Over time the holes have grown larger and irregular in shape as the wood has continued to rot.

In 2021, GSD applied for funding through the Department of Water Resources Small Community Drought Relief Program for the replacement of the Hurlbutt, Wallan, and Robertson tanks ("Tanks Replacement Project"). In August 2022, the District was notified by DWR that their grant application had been approved. The \$4,545,000 grant will cover expenses related to administration, project development, property acquisition, and construction. Additional project funding will be supplemented through the Drinking Water State Revolving Fund (DWSRF). It is anticipated that the engineering and environmental review phase of the three tanks will take up to two years with construction planned to begin in 2024. The old tanks will be demolished as the new tanks come online.

Once completed, GSD will have approximately 825,000 gallons of water storage while substantially reducing the District's water loss and maintenance costs<sup>30</sup>. The improvement in infrastructure, combined with the District's efforts to conserve water through rate

<sup>29</sup> <https://www.rcac.org/success-stories/garberville-sanitary-district/>

<sup>30</sup> <https://kymkemp.com/2023/02/13/gsd-moves-forward-with-tank-replacement-project-without-connection-to-rcsd/>

increases and customer awareness, will contribute to more efficient water management and help ensure the sustainability of water resources for the community's needs.

### Distribution

The water distribution system for GSD was acquired from the GWC. Unfortunately, limited information exists from prior water company records on the distribution piping network. Neither a map of the distribution system nor an accurate record of pipe materials, sizes, and conditions exists for the District's distribution system. Based on the information available, water mains consist of galvanized steel, cast iron, PVC, copper, and asbestos cement (AC) of varying sizes. It has also been reported that some lead joints exist along the cast iron mains although it is unknown how many. It is known that a new 6-inch C-900 PVC line connects the river pump wet well to the SWTP, a new 8-inch C-900 PVC line runs from the SWTP to Redwood Drive, and a 8-inch AC line runs from the highway to Hurlbutt Tank<sup>31</sup>.

A major planned capital project for the District is the Meadows Aerial Waterline Reroute Project. GSD applied for grant funding through the Drinking Water State Revolving Fund (DWSRF) through the SWRCB and is awaiting award notification. Rerouting this waterline would consist of constructing a new water main starting at the new 8" line at Sprowel Creek Road in Redwood Drive to Alderpoint Road, over Highway 101, and tie into the Arthur Road pump station. A tee would be installed at the intersection of Redwood Drive and Alderpoint Road. One leg of the tee would continue down Redwood Drive to Bear Canyon Road and service the customers along that line. The line down Redwood Drive would also provide the location for the possible emergency intertie between the GSD and Redway CSD water systems to increase supply redundancy in the event of a normal supply disruption. The other leg of the tee would go across Highway 101 in the Alderpoint Road Overcrossing structure and continue to the Arthur Road pump station.

There are a total of five main pressure zones as shown in Table 5-3 below.

---

<sup>31</sup> SWRCB, Division of Drinking Water, Field Inspection Report January 15, 2019. Version 02/05/2019.

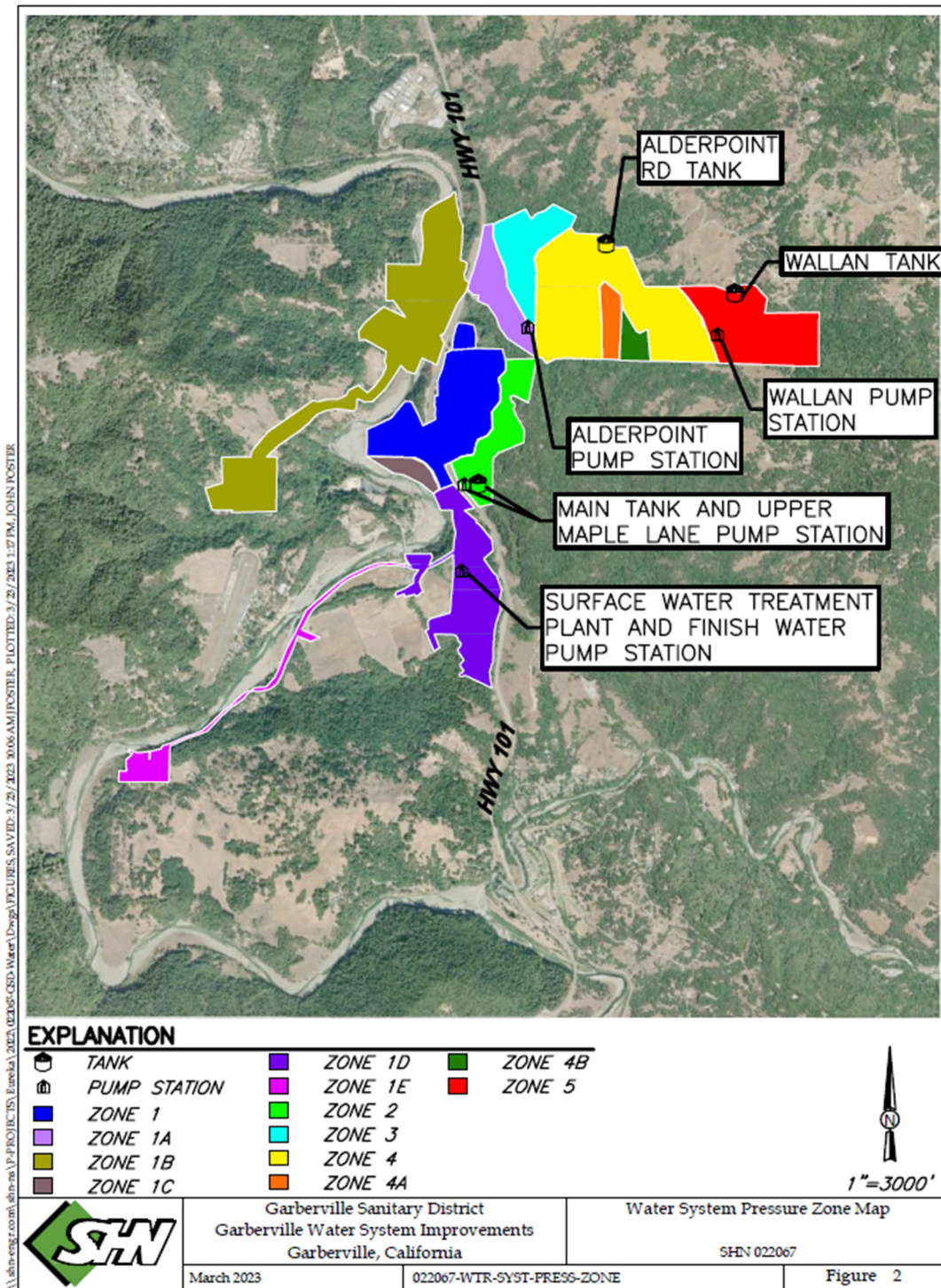
**Table 5-3: Pressure Zones**

Pressure Zone	No. of Connections <sup>a</sup>	Elevation Range <sup>b</sup> of Connections (feet)	Portion of Total Water Consumed	Associated Storage Tank	Notes
1	379	Downtown: 497-614; With PRVs: 326-386	80.98%	Hurlbutt	This zone includes all customers that are served by gravity feed from the Hurlbutt Tank, including sub-zones that have PRVs to decrease the pressure. Zone 1 includes sub-zones 1, 1A, 1B, 1C, 1D, and 1E.
2	21	666-725	2.74%	Hurlbutt	This zone is supplied water from the vertical pumps and pneumatic tanks at the Hurlbutt Tank and includes the houses along Hillcrest Drive and Upper Maple Lane.
3	20	677-688	3.84%	Alderpoint	This zone includes customers located primarily on Arthur Road. The Robertson Tank supplied this zone until spring 2022 when the District removed the tank from service and installed a pressure reducing valve (PRV) at the intersection of Alderpoint Rd and Arthur Rd so this zone could be served by Alderpoint Tank.
4	43	627-870	8.31%	Alderpoint	This zone includes the majority of the residences on the north side of Bear Canyon, and includes sub zones 4, 4A and 4B.
5	7	868-1108	4.13%	Wallan	This is the highest-pressure zone in the system.
<b>Total</b>	<b>470</b>	<b>326 - 1108</b>	<b>100.00%</b>		

- a. Number of connections were tallied based on unique addresses from 2021 usage data.
- b. Elevation ranges are approximated based on Google Earth elevation data for residences in each pressure zone.

**Source: SHN (2023). Final Preliminary Engineering Report.**

Figure 5-5: Water System Pressure Zone



## Demand

The District has 472 connections as of 2022 and an estimated 2020 population of 710. The average amount of surface water diverted from 1977 to 2022 was 60.88 million gallons (MG) per year<sup>32</sup>. The average diversion of past 20 years was 59.06 MG and 10 years was 57.33 MG<sup>33</sup>. The annual average water use of 2022 was 51.12 MG, continuing a downward trend<sup>34</sup>. The decrease in the average suggests a more efficient use of water over time and the efforts of the District to repair leaks, replace leaking tanks, and replace meters.

The highest recorded daily demand of 427,780 gallons per day occurred in July 1999. However, in 2017 the maximum demand was August 4<sup>th</sup> at 295,700 gallons (205 gpm). Based on the systems maximum capacity of 350 gpm and diversion limit of ~~336 gpm or 176 152 gpm or 80~~ million gallons per year, the District is currently seeing a maximum demand rate of approximately ~~61~~135% of its allowable diversion rate and is using approximately ~~29~~64% of its allowable annual diversion limit according to the District.

Considering the estimated water consumption for undeveloped and under-developed parcels, along with approved and potential projects, the total estimated annual water diversion needed projects to 67.26 MG or 84% of the 80 MG allotment. GSD has a policy to preserve a 5 million gallon buffer for annual variation which preserves 7.73 MG or 9.66% of the total water allotment for reserve. The evaluation of water sources, past diversions, future development potential, and approved projects concludes that there is ~~enough ample~~ water capacity to meet current and future needs within the designated service area and allow for additional development within the existing ~~POU~~ Place of Use (POU) and jurisdictional boundary.

## Water Source Capacity Analysis

GSD conducts an annual analysis of water sources to support current and future development within the designated ~~Place of Use (POU)~~. The 2022 Water Source Capacity Report considered factors like customer type, zoning, and historical billing data to estimate future water consumption for 34 potentially developable parcels. The report also identifies the potential for future development within housing opportunity zones and the creation of second or accessory dwelling units. Residential parcels have an average annual demand of 70,500 gallons while second dwelling/-accessory dwelling units use approximately 65,465 gallons per year, assuming similar water usage patterns to apartment-type users. Commercial or industrially zoned properties average 177,500 gallons per year. Agricultural meters vary widely in usage.

The analysis of diversions and development potential shows sufficient water sources to support additional development. Total estimated annual water diversion for existing commitments, undeveloped parcels, approved and under-consideration projects, amounts to 67,266,444 gallons. Available water capacity from the existing allotment and

<sup>32</sup> <https://www.garbervillesd.org/files/e2b1180ea/BOD+Meeting+Agenda+Packet+May+23%2C+2023+%281%29.pdf>

<sup>33</sup> Short, J. (2022, March 22). 2022 Annual Water Source Capacity Report. Garberville Sanitary District. Retrieved May 31, 2023, from <https://www.garbervillesd.org/files/c48c5498b/2022+Water+Source+Capacity+Report.pdf>

<sup>34</sup> [www.garbervillesd.org/files/c48c5498b/2022+Water+Source+Capacity+Report.pdf](https://www.garbervillesd.org/files/c48c5498b/2022+Water+Source+Capacity+Report.pdf)

a 5% buffer for seasonal variation allows for a 12,733,556 surplus for future development. Considering the historical average diversion from 1977 to 2022 (60,886,329 gallons) available capacity exceeds requirements and 7,733,556 gallons per year remain accessible (with 6.25% seasonal variation buffer). This represents approximately 12% of the total diversion needed, allowing for flexibility in projects under consideration and unidentified future projects. The district can rely on the South Fork Eel River diversion and the Tobin Well as backup supply, depending on water quality for treatment at the Surface Water Treatment Plant. Overall, the district possesses the capacity to meet current and future water diversion needs and accommodate projects within the POU and jurisdictional boundary and for future annexations.

### **State Water Resource Control Board Inspection**

During the last routine inspection conducted by the SWRCB on May 18 and August 19 or 2022, there were a number of items listed as deficiencies which included the following:

1. Need updated BSSP - Update the existing bacteriological sampling siting plan (BSSP) due September 15, 2022.
2. Need updated WQENP - Update the existing water quality emergency notification plan (WQENP) due September 15, 2022.
3. Tobin Well:
  - a. Sample the raw (unchlorinated) water monthly for total coliform bacteria.
  - b. Relocated the chlorine injection location from inside the well to the outlet pipe.
  - c. Add dedicated, threadless, raw-water sample tap.
  - d. Add accessible check-valve to outlet pipe, located upstream of chlorine injection point.
  - e. Ensure all openings around the base of the well house are sealed.
  - f. Recommend fire-hardening well house and maintain defensible space.
  - g. Document and report all chlorination records for the Tobin Well when in use.
  - h. Sample for volatile organic compounds (VOCs) and nitrate (overdue).
4. Distribution Sampling for Asbestos - Monitoring for asbestos in the distribution system is overdue. Sample at a tap served by asbestos-cement pipe under conditions where asbestos contamination is most likely to occur by September 30, 2022.
5. Facility Data Sheets - Complete the Facility Data Sheets due December 31, 2022.
6. Need SWTP Monthly Report Updates - Update Surface Water Treatment Plant (SWTP) Monthly Reports with the following:
  - a. The average daily turbidity level measured of the "finished water" (i.e., combined filter effluent) for each day.
  - b. All raw water turbidity measurements taken during the month.
  - c. Daily recycled water turbidity and flow for each day of the month that backwash water was recycled back into the treatment process.
  - d. Report the lowest measurement of residual disinfectant concentration in mg/L in the water entering the distribution system.

- e. Complete the DISINFECTION PROCESS DATA MONTHLY SUMMARY and SUMMARY OF WATER QUALITY COMPLAINTS form each month.
7. Hurlbutt Tank: Prior to being replaced, the following recommendations should be followed:
  - a. Inspect the tank's exterior and interior weekly.
  - b. Replace or repair tank appurtenances such as roof hatches, vents, and roof material as necessary to ensure a water-tight seal and to secure against potential pest intrusion.
  - c. Maintain or removal of all vegetation within at least five feet surrounding the tank and, if possible, pave the perimeter around the tank (at least 36" in width) to prevent new plant growth.
  - d. Install security fencing with a lockable gate around the tank.
8. Weekly Turbidity Accuracy Validation - Continuous turbidity measurements of the combine filter effluent may be substituted for the requirement to perform grab sample monitoring at least once every four hours provided the supplier validates the accuracy of the measurements on a weekly basis.
9. Alderpoint Road Tank - It is highly recommended that cathodic protection and high/low water level monitoring with remote alarm notification be installed.
10. CIPP - It is highly recommended that GSD develop a general distribution system capital improvement plan program (CIPP) to be updated at future periodic intervals (e.g., every 5 years).
11. Hydraulic Profile - It is highly recommended that GSD have an engineered hydraulic profile of the water system completed to assist with current and future planning for improvements.
12. Water Main Repair Reminder - Perform adequate flushing, disinfection, and "other" bacteriological sampling after water main repairs.

### Bulk Water Sales

In 2012, the Garberville Sanitary District (GSD) received a Cease-and-Desist Order from the SWRCB known as "WR 2012-0036-DWR", which restricted the bulk sale and delivery of water outside the authorized place of use, except for emergency domestic water supply<sup>35</sup>. The definition of "emergency domestic" included essential uses for sustaining human and animal life and sanitation purposes. A subsequent violation known as "2020-0104-EXEC GSD" occurred when members of the public reported the trucking of water by County of Humboldt employees and/or contractors in the Fall of 2019. It was alleged that GSD had engaged in bulk water sales for emergency projects, such as firefighting efforts and emergency road repairs<sup>36</sup>.

In 2020, GSD entered into confidential negotiations with the SWRCB to reach a settlement regarding the alleged violations. The settlement did not constitute an admission of fault or liability on the part of GSD and resolved the disputed claims and stopped the practice of bulk water sales to government agencies such as Caltrans and the County of

---

<sup>35</sup>[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/enforcement/compliance/cease\\_desist\\_actions/2012/wro2012\\_0036\\_dwr.pdf](https://www.waterboards.ca.gov/waterrights/water_issues/programs/enforcement/compliance/cease_desist_actions/2012/wro2012_0036_dwr.pdf)

<sup>36</sup> [www.waterboards.ca.gov/waterrights/board\\_decisions/adopted\\_orders/orders/2020/wro2020\\_0104\\_exec.pdf](http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2020/wro2020_0104_exec.pdf)

Humboldt or contractors of said agencies. GSD petitioned to expand the definition of "emergency use" in the Cease-and-Desist Order to allow necessary bulk water sales for substantial public health events or imminent threats to public health and safety<sup>37</sup>.

The settlement agreement was approved by the SWRCB, and GSD was required to implement compliance actions and pay the \$40,000 administrative civil liability penalty. Compliance actions involved obeying the Cease-and-Desist Order and continued restrictions on bulk water sales outside the authorized place of use. GSD has not conducted bulk water sales since 2020 as failure to implement these actions could result in further enforcement by the State Water Board.

### Cannabis Water Use

In November 2016, California voters approved Proposition 64, legalizing the recreational use of cannabis. In January 2018, GSD adopted ordinance Section 15.9 Commercial Agricultural Water Use to regulate cannabis cultivation within the District boundary. GSD implemented a policy requiring residential customers with high water consumption to obtain a second agricultural meter for cannabis cultivation if evidence proved that they were growing cannabis. Some customers had active commercial cannabis operations, while others had larger landscaped lots or had ceased cultivation. The District issued property owners will serve letters for commercial cannabis operations allowing the District to monitor water use within its boundary and accurately measure and report diversity in types of water usage.

In June 2020, GSD introduced a new rate structure with three tiers for residential water users including a third tier for excessive water usage, charging a higher rate of \$12 per unit. Residential customers growing cannabis had a financial incentive to obtain an agricultural meter, ensuring proper measurement and accounting of water used for commercial cannabis cultivation.

As of December 31, 2022, ten Assessor's Parcel Numbers (APNs) had been issued agricultural meters. The water delivered through these meters was tallied separately and reported in the District's Water Source Capacity Report and as part of the District's annual diversion report for their License and Permit. In 2022, these customers were billed for a total of 722,568 gallons, around 300,000 gallons less than the previous year. GSD will continue to identify residential water users cultivating or potentially cultivating cannabis and inform them of the requirement to obtain an agricultural meter and follow local and State land use regulations.

## **Wastewater Services**

GSD has the authority to collect, treat, and dispose of the community's wastewater. The District's existing wastewater facilities are within its boundaries and include collection and transmission lines, two headworks stations, two pumping stations, and a treatment plant. The current service area covers the downtown community of Garberville and the

---

<sup>37</sup> Short, J. (2022, March 22). *2021 Annual Water Source Capacity Report*. Garberville Sanitary District. Retrieved May 31, 2023, from [https://www.garbervillesd.org/files/0fc8c8f66/2021+Water+Source+Capacity+Report\\_ToBoard+2022+0524.pdf](https://www.garbervillesd.org/files/0fc8c8f66/2021+Water+Source+Capacity+Report_ToBoard+2022+0524.pdf)

Meadows Subdivision, which occupies roughly 400 acres of hillside and includes 69 parcels. The District currently provides wastewater service connections to approximately 374 customers.

### Wastewater Collection & Distribution

The original wastewater collection facilities in Garberville were built in the early 1930s by the California Conservation Corps. Today, much of the existing collection system is still in use. In 1965, a freeway construction project resulted in [the](#) reconstruction of certain parts of the collection system to accommodate the separation of the southwest portion of Garberville from the rest of the community. This configuration change necessitated the construction of a pumping station at the foot of Sunny Bank Lane. Another significant change occurred in 1977 when Meadows Subdivision Unit One was annexed to the District, introducing another pumping station. There was also a construction project creating the main ponds in 1980. These were the main modifications made to the collection system over a span of approximately 70 years.

The pumping station located at the foot of Sunny Bank Lane underwent an upgrade in 1984. It serves the purpose of collecting wastewater from around 25 residential connections and the College of the Redwoods branch campus. The wastewater is then pumped into the main system at a manhole located approximately 500 feet west of Redwood Drive on Sprowel Creek Road. Following the upgrade, the pumping station had the capacity to pump around 400 gallons per minute (gpm) using a single pump. The pumps in the station are duplex pumps equipped with high wastewater level alarms. The gravity lines leading to the pumping station are 6-inch lines, while the pressure line responsible for transporting wastewater from the pumping station to the manhole on Sprowel Creek Road (east of the freeway) is a 4-inch line. Notably, the 6-inch lines in Sunny Bank Lane, Riverview Drive, and Sprowel Creek Road were replaced in 2010. Regular maintenance and rebuilds as needed have been carried out on the pumps, with the most recent rebuild occurring in September 2011.

In 2003, a significant project was undertaken to replace two of the three existing aerial spans by rerouting them into roadways and bridges. This extensive project involved the construction of approximately 2,400 linear feet of 6-inch sewer line, 4,200 linear feet of 8-inch sewer line, 440 linear feet of 12-inch sewer line, a pump station, modifications to the existing headworks station, bore and jack operations across Highway 101 in two locations, as well as the installation of 650 linear feet of 4-inch waterline. Funding for this project, amounting to \$5.5 million, was secured through from the SWRCB <sup>38</sup>.

Currently, all wastewater flows through the two headworks, one of which was installed in 2003. Each headworks unit consists of a grit chamber, a Parshall flume, and a grinder unit. The wastewater then follows a longitudinal encroachment along State Highway 101, crosses the South Fork of the Eel River in the bridge, and utilizes an inverted siphon through the Carl Cater Memorial Bridge to reach the treatment plant. Notably, in 2011, a portion

---

<sup>38</sup> [http://humboldtlafo.org/wp-content/uploads/Adopted-MSR-SOI\\_03-20-2013.pdf](http://humboldtlafo.org/wp-content/uploads/Adopted-MSR-SOI_03-20-2013.pdf)

of the wastewater collection system was replaced to address the issue of excessive infiltration and inflow observed specifically at Sunnybank and Riverview Lanes.

### Wastewater Treatment and Disposal

GSD operates a municipal wastewater treatment facility located on Bear Canyon Road in Garberville on the west side of the South Fork of the Eel River. Wastewater collected by GSD primarily originates from the community, and there are no industrial wastewater flows directed to the treatment facilities. GSD's wastewater treatment facility operates under Waste Discharge Requirements (Order No. R1-2018-0033) that were adopted on September 06, 2018<sup>39</sup>. Additionally, GSD is separately subject to the requirements of Order Nos. 2006-0003-DWQ and WQ-2013-0058-EXEC and any future revisions thereto for operation of its wastewater collection system<sup>40</sup>.

In 2009, GSD's wastewater treatment plant underwent a major upgrade to improve its operational efficiency and environmental performance with improvements being completed in 2011. Prior to the \$3.5 million WWTP upgrade, the District was under a wastewater connection moratorium until additional treatment capacity was constructed. The current wastewater treatment facility consists of three oxidation ponds, four constructed wetland treatment ponds, a sodium hypochlorite injection system, chlorine contact pipelines, two percolation ponds, and an onsite operation and maintenance building. Wastewater treatment at the facility involves settling, absorption, aerobic and anaerobic bacterial actions, disinfection, and other biogeochemical processes.

---

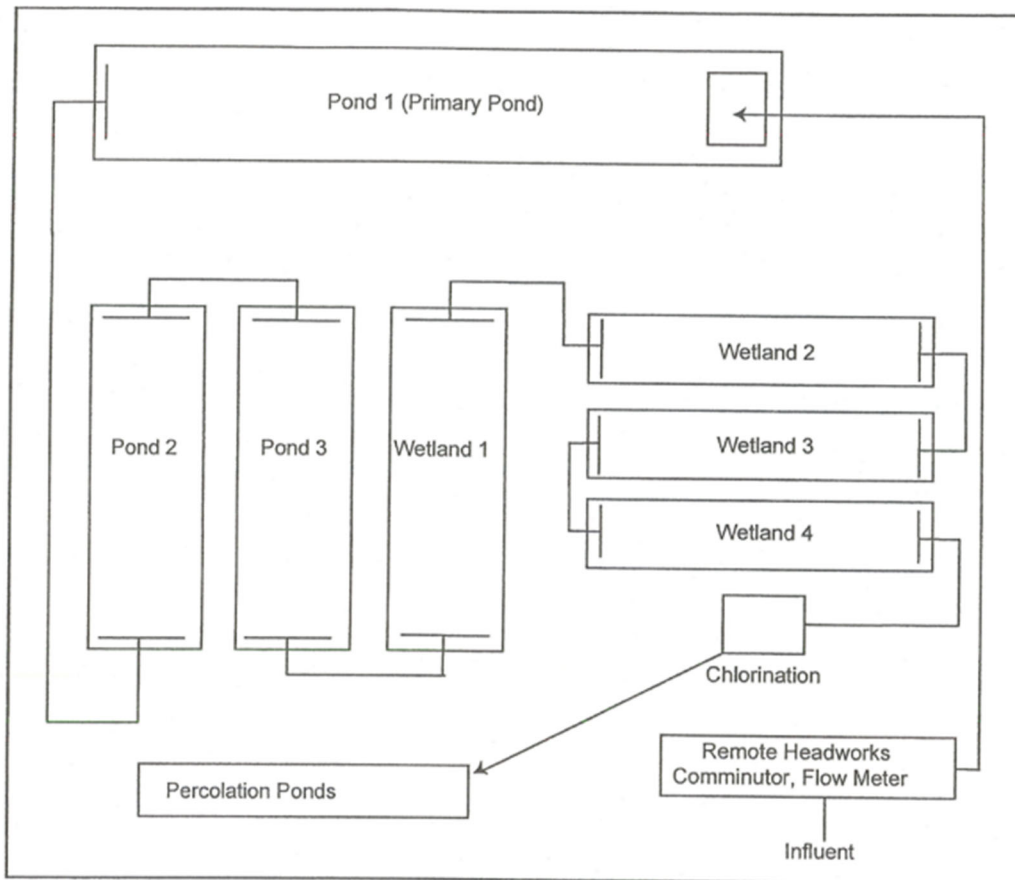
<sup>39</sup>

[https://www.waterboards.ca.gov/northcoast/board\\_decisions/adopted\\_orders/pdf/2018/18\\_0033\\_Garberville\\_WDR.pdf](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2018/18_0033_Garberville_WDR.pdf)

<sup>40</sup> On May 2, 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems. Order No. 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs by November 2, 2006. On September 9, 2013, the State Water Board adopted Order No. WQ-2013-0058-EXEC amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

As mentioned before, wastewater is pumped from the collection system headworks station and transported across the South Fork of the Eel River via the Carl Cater Memorial Bridge. The wastewater enters the facility at the north end of oxidation Pond 1 and flows by gravity through the three oxidation ponds and four wetland treatment cells in series. The effluent from Wetland Cell 4 then flows by gravity to a concrete vault where it is disinfected with sodium hypochlorite. The dosed effluent passes through two 140-linear foot 24-inch pipes, allowing for additional contact time. The disinfected effluent is discharged to the percolation ponds at "Discharge Point 001" throughout the year.

**Figure 5-6: GSD Wastewater Treatment Plant Diagram**



During system upgrades, special attention was given to the transport of the treated effluent, specifically its potential impacts on the environmentally sensitive Eel River. To assess and mitigate these concerns, a monitoring well network was established between the existing percolation ponds and the adjacent fluvial deposits within the active river channel. Data collected from these monitoring wells along with projected effluent constituent concentrations allow GSD to evaluate potential threats to surface water quality and support the continued use of the existing percolation ponds as a land-based discharge method in accordance with the current waste discharge requirements.

The waste discharge permit for the facility establishes different flow limits depending on weather conditions. The average dry weather flow is set at 162,000 gallons per day (gpd), while the average wet weather flow is specified as 235,000 gpd. The permit allows for a wet weather peak flow of up to 600,000 gpd. Current flow limits are designed to effectively manage the wastewater treatment process during various weather conditions with no outflow or discharge between May through October 1. This indicates that the existing infrastructure has ample capacity to handle the wastewater demands of the District. There are no significant large-scale capital improvement projects planned for the wastewater system in the near future, further affirming its ability to meet the District's needs at current operating capacity.

## Other Service Providers

### Rivercrest Mutual Water Company

RMWC is a state small water system (defined as 5 to 14 service connections) that serves roughly seven connections in the vicinity of Rivercrest Drive and Sprowel Creek Road and located within the sphere of influence of GSD. This water system utilizes an existing well on the river bar of the South Fork of the Eel River. The well serving this system is considered under the influence of surface water and has no filtration and lacks adequate storage capacity for disinfection contact time to inactivate pathogens. Because this system is not a public water system it is not eligible for emergency funds or other opportunities for infrastructure improvement that are available for public water systems. The system operates under a boiled water advisory since state law requires systems using surface water source to provide continuous disinfections. Users on the system use the water at their own risk. In 2013/2014, RMWC applied to the California Department of Public Health for pre-planning grant funds to be used for feasibility and planning efforts to evaluate consolidation with GSD. At that time, it was estimated that GSD would need to supply approximately 910,000 gallons per year to serve the Rivercrest properties. There is an opportunity for future consolidation planning efforts by RMWC and GSD.

### Fire Protection and Emergency Response

Garberville Fire Protection District (GFPD) is an independent, single purpose special district formed in 1940 to provide fire protection, emergency medical services, rescue, hazardous materials emergency response, and other services relating to the protection of lives and property pursuant to the Fire Protection District Law of 1987. The District is governed by a three (3) member Board of Directors who are elected by registered voters that live within the boundaries of the District. According to the Humboldt County Fire Chiefs' Association Annual Report, the GFPD had 19 volunteers in 2021. The incident response statistics for 2021 included 24 vegetation fires, 13 structure fires, 19 vehicle accidents, 150 medical, four hazmat/menace, 14 public assistance, 79 other fires, and seven other services<sup>41</sup>.

Humboldt LAFCo approved an application by the GFPD in July of 2022 to annex the District's approximately 36,000 acre out-of-district good-will response area, which

---

<sup>41</sup> Humboldt County Fire Chiefs' Association, 2021 Annual Report: Garberville Fire Protection District. April 2023.

included the following: (1) a property tax exchange agreement with Humboldt County for the annexation area, whereby the County would shift property tax base and growth generally equivalent with the current Garberville FPD property tax allocation; and (2) a special tax as a means to establish a dependable long-term source of revenue for community fire protection services. More than two thirds of required voters within the proposed district approved the special tax in March of 2023<sup>42</sup>. The GFPD and Sprowel Creek VFC will now operate as a consolidated entity and will receive revenue and resources needed to serve the full extent of the former good-will service area.

Increased revenue generated from the new special tax will enable the Garberville FPD to sustain and enhance community fire and rescue services with funding allocated towards implementing a volunteer recruitment and retention program and hiring ~~of~~ a daytime firefighter/EMT and part-time administrative staff, which will improve response times and ensure effective management of records and expenditures. The revenue will also support the regular replacement of equipment, enhancing operational safety and effectiveness. The expansion of the Sprowel Creek fire station and the development of a new fire station in Benbow will further improve response capabilities.

#### Solid Waste Disposal

Solid waste disposal is provided by Recology Humboldt. They offer residential and commercial pickup including recycling. The Redway transfer station is also located next to the Eel River Conservation Camp off Redwood Drive.

#### Police Services

Police services in and around the District boundary are provided by the Humboldt County Sheriff Department. In 2022, the Garberville station responded to 7,795 incidents including 1,739 deputy-initiated actions, 58 felony arrests, and 107 misdemeanor arrests<sup>43</sup>. This is a decrease from the 2021 total incidents of 7,984.

## 5.3 GOVERNANCE & FINANCE

### Governance

The District is an independent small district served by a five-member Board of Directors that is elected to four-year terms. Board meetings are held every fourth Tuesday of the month at 5:00pm at the District's office located at 919 Redwood Drive in Garberville.

**Table 5-4: Board of Directors**

Board Member	Title	Term
<b>Doug Bryan</b>	Chairperson	Mar 2014 – Dec 2024
<b>Rio Anderson</b>	Vice Chairperson	Feb 2012 – Dec 2024
<b>Julie Lyon</b>	Treasurer	Nov 2018 – Dec 2026
<b>Dan Thomas</b>	Board Member	Mar 2020 – Dec 2024
<b>Richard Landes</b>	Board Member	Dec 2022 – Dec 2026

<sup>42</sup> <https://humboldt.gov.org/DocumentCenter/View/115806/LAST-ELECTION-NIGHT-REPORT>

<sup>43</sup> Humboldt County Sheriff's Office, 2022 Annual Report. April 2023.

## Staffing

GSD currently employs ~~6-six~~ employees including ~~4-four~~ full-time, ~~2-two~~ part-time, and ~~0 zero~~ seasonal ~~staff~~. Full-time employees receive a benefits package including medical, dental, and vision insurance. In addition to GSD's regular employees, the District also contracts with outside firms on an as needed basis for engineering, construction, project management, accounting, and legal services.

## Accountability and Transparency

The District maintains a website in accordance with SB929 regulations ([www.garbervillesd.org](http://www.garbervillesd.org)). The District has a webpage dedicated to District Transparency ([www.garbervillesd.org/district-transparency](http://www.garbervillesd.org/district-transparency)).

Board agendas and notices are posted at the District office and on the website at least 72 hours in advance of scheduled Board meetings. Meeting minutes are posted on the District website. Meetings of the Board of Directors are subject to the Ralph M. Brown Act, which was officially re-adopted at the Board of Directors meeting held January 31, 2023.

## Financial Summary

### Profit and Loss Analysis

The profit and loss analysis for GSD provides insight into the financial performance of the organization over the past few fiscal years identifying trends and challenges faced by the District. The District adopts an annual budget, with Budget Committee review in April and Board adoption in May. The District receives revenue from several sources, primarily water and sewer services, with other revenues including connection fees, late charges, and other ~~revenue~~ sources including property tax and reception of capital grants. Expenditures include administrative subcategories ~~including of~~ staff and payroll, employee benefits, education/training professional consulting fees, and associated maintenance and materials costs for sewage collection, treatment, and distribution. Additional analysis is provided below:

#### 1. Operating Revenues:

- **Water Charges:** The revenue from water charges displays a mixed trend over the analyzed period. Water charges increased from \$507,233 in FY 19-20 to \$621,407 in FY 21-22. The District's new rates were implemented in August 2020 with ~~5-five~~ years of adopted increases. It is anticipated to level off in FY 23-24 and remain steady so long as demand continues to remain consistent.
- **Sewer Charges:** The revenue generated from sewer charges demonstrates a more consistent pattern, with a gradual increase from \$351,884 in FY 18-19 to \$450,658 in FY 21-22. The District's new rates were implemented in August 2020 with ~~5-five~~ years of adopted increases. It is anticipated to level off in FY 23-24 and remain steady so long as demand continues to remain consistent.

- Connection Fees: Connection fees were reported in FY 17-18 to FY 19-20, amounting to \$32,000, \$24,000, and \$16,000, respectively. The presence of connection fees during those years indicates a period of new connections or expansions within the district. However, no connection fees were reported in FY 20-21 and FY 21-22. Reconnection fees were suspended in accordance with State COVID-19 mandates during those fiscal years. The State Low Income Household Water Assistance Program (LIHWAP) has also affected the number of disconnected customers in the District.
- Late Charges: Late charges show variations throughout the analyzed period, ranging from \$4,230 in FY 20-21 to \$15,255 in FY 21-22. These charges represent penalties imposed on customers for delayed payments. The discrepancy between FY 20-21 and FY 21-22 is a result of GSD suspending late charges in accordance with State COVID-19 mandates. The District implemented a change in rate for late charges as part of the District's new rate structure.

## 2. Total Revenue:

- The total revenue for the District showcases fluctuations over the analyzed period. It ranged from \$901,543 in FY 19-20 to \$1,090,160 in FY 21-22. This upward trajectory in total revenue indicates a growth in the District's overall financial inflow, driven primarily by rate increases for water and sewer service charges.

## 3. Operating Expenditures:

- Administrative & General: The expenditure on administrative and general operations shows an increasing trend from \$366,212 in FY 17-18 to \$500,590 in FY 21-22. This increase is mainly tied to wages and insurance costs, the latter of which has risen almost double over the past few years and is estimated to rise 25-75% for FY 23-~~24~~, according to the District.
- Sewage Collection: Expenditure on sewage collection displays slight variations, but the overall trend remained relatively stable. It ranged from \$47,637 in FY 18-19 to \$83,228 in FY 21-22, reflecting the costs associated with collecting and maintaining the sewage system.
- Sewage Treatment: The expenses related to sewage treatment remained consistent over the analyzed period, with fluctuations within a narrow range. This indicates a stable investment in sewage treatment processes, ranging from \$62,689 in FY 17-18 to \$91,350 in FY 21-22.
- Water Transportation & Distribution: The expenses associated with water transportation and distribution demonstrate some variability, with a peak at \$122,535 in FY 19-20 and a dip to \$80,608 in FY 21-22. These figures represent costs incurred in the transportation and distribution of water throughout the District.

- Total Water Treatment: The total expenses related to water treatment remained relatively stable over the analyzed period, ranging from \$112,822 in FY 20-21 to \$140,609 in FY 18-19.
4. Total Expense:
- The total expenses for the District varied throughout the analyzed period, ranging from \$686,543 in FY 17-18 to \$895,769 in FY 21-22. This fluctuation indicates changes in the overall expenditure incurred by the District.
5. Other Income and Expense:
- Other Income: Other income represents additional revenue sources for the District aside from operating ~~revenues, and revenues~~ and includes the property tax revenue which ~~in FY 2021-22~~ totaled \$30,896 in FY 2021-22. It shows fluctuations over the analyzed period, with the highest reported at \$112,282 in FY 21-22 due to the receipt of significant Capital Grant Income that year.
  - Other Total Expense: The most significant expense category is attributed to depreciating assets. Depreciation expenses reflect the gradual wear and tear, or obsolescence of long-term assets which decreases each year as the assets value decreases. As a result, the District allocates funds and invests in grants to cover the anticipated replacement or refurbishment costs. The expenses associated with non-operating activities remained relatively consistent, with fluctuations within a narrow range. The total expenditure ranged from \$430,035 in FY 21-22 to \$539,049 in FY 17-18.
  - Net Other Income: Net other income reflects the overall balance between other income and other total expenses. The figures show negative values throughout the analyzed period, indicating that the expenses exceeded the income from non-operating activities.
6. Gain/(Loss): The gain or loss represents the net financial outcome of the District after accounting for both operating and non-operating revenues and expenses. The figures indicate a loss for each fiscal year, with the highest loss recorded at \$292,477 in FY 18-19 and the lowest loss at \$123,360 in FY 21-22, all of which are less than the depreciation expense posted, resulting in a positive cash flow each year.

GSD experienced an upward trajectory in total revenue, primarily driven by an increase in water and sewer service rates in 2020. The District's receipt of a \$4,545,000 grant for the replacement of leaking tanks is expected to contribute to increased revenue in future fiscal years. When comparing operating revenues to operating costs, the District shows a net surplus. However, after depreciation is accounted for, there is a net loss for all years reviewed which has resulted in a decrease of the District's net position (or total worth) from FY 2017-18 to FY 2021-22. The change in net position during FY 2019-20 was significantly greater than other fiscal years as a result of the \$40,000 settlement fee and

additional professional expenses necessary to litigate the complaint for the SWRCB Bulk Water settlement at the time.

**Table 5-5: Annual Profit and Loss Summary**

Category	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<i>Revenues:</i>					
Water Charges	\$534,001	\$525,045	\$507,233	\$576,166	\$621,407
Sewer Charges	\$359,798	\$351,884	\$361,938	\$417,839	\$450,658
Connection Fees	\$32,000	\$24,000	\$16,000	\$8,000	\$0
Late Charges	\$6,025	\$14,090	\$9,795	\$4,230	\$15,255
Other Operating Revenue	\$8,212	\$7,320	\$6,578	\$3,625	\$2,840
Uncategorized Income	\$135	\$1,500	\$0	\$0	\$0
<b>Total Operating Revenue</b>	<b>\$940,170</b>	<b>\$923,839</b>	<b>\$901,543</b>	<b>\$1,009,860</b>	<b>\$1,090,160</b>
<i>Expenditures:</i>					
Administrative & General	\$366,212	\$398,915	\$478,372	\$474,712	\$500,590
Sewage Collection	\$50,000	\$47,637	\$81,401	\$60,302	\$83,228
Sewage Treatment	\$62,689	\$67,944	\$77,547	\$70,526	\$91,350
Water Transportation & Distribution	\$84,715	\$80,455	\$122,535	\$119,247	\$80,608
Total Water Treatment	\$122,927	\$140,609	\$119,621	\$112,822	\$139,991
<b>Total Operating Expense</b>	<b>\$686,543</b>	<b>\$735,561</b>	<b>\$879,475</b>	<b>\$837,609</b>	<b>\$895,769</b>
<i>Other:</i>					
Other Income	\$95,896	\$40,905	\$52,139	\$47,150	\$112,282
Other Total Expense	\$539,049	\$521,660	\$523,789	\$492,836	\$430,035
Net Other Income	(\$443,154)	(\$480,755)	(\$471,650)	(\$445,685)	(\$317,752)
<b>Change in Net Position</b>	<b>(\$189,526)</b>	<b>(\$292,477)</b>	<b>(\$449,582)</b>	<b>(\$273,434)</b>	<b>(\$123,360)</b>

### Audit Analysis

As noted previously, GSD is primarily funded through water and sewer service charges, connection fees, property tax revenue, and grants. The largest revenue for the District comes from water and sewage charges which make up approximately 97% of the revenues between fiscal years 2017-2022. The District conducts annual audits in compliance with sanitary district law. Below is a financial summary based on audit summaries from fiscal years (FY) 2017-22.

#### 1. Operating Revenues:

- **Utility Sales:** The revenue generated from utility sales shows a fluctuating trend over the years, with a gradual increase from FY 17-18 to FY 21-22. The highest utility sales were recorded in FY 21-22 at \$1,087,320.

- Connection Fees: Connection fees were only reported in FY 18-19 and FY 19-20, amounting to \$24,000 and \$16,000, respectively. No connection fees were reported in the other fiscal years.
  - Other Revenues: Other revenues include miscellaneous sources of income for the District. The revenue shows a decreasing trend over the years reviewed.
2. Total Revenue: The total revenue for the district fluctuated during the analyzed period. It reached its peak in FY 21-22 at \$1,090,160.
  3. Operating Expenses: Operating expenses reflect the costs associated with running the District's operations. The expenses consist of various categories, including salaries and wages, payroll taxes, employee benefits, rent, materials and supplies, transportation, sewage collection, office expenses, insurance, professional services, sewage treatment, water treatment, water distribution, permits and fees, utilities, bad debts, other expenses, and depreciation and amortization. The highest operating expenses were recorded in FY 19-20, totaling \$1,344,370.
  4. Non-Operating Revenues (Expenses): Non-operating revenues and expenses represent the income or costs that are not directly related to the District's core operations. This category includes items such as property taxes and exemptions, SWRCB payment, capital grant income, gain on asset disposal, other income, other expenses, interest income, and interest expense. The net non-operating revenue fluctuated, with the highest recorded in FY 17-18 at \$84,851.
  5. Net Gain/(Loss): The net gain or loss represents the overall financial performance of the District after accounting for both operating and non-operating revenues and expenses. The District experienced net losses in each fiscal year, with the highest loss recorded in FY 19-20 at \$449,583. This is largely due to depreciation and amortization of assets which accounts for approximately \$400,000 to \$500,000 annually.

**Table 5-6: GSD Audit Summary**

Category	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Operating Revenues					
Utility Sales	\$893,799	\$876,929	\$869,171	\$993,825	\$1,087,320
Connection Fees	-	\$24,000	\$16,000	\$8,000	-
Other Revenues	\$46,371	\$22,910	\$16,372	\$8,035	\$2,840
<i>Total Operating Revenue</i>	<i>\$940,170</i>	<i>\$923,839</i>	<i>\$901,543</i>	<i>\$1,009,860</i>	<i>\$1,090,160<sup>44</sup></i>
Operating Expenses					
Salaries and Wages	\$288,265	\$313,038	\$322,556	\$336,285	\$368,860
Payroll Taxes	\$24,246	\$26,555	\$26,982	\$27,469	\$29,528
Employee Benefits	\$34,050	\$45,036	\$48,701	\$41,196	\$56,442
Rent	\$10,856	\$9,205	\$10,855	\$10,040	\$10,020

<sup>44</sup> GSD has noted that late charges were not accounted for in this audit and provided an additional \$15,255 in revenue.

Materials and Supplies	\$1,602	\$2,018	\$1,899	\$1,070	\$1,496
Transportation	\$1,804	\$1,490	\$2,922	\$3,518	\$3,589
Sewage Collection	\$16,288	\$13,953	\$42,288	\$24,749	\$12,729
Office Expense	\$24,944	\$8,783	\$6,758	\$12,010	\$8,903
Insurance	\$30,781	\$30,588	\$37,586	\$52,446	\$59,161
Professional Services	\$69,691	\$69,753	\$92,341	\$79,829	\$81,475
Sewage Treatment	\$32,576	\$27,728	\$32,314	\$24,818	\$38,425
Water Treatment	\$75,716	\$87,351	\$78,321	\$72,363	\$100,235
Water Distribution	\$34,020	\$37,348	\$66,322	\$66,423	\$38,082
Permits and Fees	\$22,010	\$23,829	\$29,237	\$29,377	\$31,089
Utilities	\$2,408	\$2,356	\$2,760	\$2,494	\$2,676
Bad Debts	\$1,856	\$2,456	\$5,557	\$8,350	\$4,286
Other Expenses	\$15,430	\$35,303	\$32,077	\$42,089	\$43,997
Deprecation	\$526,012	\$511,289	\$504,894	\$480,737	\$422,589
<i>Total Operating Expense</i>	<i>\$1,212,555</i>	<i>\$1,248,079</i>	<i>\$1,344,370</i>	<i>\$1,315,263</i>	<i>\$1,313,582</i>
Non-Op Revenues (Expenses)					
Property Tax & Exemptions	\$26,933	\$28,128	\$29,887	\$31,105	\$31,191
SWRCB Payment	-	-	(\$40,000)	-	-
Capital Grant Income	\$60,000	-	-	-	\$55,267
Gain on Asset Disposal	-	-	-	-	-
Other Income	-	\$1,660	\$12,887	\$2,340	\$15,012
Other Expense	(\$13,038)	-	(\$13,702)	(\$6,864)	(\$4,180)
Interest Income	\$8,963	\$11,117	\$9,365	\$13,705	\$10,814
Interest Expense	(\$13,038)	(\$9,141)	(\$5,193)	(\$5,235)	(\$3,266)
<b>Net Non-Op</b>	<b>\$84,851</b>	<b>\$31,764</b>	<b>\$ (6,756)</b>	<b>35,051</b>	
Change in Net Position	(\$189,527)	(\$292,476)	(\$449,583)	(\$270,352)	(\$118,584)

The change in net position, as indicated in Table 5-7, reflects the overall financial position over the given fiscal years. During FY 17-18, the District experienced a net loss of \$189,527, further deepening in FY 18-19 reaching \$292,476. This negative trend continued into FY 19-20, with a significant net loss of \$449,583. However, in FY 20-21, there was a slight improvement as the net loss was reduced to \$270,352. The most recent fiscal year, FY 21-22, saw a further decrease in the net loss to \$118,584. This trend is due to the rate increase that is being implemented in response to the increase in costs to operate the District.

**Table 5-7: Total Net Position Summary**

Category	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Total Assets	\$12,159,817	\$11,673,745	\$11,169,709	\$10,802,114	\$10,710,329
Total Liabilities	\$1,657,133	\$1,463,537	\$1,409,084	\$1,311,841	\$1,338,640
<b>Total Net Position</b>	<b>\$10,502,684</b>	<b>\$10,210,208</b>	<b>\$9,760,625</b>	<b>\$9,490,273</b>	<b>\$9,371,689</b>
<i>Change</i>	<i>(\$189,527)</i>	<i>(\$292,476)</i>	<i>(\$449,583)</i>	<i>(\$270,352)</i>	<i>(\$118,584)</i>

## 2020 Rate Study and Rate Increase

The District conducted a rate study in 2020 to comply with Proposition 218 "Right to Vote on Taxes Act". The law requires that any proposed rate increase be preceded by a public notice and an opportunity for affected customers to protest the increase. The notice must include the reasons for the increase, how it is calculated so that the proposed rates do not exceed the reasonable costs of providing utilities service and rates based on the actual costs incurred such as operational expenses, maintenance, and capital improvements<sup>45</sup>.

The rate study assessed existing conditions of the water and sewer systems, the sufficiency of current rates to meet operating expenses and debt service obligations over a 5, 10 and 20-year projection. The study identified capital improvement projects and explored potential financing options, such as grants and low-interest loans as alternatives to raising rates. The report concluded that the existing rates are insufficient to cover projected operational expenses, existing debt service, capital improvement projects, and asset replacement costs and therefore ~~necessitating~~necessitate a rate increase. The GSD Board votes annually to implement rate increases in accordance with the master schedule.

GSD's adopted billing structure charges a base rate for residential, multifamily, and commercial water and sewer connections to establish fairness and promote sustainable water usage for residential and commercial customers. Additional charges are added based on water and sewage usage. Water for residential customer usage is broken up in three tiers, based on unit quantity with one unit equal to 748 gallons<sup>46</sup>. Instead of installing additional meters, accounts with multiple single-family units will be evaluated and assigned Equivalent Residential Units (ERUs) for billing and will use the same rate structure as commercial accounts. Commercial accounts utilize a tiered base rate structure, which is based on average annual consumption, rather than meter size, with accounts classified as low, mid-range, or high water users.

Sewage rates are measured by water consumption per month. The base rate for water and sewage service rose by \$8 per month in 2022, an average ~~of, a 6.95% increase~~ of 6.95% over the previous rate structure. The adjustment was deemed necessary due to insufficient revenue to cover expenses, debt service, capital improvement projects, and asset replacement costs. Discrepancies were identified in the previous rate structure for residential customers, leading to unequal sewer base rates and unequal distribution of fixed expenses between residential and commercial customers.

Changes to rate structure include implementing a uniform sewer base rate per ERU Equivalent Residential Unit (ERU) for all account types, regardless of whether they are residential, commercial, multi-family, or multi-use. The base sewer rate calculation will remain unchanged unless there are modifications to the premise conditions, such as a change in usage. Every account will be assigned an ~~Equivalent Residential Unit (ERU)~~ based on past average consumption. The base rates will be the same per ERU for all

<sup>45</sup> [https://lao.ca.gov/1996/120196\\_prop\\_218/understanding\\_prop218\\_1296.html](https://lao.ca.gov/1996/120196_prop_218/understanding_prop218_1296.html)

<sup>46</sup> <https://kymkemp.com/2022/06/06/up-up-up-garberville-sanitary-district-board-approves-rate-hike-starting-in-july/>

account types. Residential customers will be charged a consumption fee per unit of water used, while commercial customers will have a consumption fee based on their usage multiplied by a consumption strength multiplier<sup>47</sup>.

Adjustments in rates and charges will impact customers' bills and contribute to a more balanced portfolio of the GSD in the coming years and will allow for investment into capital improvements. The higher base rate, coupled with the increases in tiered rates and sewage rates, will generate additional revenue for the District.

### Tank Replacement Funding & Financial Reserves

In December 2021, the District received from the State Water Resources Control Board Division of Financial Assistance, a Proposition 68 Funding Agreement D2102010 in the amount of a \$325,000 grant for the Planning Phase work necessary to replace the Robertson, Wallan, and Hurlbutt Tanks.

In August 2022, GSD received a \$4,545,000 grant from the California State Department of Water Resources Small Community Drought Relief Program grant for administration, project development, property acquisition, and construction for the replacement of the Wallan, Robertson, and Hurlbutt Tanks<sup>48</sup>. This program, authorized by the Legislature through the Budget Act of 2021 (Stats. 2022, ch. 44, § 25) and Trailer Bill, (Wat. Code, § 13198 et seq.)<sup>49</sup> aimed to address the immediate impacts of drought scenarios on human health, safety, and the environment.

The grant provided crucial funds to the GSD to mitigate the loss or contamination of water supplies and ensure the availability of clean and safe water to the community. The funding will also have a positive impact on its financial outlook. Capital improvements, such as new tanks, will enhance water storage capacity and distribution efficiency, which will help to optimize revenue generation and contribute to a more resilient and financially sound future for the GSD.

The Garberville Sanitary District's financial management approach includes maintaining reserve balances to ensure financial stability, meet working capital requirements, and account for potential unexpected increases in costs or for emergencies. Two types of reserve funds are maintained: legally restricted funds and Board designated funds. Legally restricted funds include the Water Enterprise Fund held in trust with the State of California for the SWRCB-SRF water project loan. Board-designated funds include the O&M Operating Reserve, O&M Emergency Reserve, and Unrestricted Reserves with a target reserve amount set at \$1.2 million<sup>50</sup>.

As of the end of 2019, the District estimated a reserve balance of \$750,000, with a reserve alert level set at \$800,000. The reserve alert level maintained flexibility for the District to account for expenses or capital improvement projects not planned to be deducted from the reserve account. The \$400,000 difference between the target reserve amount and

---

<sup>47</sup> [www.garbervillesd.org/files/8fa363bc2/2020+Rate+Study+Main+Report\\_Published.pdf](https://www.garbervillesd.org/files/8fa363bc2/2020+Rate+Study+Main+Report_Published.pdf)

<sup>48</sup> <https://water.ca.gov/News/News-Releases/2022/Aug-22/15-California-Communities-to-Receive-Drought-Funding-Amid-Extreme-Conditions>

<sup>49</sup> <https://www.grants.ca.gov/grants/small-community-drought-relief-program/>

<sup>50</sup> [https://www.garbervillesd.org/files/8fa363bc2/2020+Rate+Study+Main+Report\\_Published.pdf](https://www.garbervillesd.org/files/8fa363bc2/2020+Rate+Study+Main+Report_Published.pdf)

the alert level served as a cushion for asset replacement and efficient execution capital improvement projects while also allowing for flexibility in responding to variations in operational expenses and annual revenue.

The Garberville Sanitary District's implementation of a rate increase, and receipt of a substantial grant for tank replacement while maintaining a financial reserve create a positive financial outlook for the District. The rate increase ensures sufficient revenue to cover operational expenses, debt service, and capital improvement projects. The grant funding for tank replacement enhances water storage capacity and distribution efficiency conservation and potentially frees up funds for other capital improvement projects. The District's ability to maintain a financial reserve provides financial stability and flexibility to address unforeseen costs and emergencies. Overall, these measures contribute to a financially resilient and sustainable future for the Garberville Sanitary District.

## 5.4 GARBERVILLE SANITARY DISTRICT MSR DETERMINATIONS

As set forth in Section 56430(a) of the CKH Act- In order to prepare and to update the SOI in accordance with Section 56425, the commission shall conduct a service review of the municipal services provided in the county or other appropriate area designated by the commission. The commission shall include in the area designated for a service review the county, the region, the sub-region, or any other geographic area as is appropriate for an analysis of the service or services to be reviewed, and shall prepare a written statement of its determinations with respect to each of the following:

### (1) Growth and population projections for the affected area

- a) The current District population is estimated to be 710 based on the 2020 decennial census data. Due to the community's limited potential for development, it is anticipated that the population will remain fairly consistent over the next five to ten years.
- b) It is recommended that the District conduct a District specific population and income survey to provide more accurate population estimates due to its rural nature, unhoused individuals, and seasonal agricultural workers likely not being represented currently in census data.

### (2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence

- a) Garberville is considered a Severely Disadvantaged Community with a 2021 MHI of \$24,357, which is 29% of the 2021 California MHI of \$84,097. Redway, which is northwest of the GSD, is a DUC with a 2021 MHI of \$62,786. GSD provides water and wastewater services to the area, while fire and emergency response is provided by the Garberville FPD. Should any nearby areas be proposed for annexation, careful consideration should be given to the boundary location in order to ensure potentially disadvantaged areas are receiving vital services.

### (3) Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies

- a) GSD is a retail water supplier serving 472 connections. As of 2022, the District averaged a water use of 51.12 MG. The system has a diversion limit of 80 MG per year and on average uses approximately 64% of its allowable annual diversion limit. The maximum demand in 2017 was 205 gpm and the system has a capacity of 350 gpm. Based on current water use, potential use from under-developed parcels, approved future projects, and the District's reserve policy, GSD has a surplus of 10% or 8 MG for future development. As such, the District has enough water capacity to meet current and future needs.
- b) The water treatment plant and raw water pump station have permanent backup generators that can provide full electrical backup during outages. Of the four main District storage tanks, three of them are in states of disrepair and will need to be replaced in the near future. The District has attempted to extend the life of these tanks by minimizing leakages and deficiencies but has had to remove two

from service. The District has installed a temporary backup tank and a pressure reducing valve to allow for a tank in good condition to serve the areas with tank failures. Despite the current infrastructure deficiencies, the District is providing adequate public services and has plans to install permanent replacement tanks in 2024 to increase capacity of public facilities.

c) The wastewater treatment plant has an average dry weather flow of 162,000 gpd and an average wet weather flow of 235,000 gpd. A wet weather peak flow of up to 600,000 gpd is permitted. The infrastructure has adequate capacity to provide for the District's demands. The wastewater treatment plant underwent a major upgrade in 2009 and has been operating efficiently since. No upgrades or improvement projects are planned for the wastewater system in the near future as it has ample ability to meet the needs of the District.

#### **(4) Financial ability of agencies to provide services**

a) When comparing operating revenues to operating costs, the District shows a net surplus. However, after depreciation is accounted for, there is a net loss for all years reviewed which has resulted in a decrease of the District's net position (or total worth) from FY 2017-18 to FY 2021-22. However, the net loss is decreasing due to the District's rate increases and is anticipated to continue following this trend in the coming years.

b) GSD's implementation of a rate increase, and receipt of a substantial grant for tank replacement while maintaining a financial reserve created a positive financial outlook for the District. The rate increase ensures sufficient revenue to cover operational expenses, debt service, and capital improvement projects. The grant funding for tank replacement enhances water storage capacity and distribution efficiency conservation and potentially frees up funds for other capital improvement projects. The District's ability to maintain a financial reserve provides financial stability and flexibility to address unforeseen costs and emergencies. Overall, these measures contribute to a financially resilient and sustainable future for GSD.

#### **(5) Status of and, opportunities for, shared facilities**

a) GSD has applied for grant funding through the Drinking Water State Revolving Fund through the SWRCB. This funding would allow the District to reroute the Meadows Aerial Waterline. This would provide an opportunity for GSD to construct an emergency intertie with Redway CSD along Redwood Drive. GSD is waiting on funding approval and working on additional coordination with Redway CSD.

b) In 2022, Weott CSD hired one of the GSD licensed operators to act as a part-time interim General Manager. As part of this agreement, the GSD operator was tasked with training a new long-term General Manager for Weott CSD.

c) RMWC, a state small water system in the vicinity of Rivercrest Drive and Sprowel Creek Road, utilizes an existing well that's located in close proximity to the well

that GSD uses as its water source. As such, there are opportunities for system consolidation between GSD and RMWC but this has not been initiated.

**(6) Accountability for community service needs, including governmental structure and operational efficiencies**

- a) The District is governed by a five member Board of Directors that is elected to staggered four-year terms. Regular meetings are held every fourth Tuesday of the month.
- b) GSD currently maintains a website that meets SB929 regulations that includes a dedicated page for transparency. Four years of District audits are available on the website as of October 2023. Additional information on rates, District policies, and prior annexations is also available.
- c) The District utilizes contract staff as necessary for engineering, planning, and accounting which helps reduce overhead costs.

**(7) Any other matter related to effective or efficient service delivery**

- a) The District's main source of water is the South Fork of the Eel River which is utilized by numerous public and private water suppliers. It is also subject to major fluctuations and potential drought restrictions. It may be beneficial for the District to assess other potential sources of water such as additional wells.
- b) The District's current SOI encompasses an additional 1,258 acres beyond the District boundary, including areas surrounding Connick Creek Road, Sprowel Creek Road, and Camp Kimtu Road. The SOI was last updated in March 2013. At this time, no adjustments to the SOI are proposed.

## 5.5 GARBERVILLE SANITARY DISTRICT SOI DETERMINATIONS

In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development of local governmental agencies to advantageously provide for the present and future needs of the county and its communities, the commission shall develop and determine the sphere of influence of each local agency, as defined by G.C. Section 56036, and enact policies designed to promote the logical and orderly development of areas within the sphere. In determining the sphere of influence of each local agency, the commission shall consider and prepare a written statement of its determinations with respect to the following:

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

a) Lands within the District's SOI are predominantly Residential Agriculture and Natural/ Public Resources with some Public Facility and Industrial designations. These are low density uses and indicate there is unlikely to be substantial development in the area.

**(2) Present and probable need for public facilities and services in the area.**

a) Garberville is one of the main populated areas in southern Humboldt County and there continues to be a need for public services including water, wastewater, and fire/ emergency response. There are existing developed areas within the SOI that may request new or expanded services including single family homes, park areas, and minor industrial uses.

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

a) GSD's wastewater treatment plant was upgraded in 2003 and has ample capacity to meet current and future needs.

b) The District has allocated approximately 90% of its water supply for current and approved uses. As such, careful consideration should be given to future requests for services and annexations.

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

a) The community of Redway is located approximately two miles northwest of Garberville along Redwood Drive. This is another one of the regions largely populated areas. The community of Redway is currently provided water and wastewater services by Redway CSD.

**(5) 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.**

- a) There are no proposed changes to the District's SOI at this time. The current SOI as shown in Figure 5-1 is proposed to be reaffirmed.
- b) Water and wastewater services are adequately provided in the area by GSD. Fire and emergency response services are provided by the Garberville FPD which is an established all-risk fire department with sustainable funding and combination career and volunteer personnel.