M E M O R A N D U M

TO: Shannon Costa, Butte LAFCO Deputy Executive Officer

FROM: Kateri Harrison, SWALE Inc KH

DATE: May 31, 2023

SUBJECT: Public Comment Received

The public comment period for the Public Review Draft MSR was from May 5, 2023 to May 31, 2023, at total of 26-days. During this timeframe, one letter from the South Feather Water and Power Agency was received. The consultant's response to these comments is provided in an updated Chapter 10, attached. Based on the comments from SFWPA, minor refinements were made to Chapter 6 including the addition of five new sentences and the deletion of one paragraph. The updated Chapter 6 is attached for your consideration.

Attachments:

- MSR Chapter 6, updated
- MSR Chapter 10, updated

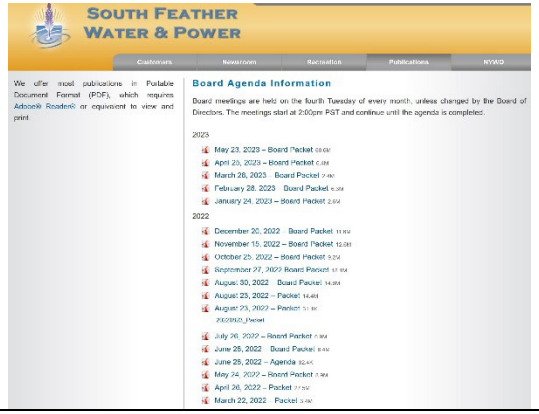
Chapter 10: Comments Received

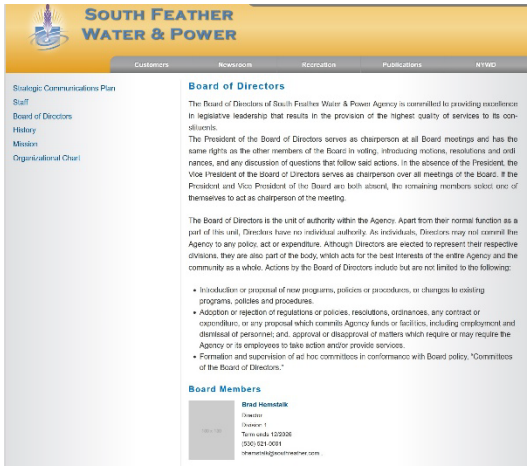
Butte LAFCO welcomes public comments on this Municipal Service Review for Wastewater Services in the Oroville Area. The public comment period for the Public Review Draft MSR was from May 5, 2023 to May 31, 2023, at total of 26-days. Written comments were invited to be submitted directly to LAFCO. Verbal comments were accepted during the June 1, 2023 public meeting. Public comments received during this formal comment period are addressed directly in this chapter in the Final MSR. Comments received after the public comment period closed will be accepted by LAFCo and may be documented in a supplemental appendix to this MSR after the June 1, 2023 public meeting. Please see LAFCO's website at <*https://www.buttelafco.org/*> for additional details.

During the public comment period, one letter from the South Feather Water and Power Agency was received as detailed in the following pages. The consultant's response to these comments is listed in Table 10-1 below.

Log of Comments
MSR for Water and Wastewater Services in Oroville Area
Butte LAFCO
June 1, 2023

#	Commenter/ Agency	Date	Page Reference	Comment	LAFCO Consultant Response
1.Comments From South Feather Water and Power Agency					
1a	SFWPA	May 26, 2023	CH 6 Pg 6-3	Request adding to profile years 2021 and/or 2022 which reflect a more accurate analysis for such an important multi-year document.	The MSR consultants utilized FY2020 as the base year for all of the service providers described in the MSR to retain consistency. However, to respond to this specific request, data for FY2021 was added to page 6-3. SFWPA has not posted its 2022 annual audit to its website as of May 30, 2023 (as shown in the screenshot below). Therefore, it is not currently available for analysis and inclusion in the MSR. 
1b	SFWPA	May 26, 2023	Pg 6-6	South Feather agrees that the Sphere of Influence boundary should be coterminous	A sentence has been added to page 6-6 to note this comment.

				with the Place-of-Use boundary. However, by applying for an expanded Place-of-Use boundary it will likely cause protest from another existing water service provider listed in the MSR and impact South Feather rate payers with un-necessary costs.	
1c	SFWPA	May 26, 2023	Pg 6-9	Agency active committees are readily available and selected and posted in multiple regular board meetings open to the public.	Commentor provided insufficient data about this request. Information about Board Committees are not posted to this webpage <*https://southfeather.com/publications/agenda/*> or this webpage <*https://southfeather.com/about/board/*> as of May 30, 2023 as shown in the two screenshots below. SFWPA may wish to consider updating its website to list committees of the Board in the future (this is an optional recommendation and LAFCO does not "require" this). This information is simply helpful to the general public. No changes made to the MSR text as a result of this comment. 

					
1d	SFWPA	May 26, 2023	Pg 6-12	LAFCO would like to see fewer than 50 percent of a District's meetings list a closed session item. Comment -Under the Brown Act, closed session is an important protection of HIPPA privacy rights and attorney/client privilege…..	Thank you for providing this comment. The MSR's key performance indicators (KPIs) are not "requirements" nor are they intended to be punitive judgements. Rather, the KPI's give LAFCO a list of measures that could be studied in more depth in the next MSR for an agency. The KPI regarding closed sessions of the Board was chosen by the MSR consultant because it has successfully been used in MSRs for the El Dorado Irrigation District, City of Fairfield, City of Lincoln, and numerous other agencies throughout California. Additionally, the KPIs are helpful for allowing LAFCO to identify trends such as: • Cross-comparison among different agencies, or • Analysis of multiple years (or MSRs) for one district. For example, El Dorado LAFCo's MSR for the El Dorado Irrigation District (EID) found that:

					"During the year 2019, the [EID] District Board held thirteen (48%) "Closed Sessions" noted on its agenda, primarily concerning property acquisition, litigation, and labor negotiations. The stated rationale for the closed sessions appears consistent with the provisions of the Brown Act." The MSR consultants recommend retention of the closed session KPI. However, 3 new sentences have been added to page 6-12 stating that "It is recognized that under the Brown Act, closed session is an important protection of HIPPA privacy rights and attorney/client privilege during potential or active litigation. An agency with the complexity and size of SFWP A will have closed session items on a regular basis. The stated rationales for the closed sessions appear consistent with the provisions of the Brown Act." The big picture with this KPI is that one of LAFCO's overarching goals is to promote good government. It is thought that good government policies can prevent scandals such as that which occurred in the City of Bell (https://en.wikipedia.org/wiki/City_of_Bell_scandal). However, it is tricky to measure "good government". This is why the MSR uses multiple KPIs. If SFWPA has ideas to better measure good government and transparency, please talk with LAFCO's Executive Officer because your ideas could help both LAFCO and other agencies in Butte County. SFWPA is currently a role model for good government. However, even role models (such as SFWPA and LAFCO) have room for improvement.

1e	SFWPA	May 26, 2023	Pg 6-17	Again, on closed session determination.	Please see the above response to comment on closed sessions.
1f	SFWPA	May 26, 2023	Pg 6-53	The content written determining seven water quality items exceed EWG Non-Regulated Health Guidelines is a serious statement and frankly inappropriate.	The MSR consultants disagree with this comment. The Environmental Working Group (EWG) is a well-respected organization. Additionally, the information from EWG Tap Water Database is easily accessible to the general public on its website at <*https://www.ewg.org/tapwater/* > . It is noted that the MSR also provides water quality information from the Safe Drinking Water Information website and the California Integrated Water Quality System Project and these two data sources accurately describe the water quality associated with SFWPA's water. As a courtesy, given the concern expressed by SFWPA, the text regarding EWG has been removed from Chapter 6.

Attachments:

- SFWPA Comment Letter and
- Updated Chapter 6.

SOUTH FEATHER WATER & POWER AGENCY
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May 26, 2023

Mr. Steve Lucas
Local Agency Formation Commission
1453 Downer Street, Suite C
Oroville, CA 95965

Re: Draft Municipal Service Review

Dear Mr. Lucas:

South Feather Water and Power Agency has reviewed Chapter 6 of the draft MSR specific to the agency and offer the following comments.

Let me first thank LAFCO for its coordinating efforts towards an updated MSR. Overall, the encompassing content satisfactorily captures SFWPA's structure and services.

Comments to please consider;

A. The document primarily reflects the financial performance of FY2020 starting on page 6-3 (Profile and Overview) which is not a true representation of South Feather's annual performance, past and present. FY2020 was challenging in many ways and SF would request consideration to profile years 2021 and/or 2022 which reflect a more accurate analysis for such an important multi-year document.

B. Page 6-6: South Feather agrees that the Sphere of Influence boundary should be co-terminus with the Place-of-Use boundary. However, by applying for an expanded Place-of-Use boundary it will likely cause protest from another existing water service provider listed in the MSR and impact South Feather rate payers with un-necessary costs.

C. Page 6-9: Agency active committees are readily available and selected and posted in multiple regular board meetings open to the public.

D. Page 6-12: LAFCO would like to see fewer than 50 percent of a District's meetings list a closed session item. Comment – Under the Brown Act, closed session is an important protection of HIPPA privacy rights and attorney/client privilege during potential or active litigation. An agency with the complexity and size of SFWPA will have closed session items on a regular basis. This should not be a reflection of management performance. For example, the previous General Manager sued the district post retirement that had nothing to do with current staff but was protected under attorney/client privilege. If this scenario was a public matter, then the post employee's privacy rights would have been violated.

E. Page 6-17: Again, on closed session determination. It is stated that South Feather exceeds the 50 percent accountability indicator. The number of closed session items needing to be less than 50 percent seems subjective.

F. Page 6-53: The content written determining seven water quality items exceed EWG Non-Regulated Health Guidelines is a serious statement and frankly inappropriate. SFWPA is operated to state regulations and publish an annual consumer confidence report. This section of narrative cannot be accepted and imposes serious concerns about the accuracy of data and implied health risk to water consumers. Please consider replacing this content with South Feather's Annual Water Quality Report which meets all requirements from the State Water Resources Control Board – Division of Drinking Water.

Thank you in advance for the opportunity to comment on areas within the MSR that South Feather desire to be modified and more accurately reflect the Agency.

Sincerely,
SOUTH FEATHER WATER AND POWER AGENCY

Rath Moseley, General Manager

Chapter 6: South Feather Water and Power Agency

(Image courtesy of Google Maps)

This chapter presents a municipal service review for the South Feather Water and Power Agency (SFWPA) with details of the Agency formation, boundary, government structure, population and land use, disadvantaged communities, and the provision of water services and facilities. Based on the information included in this report, written determinations that make statements involving each service factor that the Commission must consider as part of a municipal service review are presented. The determinations are based upon data presented in this Chapter for the South Feather Water and Power Agency and are recommended to the Commission for consideration. The Commission's final Municipal Service Review (MSR) determinations will be part of a Resolution which the Commission formally adopts during a public meeting.

Table of Contents

6.1 Agency Profile & Overview

6.1.1 Agency Profile

Type of Agency:	Irrigation District
Principal Act:	California Water Code, Division 11, §20500 et seq.
Functions/Services:	• Raw untreated water for agricultural irrigation; • Water treatment and distribution for municipal purposes (residential and commercial); • Recreation; • Hydropower.

Main Office:	2310 Oro Quincy Highway, Oroville, CA 95966
Mailing Address:	Same
Phone No.:	(530) 533-4578
Fax No.:	(530) 533-9700
Web Site:	https://southfeather.com/
General Manager:	Rath Moseley Email: rmoseley@southfeather.com
Alternate Contact:	Jaymie Perrin Email: jperrin@southfeather.com
Meeting Schedule:	Fourth Tuesday of every month, starting at 2:00 PM PST
Meeting Location:	2310 Oro Quincy Highway, Oroville, California 95966.
Date of Formation:	November 1919
Area Served:	33,718 acres (52.68 square miles)
Population:	Existing population ranges from 16,770 to 24,300
Number of water connections:	Miners Ranch Treatment Plant serves 6,909 connections. Bangor Treatment Plant serves 22 connections
Annual Total Revenue:	Approximately $17.4 million in FY2020 Approximately $29.2 million in FY2021
Annual Expenditures	$21 million in FY2020 $19.3 million in FY2021

6.1.2 Agency Overview

The South Feather Water and Power Agency (SFWPA) is a local government agency structured as an Irrigation District consistent with its Principal Act: California Water Code, Division 11, Section 20500 et seq[1]. SFWPA provides the following services to its customers located within the Feather River/Lower Honcut Watershed in Butte County:

- Raw untreated water for agricultural irrigation;
- Water treatment and distribution for municipal purposes (residential and commercial);
- Recreation; and
- Hydropower.

6.2 Agency Formation and Boundary

6.2.1 Formation

The South Feather Water and Power Agency (formally known as the Oroville-Wyandotte Irrigation District) was organized on November 17, 1919. The impetus to organize the District began during the California gold rush when miners constructed a ditch to move water from the South Fork of the Feather River to the mining sites at Forbestown, Wyandotte, Honcut, Ophir, and Bangor. Later the mining ditch network was modified and expanded to divert water from tributaries of the Feather River. The old water rights from the South Feather Land and Water Company and the Palermo Land and Water Company were assumed by the Oroville-Wyandotte Irrigation District and, subsequently, the South Feather Water and Power Agency (SFWPA, UWMP 2021g).

6.2.2 District Boundary

The South Feather Water and Power Agency geographic boundary currently encompasses 33,718 acres or 52.68 square miles, as seen in Figure 6-1. The SFWPA is located within the west side of the County of Butte and generally encompasses the areas south of Lake Oroville and east of downtown Oroville. The City of Oroville and California Water Service (Cal Water) are adjacent to the western boundary of SFWPA. Lake Oroville is located to the north of SFWPA. Unincorporated parcels that rely upon groundwater wells, subject to the approval of the Butte County Environmental Health Department, are located to the east and south of SFWPA. The boundary area has an irregular shape and also includes 19 non-contiguous parcels, as well as isolated boundary pockets located east of the District Sphere of Influence. The boundary includes 11,127 assessor parcels (LAFCO GIS, 2020). The District has annexed seven parcels since 2008, adding 26.7 acres into its boundary area, as listed in Table 6-1 below.

[1] There are 92 irrigation districts in California. The CA Water Code authorizes irrigation districts to provide the following services: sell and lease water; operate sewage collection and disposal system; deliver water for fire protection; dispose and salvage sewage water; protect against damage from flood or overflow; provide drainage made necessary by the irrigation provided; maintain recreational facilities in connection with any dams, reservoirs, etc.; and operate and sell electrical power.

Table 6-1: Annexations into SFWPA Boundary			
Agency	**Year**	**Acres**	**Assessor's Parcel Number**
SFWPA	2021	n/a	Bonite Street (Rodriquez) Annexation No. 2-21
SFWPA	2019	7.1	026-250-008
SFWPA	2015	6.6	079-270-076
SFWPA	2015	1.2	026-090-006
SFWPA	2008	1.3	033-035-003 and -004
SFWPA	2009	10.5	027-070-069 and -070
Data Source: Butte LAFCo, Ms. Costa, August 2021			

In addition to the recent annexations listed above, LAFCO approved the annexation of the unincorporated community of Palermo in September 2022. The Palmero annexation consists of approximately 550 parcels added to the South Feather Water and Power Agency. The annexation facilitates the Palermo Clean Water Consolidation Project, a partnership between the County of Butte and South Feather Water and Power Agency, to provide safe, clean drinking water to the residents of Palermo who have historically depended on private wells for domestic water.

SFWPA has received several newly proposed annexations, as listed below in Table 6-2.

Table 6-2: Proposed Annexations				
Agency	**Year**	**Acres**	**Assessor's Parcel Number**	**Name of Project**
SFWPA	2021	n/a	033-023-002 and 033-023-003	Resolution No. 21-22-02
SFWPA	2021	n/a	033-022-006	Resolution No. 21-23-02
SFWPA	2021	n/a	n/a	Wulbern/Starr Resolution No. 21-26b was considered on October 26, 2021
Data Source: SFWPA Meeting Agendas, 2021 Note: Acreage and APNs were not readily available				

California Water Service (a private water company serving the City of Oroville) has extended its service area into a small portion of the northeast corner of the SFWPA service area. It provides domestic water service at that location (LAFCO/Kleinschmidt MSR, 2006).

6.2.3 Sphere of Influence

This section briefly describes the existing Sphere of Influence (SOI) for the South Feather Water and Power Agency. Additional details can be found in Appendix K, SOI Options, in this document. Butte LAFCO adopted the original SOI for the SFWPA in 2006 via Resolution No. 55-M 2005/2006. The Agency's SOI is almost twice the size of its boundary and encompasses 64,125 acres. The SOI includes 11,853 parcels, which is slightly more parcels than within the boundary (11,127), and this indicates that the average parcel size is larger in the SOI. Table 6-3 below, contains additional details regarding the size of the boundary and SOI.

As part of this MSR preparation process, Agency staff indicated that the Sphere of Influence boundary is adequate for projected future needs (SFWPA, 2021a). However, in the 2006/07 MSR, SFWPA noted that their Sphere of Influence boundary should be co-terminus with their "place-of-use" boundary as designated by the State Water Resources Control Board to best accommodate future needs regarding the approved area for distribution of water per existing water rights. Subsequently in a letter to LAFCO dated May 26, 2023 (see Chapter 10), SFWPA noted that applying for an expanded Place-of-Use boundary could potentially cause protest from another existing water service provider listed in the MSR and impact South Feather rate payers with unnecessary costs.

Table 6-3: Geographic Summary (2021) of Water Services for SFWPA

	Boundary Area (All Services)	**SOI (All Services)**	**Total Boundary & SOI**
Total Acres	33,718	64,125	97,843
Square Miles	52.68	100.19	152.87
Number of Assessor Parcels	11,127	11,853	22,980

Source: Butte County GIS Data, 2020

There is a geographic overlap in water service with an adjacent water services provider, the California Water Company, as shown in Figure 6-2 below. The area shown for the SFWPA is the "place of use" per the CA Water Board. Figure 1-2 shows a different perspective of the geographic overlap which consists of 343 parcels (APNs) and 228.5 acres (assessor's acreage).

6.2.4 Extra-Territorial Services

LAFCO's 2006 MSR (by Kleinschmidt) noted that SFWPA served water to six customers outside its boundaries via surplus water agreements that were considered for renewal annually. These six customers received irrigation water (not potable). However, there are no current surplus water agreements for these six customers (personal communication, R. Mosley 7/11/2022). Otherwise, the SFWPA has not provided extra-territorial services outside its District boundary due to its formal policies that require annexation to the District prior to service (SFWPA, 2021a). However, during recent drought conditions, local property owners have had wells go dry. County officials issued a Local Emergency[2] on July 20, 2021, and are working to secure more resources and assistance for well owners experiencing difficulties. In the Oroville area, the South Feather Water and Power Agency provides three locations with potable (drinking) water available to well owners, as listed in Table 6-4 below.

[2] 55 private well owners in Butte County have wells that have run dry during the years 2014 to 2021 as they reported to CA DWR at: *https://data.cnra.ca.gov/dataset/household-water-supply-shortage-reporting-system-data*. Nine of those well owners were located in the Oroville area. There may be more "unreported" wells that have run dry during the drought.

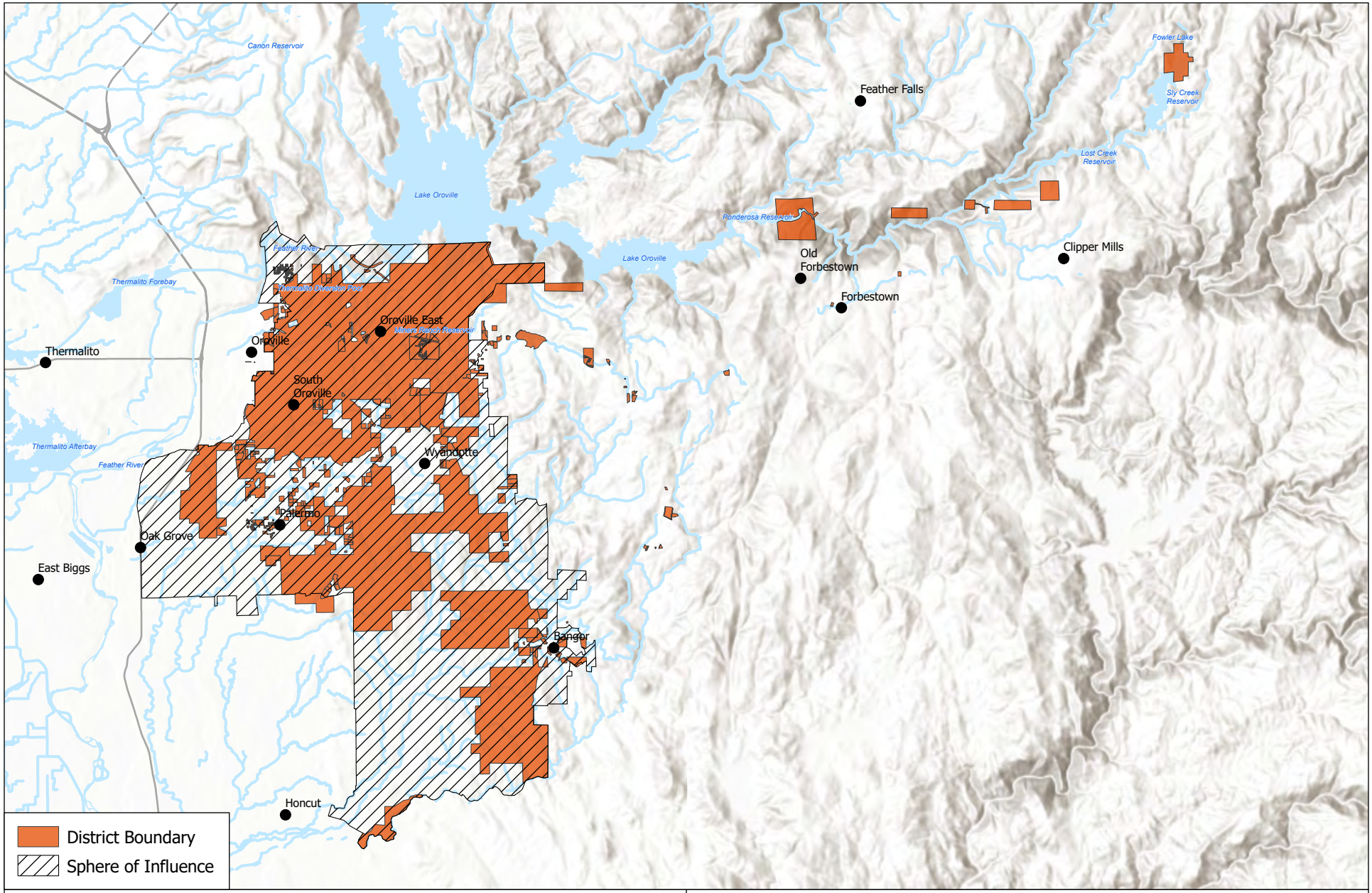


Figure 6-1
Boundary and SOI South Feather Water and Power Agency

Map Date: 09/29/2021
Data Source: Butte LAFCO

Figure 6-2: Overlapping Service Areas Between SFWPA and Cal Water

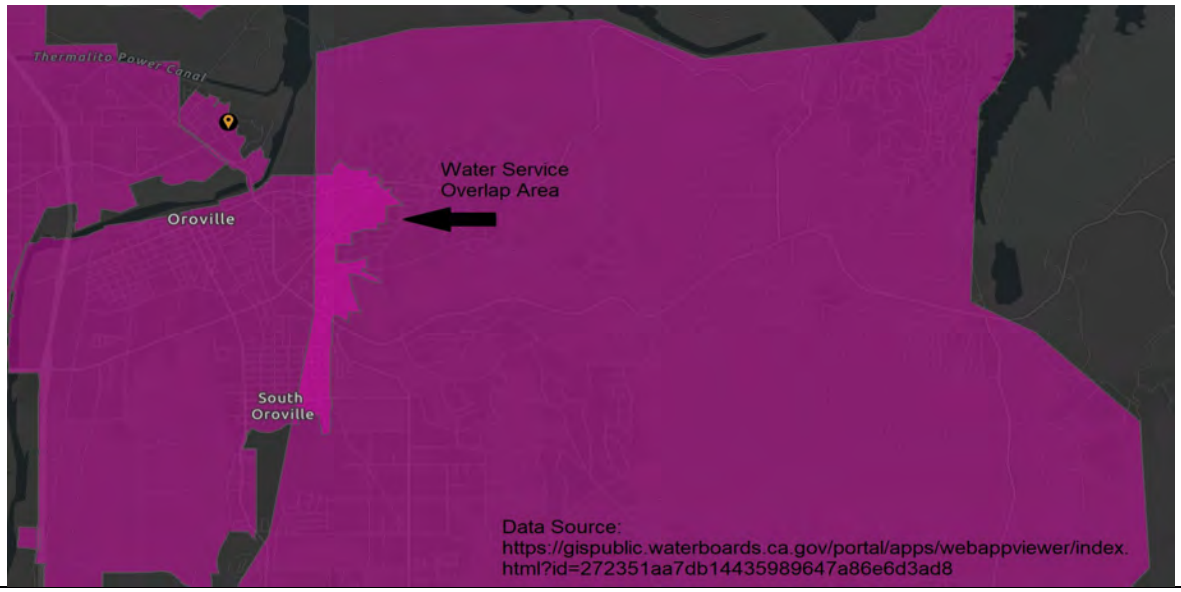


Table 6-4: Potable Water Locations for Well Users During Drought	
Address	Water Detail
7540 Oro Bangor Hwy	This location will accommodate containers up to 5 gallons. Public access is unlimited. No limit on daily use.
2310 Oro Quincy Hwy.	This location will accommodate containers up to 5 gallons. Public access is unlimited. No limit on daily use
234 Kelly Ridge Road.	This location will accommodate containers up to 5 gallons. Public access is unlimited. No limit on daily use.
Data Source: *https://fox40.com/news/local-news/butte-county-residents-whose-wells-have-gone-dry-can-get-water-at-several-locations/*	

6.2.5 Other Overlapping Service Providers

One small water supplier is located within the SFWPA boundary: the Pleasant Grove Mobile Home Park, as listed in Table 6-5 below.

Table 6- 5: PLEASANT GROVE MHP – Water Service Detail

Boundary Type	Water Service Area
Water System Number	CA0400020
Water System Name	Pleasant Grove Mhp
County	Butte
Population	327
Regulating Agency	LPA34 - Butte County
State Classification	Community
Address Line 1	6986 Lincoln Blvd
City	Oroville
State	CA
Zip Code	95965
Service Connections	88
Contact Phone Number	530-667-5190
Data Source: https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8	

6.3 District Governance and Accountability

This section describes how performance, accountability, transparency, and public engagement relate to the public's trust in local government. LAFCO is required by the CKH Act to make specific determinations regarding a local agency's government structure and accountability.

6.3.1 Government Structure

The SFWPA is a local government agency structured as an Irrigation District consistent with its Principal Act: Irrigation District Law, Division 11, of the Water Code (Section 20500 et seq.) of the State of California. The Agency was originally established in November 1919. Today, the Agency is governed by an elected five-member Board of Directors, which serves as the decision-making authority for SFWPA. The General Manager is appointed by the Board of Directors (SFWPA, 2021). The General Manager appoints department heads.

6.3.2 District Board

The Agency operates under the direction of the elected District Board. SFWPA's territory is organized into five divisions, and one Board Member is elected from each division. Each elected Board Member must be a registered voter, a landowner in the SFWPA, and a resident of the division that he or she represents at the time of their nomination or appointment and through their entire term consistent with California Water Code section 21100. Directors are elected by registered voters who are residents of the District.

Board members serve a four-year term, with two Board Member seats running two years apart from the remaining three seats. A new Board Chair and Vice-Chair are selected by the Board Members each year. Information about the Agency's active committees was not readily available. The current Board of Directors members and the expiration dates of their terms are shown in Table 6-6 below.

Table 6-6: South Feather Water and Power Agency Board of Directors

Name	Title	Term End	Division
Rick Wulbern	Board President,	Term expires 12/2024	2
Ruth Duncan	Board Vice President	Term Expires 12/2024	4
Brad Hemstalk	Director	Term expires 12/2026	1
Mark Grover	Director	Term expires 12/2026	3
John Starr	Director	Term expires 12/2026	5

Source: Agency/City website at: https://southfeather.com/about/board/

Board members received an annual stipend of $7,200 for attendance at regular and special Board meetings and committee meetings during the year 2020 (CA Auditor, 2021).

The District Board holds regular public meetings on the fourth Tuesday of every month, beginning at 2:00 PM PST and continuing until the agenda is completed (SFWPA, 2021). The location for Board meetings is 2310 Oro Quincy Highway, Oroville, California 95966. All meetings of the District Board and other advisory boards are open to the public in accordance with the Brown Act. The agenda for each District Board meeting includes a public comment period for items not on

the agenda. Additionally, the Board meeting minutes reflect that the public is invited to speak on all items included on the agenda. All meeting agendas are publicly posted on the SFWPA website at: https://southfeather.com/. Agendas are also distributed in hard-copy (bound packets) to Board Members (SFWPA, 2021a).

In California, elected members of special district boards are required to comply with three laws regarding accountability and ethics, including: 1) the Political Reform Act; 2); Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training. A description of these three state laws is provided in Chapter 3, Introduction. An assessment regarding compliance with these three ethics and accountability laws by elected board members of each of the subject water or wastewater-related agencies was made as part of this MSR process.

- Political Reform Act: Each district is required to have conflict of interest code/policies. SFWPA has adopted a conflict of interest policy known as Policy #120. Ideally, SFWPA's conflict of interest policies would be made available to the public on their website; however, since the Agency website does not yet provide information on this topic, it is an item that needs improvement. The Political Reform Act requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with Agency or County staff. SFWPA board members file this statement with the SFWPA Finance Dept. An indication of compliance with this law was assessed by querying the Fair Political Practices Commission (FPPC) Complaint and Case Information Portal at: <https://www.fppc.ca.gov/enforcement/complaint-and-case-information-portal.html>. Query results for the SFWPA found no complaints or cases, which indicates good compliance with the Political Reform Act.
- Assembly Bill 1234 (Salinas, 2005): Local government officials are required to take ethics training every two years. The consultants' review of the SFWPA website indicates that Board members do not submit required forms and receive updated required trainings as prescribed by the state laws regarding ethics training. Therefore, SFWPA's Board is not currently in compliance with AB 1234. Compliance with this law was assessed for each water or wastewater agency studied in this MSR by asking the Agency Clerk of the Board for the dates and other documentation of training events. SFWPA expects to provide this training to Board members in August 2022 (personal communication, R. Mosley, 7/11/22).
- Government Code 53237 et. seq.: Special district board members must receive the required sexual harassment prevention two-hour training every two years. Compliance with this law was assessed for each of the water and wastewater agencies studied in this MSR by searching for the information on the Agency's website and asking the Agency Clerk of the Board for the dates and other documentation of training events. SFWPA's website does not document whether SFWPA elected Board members have submit required forms or receive trainings as required by the state laws regarding mandated sexual harassment prevention training. SFWPA expects to provide this training to Board members in August 2022 (personal communication, R. Mosley, 7/11/22). It is recommended that the SFWPA website be updated to include this information.

6.3.3 Accountability and Transparency

Brown Act

The Brown Act is described in Chapter 3, Introduction, of this MSR. All meetings of the District Board and committees are open to the public in accordance with the Brown Act. The agenda for each meeting includes a public comment period, and agendas are made available 72 hours before meetings. Any written document that relates to an agenda item is available for public inspection at the same time the document is distributed to the members of the Board of Directors. Written documents are available at the Agency Office and on the Agency website at: https://southfeather.com/. Agendas are also distributed via email upon request.

The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (Assembly Bill 2257). These new Brown Act requirements prescribe the methods and location by which an agenda must be accessible on an agency's website for all meetings as detailed in the Introduction, Chapter 2[or Chapter 3]. New requirements state that meeting agendas be retrievable, downloadable, searchable, and indexable. As part of this MSR, the website for each water and wastewater agency was evaluated to determine if meeting agendas are made available to the public in a manner compliant with AB2257. SFWPA makes its agenda available on its website, under a tab entitled "Publications" under its "Board Agenda Information" section, at the following URL: https://southfeather.com/publications/agenda/. It is also found directly on its homepage at the bottom. This webpage contains meeting minutes and agendas for the current year. This information is easily found on the homepage and provides the necessary agenda information, with the most current agenda located at the top. Board packets for both regular and special meetings are provided. Therefore, the Agency website agenda distribution does comply with the requirements of the Brown Act 2016 Updates described in AB2257.

On March 4, 2020, Governor Newsom signed Executive Order No. N-29-20, declaring a state of emergency due to the threat of COVID-19 and suspending the general Brown Act requirements for teleconferencing. AB 361 (Chapter 165, Statutes of 2021) allows[3] public agencies to continue to meet remotely during a proclaimed state of emergency through January 1, 2024, while mandating that such meetings continue to be publicly accessible.

[3] *AB 361 allows a public agency to hold a remote meeting if a proclaimed state of emergency is in effect and: (1) state or local officials have imposed or recommended measures to promote social distancing; (2) the public agency holds a meeting for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; or (3) the public agency holds a meeting and has previously determined by majority vote that as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees. A public agency that holds a meeting using teleconferencing must give notice of the meeting and post agendas in compliance with the Brown Act, allow the public to access the meeting by phone or video, and provide an opportunity for the public to address the legislative body directly during the meeting. In the event that the public's ability to access the meeting or provide public comment is disrupted, the agency cannot take any action on items appearing on the agenda until public access to the meeting is restored. Additionally, depending on how the public agency provides for public comment, AB 361 contains various requirements to ensure public comment periods are not concluded prematurely. Finally, AB 361 requires that local agencies reconsider the need for remote meetings, at least every thirty days, while a state of emergency remains active. In order to continue to utilize remote meetings, the local agency must find, by majority vote, that (1) the state of emergency continues to directly impact the agency's ability to meet safely in person or (2) state or local officials continue to impose/recommend measures to promote social distancing.*

In response to these events and consistent with Executive Order N-29-20, N-25-20, and N-35-20 from the Executive Department of the State of California, the Agency implemented Teleconference/Electronic Meeting Protocols effective April 2020, which allow for public participation through video conferencing (Zoom) and by telephone. During the Covid-19 pandemic, SFWPA limited in-person attendance for its Board meetings. All meetings are streamed live via Zoom, a video conferencing platform accessible by the public for free. Instructions for telephone and video conference participation are listed on the meeting agenda. Additionally, public comments for Directors can be submitted anytime via e-mail. However, in order to be read into the record during the meeting, it must be submitted to PublicRelations@southfeather.com prior to the Tuesday before the meeting date. Individuals will be given an opportunity to address the Board regarding matters within the Agency's jurisdiction that are not scheduled on the agenda. However, the Board cannot take action on any matter not on the agenda. Public comments are limited to 5 minutes per speaker. An opportunity for public comment on agenda items is provided at the time they are discussed by the Board.

Under the Brown Act, closed sessions of Board meetings are not encouraged; however, the Act does provide guidance about exceptions when closed sessions can be held under special circumstances. Commonly, LAFCO utilizes the number of closed sessions a Board holds during a year as an indicator of transparency since fewer closed sessions indicate better transparency levels. As an indicator, LAFCo would like to see fewer than 50 percent of a District's Board meetings list a closed session. The number of closed sessions listed on SFWPA's Board meeting agendas was evaluated. In the year 2020, the SFWPA Board held a total of 13 meetings which included 13 closed sessions (SFWPA Agendas, 2020). This calculates to 100 percent of SFWPA's Board meetings having closed sessions, exceeding LAFCO's indicator, indicating a potential lack of transparency or other issue. This is an item that needs improvement. However, it is recognized that under the Brown Act, closed session is an important protection of HIPPA privacy rights and attorney/client privilege during potential or active litigation. An agency with the complexity and size of SFWPA will have closed session items on a regular basis. The stated rationales for the closed sessions appear consistent with the provisions of the Brown Act.

The Board's closed sessions primarily dealt with litigation, and litigation is expensive for public agencies due to the costs associated with preparing an administrative record, retaining attorneys, and preparing briefs. Avoidance of litigation is an indicator of management's effectiveness in utilizing alternative dispute resolution mechanisms. To assess the status of litigation, the MSR Authors reviewed SFWPA Board Agendas for the year 2020 and counted the number of legal cases. SFWPA was involved in eight litigation cases in the year 2020, including seven active cases and one anticipated case, as listed below in Table 6-7 (Source: SFWPA Agendas, 2020). The SFWPA is currently being sued by the North Yuba Water District, asserting a number of legal issues such as "breach of contract and breach of fiduciary duty." (NYWD, 2021). The recently hired SFWPA staff (Mr. R. Moseley) is working to reduce the number of concurrent litigation cases which involve the Agency.

Table 6-7: Litigation Discussed in 2020 - SFWPA
Existing Litigation
● Existing Litigation- - George Foster and Georgia Perry v. South Feather Water and Power Agency, Daniel Love, Nike Hall, Butte County Superior Court Case No. 19CV03069 ● Existing Litigation-Sierra Mountain Construction, Inc. v. South Feather Water and Power Agency, Butte County Superior Court Case No. 18CV00896 ● Existing Litigation-Final Compensation Calculation of Michael C. Glaze, Respondent, and South Feather Water and Power Agency, Respondent OAH Case No. 2018041142 ● Existing Litigation-(Gov. Code Section 54956.9) Glaze v. South Feather Water & Power Agency, Butte County Superior Court Case No. 20CV01283. ● Existing Litigation-(Government Code §54956.9(d)(1)) Bay-Delta proceedings, including the California WaterFix, and the associated environmental documentation. ● Existing Litigation- (Gov. Code §54956.9(d)(1).) Pacific Gas & Electric Co. Bankruptcy Proceedings, Case Nos. 19-3088 and 19-30089. ● Existing Litigation-(Gov. Code §54956.9(d)(1).) Sharp v. North Yuba Water District et al., (Yuba County Superior Court) Case No. CVPT20-00386.
Anticipated Litigation
● Anticipated Litigation- (Government Code §54956.9b) One potential case.

As listed in the above table, in 2020, SFWPA was involved with seven existing lawsuits plus one potential future lawsuit. However, the legal status of the above cases has been resolved as of July 2022, with the exception of the North Yuba Water District (personal communication, R. Mosley, 7/11/2022). Therefore, the number of closed sessions on meeting agendas is expected to decline significantly. It is recommended that the SFWPA Board and management continue to work towards reducing the number of closed sessions listed on Board agendas by reducing the number of concurrent lawsuits the Agency is involved with by utilizing legal and management skills along with other legal options such as settling court cases, mediation, and dispute resolution. It is also recommended that LAFCo study this issue when the next MSR or SOI analysis is written on the SFWPA.

Website

The Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires that special districts have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. Compliance with the Special District Transparency Act is used by LAFCO as one indicator to determine the accountability and transparency of a District.

The Agency's website is kept updated and is easily navigable, with current and past agenda packets and financial reports available for download. The "Newsroom" tab (webpage) is updated regularly. Contact information, financial statements, consumer confidence reports, and other publications are available for viewing and download on the Agency's website. Additionally, the homepage provides a phone number for emergency services. The Agency also does not seem to have a policy requiring that the SFWPA website be user-friendly and contain accurate and up-to-

date information. Although the SFWPA District website mostly complies with the requirements of the Special District Transparency Act, there is always room for improvement, and it is recommended that the Agency consider adding the following features associated with its website and other public communication:

- Adopt a policy requiring that the SFWPA website be user-friendly and contain accurate and up-to-date information; and
- Create a web page where community members can sign up for a free electronic subscription service that will send automatic email notifications when selected website information is updated.

General Accountability

The SFWPA demonstrated accountability and transparency in its disclosure of information and cooperation with Butte LAFCO. The Agency cooperated with LAFCO's requests for information and participated in an interview with the MSR consultants. Drinking water regulations are described in Appendix D. The Agency generally works towards compliance with these regulations.

Butte County is required by state law to impanel a grand jury. The major functions of a grand jury are divided into criminal indictments and civil investigations, and the civil investigation portion requires the majority of the time. The civil or "watchdog" responsibilities of the grand jury include examining all aspects of local government, including cities and special districts, to ensure the county is being governed honestly and efficiently and public monies are being handled appropriately. If an agency is subject to any grand jury inquiries, this can indicate poor performance or a high number of complaints about an agency. SFWPA was not investigated by the Butte County grand jury in 2020. Its most recent investigation by the Butte County grand jury was in 2011 to ensure SFWPA's continued compliance with the ethics training requirements of AB 1234 (SFWPA, 2011).

6.3.4 Management Efficiencies

The General Manager is appointed by and reports to the Board of Directors. Specifically, the General Manager serves as the Executive Officer and is responsible for all functions of agency staff. Additionally, the General Manager is responsible for ensuring Agency compliance with the Brown Act with support from the Agency's legal counsel. The Agency's Environmental and Safety Compliance Officer ensures compliance with rules and regulations regarding environmental and safety issues. The Agency's Water Division Manager is responsible for rules and regulations regarding water distribution. An important part of management effectiveness includes the Agency adopting an Agency-wide mission and vision statement. Based on the information assessed in this MSR, it appears that the SFWPA achieves its Mission.

SFWPA Mission Statement
The mission of South Feather Water and Power Agency (SFWPA) is both to deliver a dependable supply of safe, quality drinking water to its customers, and a dependable supply of water for agricultural users, in an economical, efficient and publicly responsible manner. *Hydroelectric generation facilities shall be utilized to optimize revenue from power generation, consistent with providing adequate and dependable water supplies to customers.* *SFWPA is also committed to providing its employees a safe work environment and encouraging personal growth and attainment of goals.*

Listening to and addressing feedback from customer suggestions and complaints is an important administrative function for local governments because it demonstrates concern for the constituents. SFWPA offers customers several ways to communicate suggestions or complaints, including:

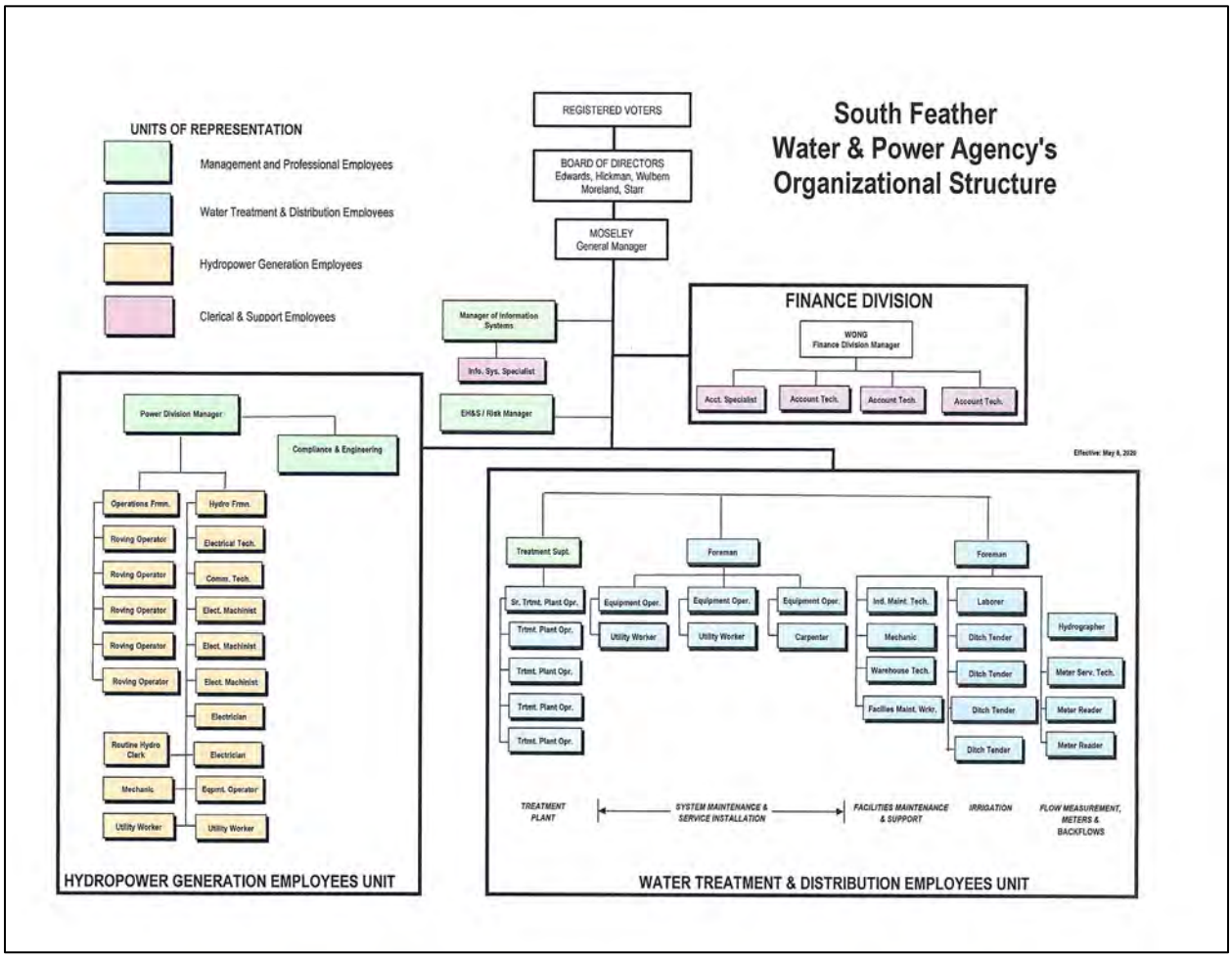
- Phone at (530) 533-4578
- Web Site Contact Form: https://southfeather.com/necontact/
- U.S. postal mail to: 2310 Oro Quincy Highway, Oroville, CA 95966
- Directly to the General Manager: Email: rmoseley@southfeather.com

6.3.5 Staffing and Training

SFWPA's staff is organized into four divisions/units: Management, Finance, Water Treatment and Distribution, and Hydropower Generation. The reporting structure and the number of staff positions in each unit are depicted in the organization chart shown in Figure 6-3 below. As of June 2021, SFWPA had a total of 58 regular full-time employees. Seventeen employees worked in the administrative and overhead sector, and 27 worked in the Water Transmission and Distribution Unit (SFWPA, 2021a).

Employees receive a compensation package that could include the following, depending on the specific position: regular pay, overtime, lump sum, other pay, defined benefit, health-dental-vision insurance, and a retirement contribution. The compensation data for the year 2020 for the 58 regular full-time employees and the five non-regular or part-time employees is reported by SFWPA to the California Auditor.

Figure 6-3: SFWPA Organization Chart



6.3.6 Determinations for Governance and Accountability

Based on the information included in Sections 6.1 through 6.3 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-8 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 6-8: MSR DETERMINATIONS: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES		
Number	**Indicator**	**Determination**
SFWPA-Acc-1	Number of closed sessions during the year 2020 (ideally fewer than 50%).	100 percent (i.e., 13) of the meetings of the SFWPA Board of Directors included closed sessions during the year 2020. This number exceeds the 50 percent accountability indicator and is, therefore, an item that needs improvement. Therefore, it is recommended that the Board and staff reduce the number of closed sessions held each year by reducing the number of concurrent lawsuits.
SFWPA-Acc-2	Does the agency's Website comply with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257?	Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. The Agency's website agenda distribution does comply with the requirements of the Brown Act 2016 Updates described in AB2257, in that meeting agendas are retrievable, downloadable, searchable, and indexable. SFWPA makes its agenda and minutes available in .pdf format on its website, under a tab entitled "Publications" under its "Board Agenda Information" section, at the following URL: https://southfeather.com/publications/agenda/. Agendas are also found directly on its homepage at the bottom. Board packets for both regular and special meetings are listed.
SFWPA-Acc-3	Compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires special districts to have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information.	Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. The SFWPA does currently maintain a website that lists contact information for staff and the Board. Financial reports are also available at: https://southfeather.com/publications/financial-reports/. Compensation reports were not found on the SFWPA website; however, the data is available from the CA Auditor's website. Therefore, the SFWPA mostly complies with the Special District Transparency Act. It is recommended that the SFWPA website be updated to include a link from the home page to the CA Auditor's website for access to compensation data.
SFWPA-Acc-4	Terms of office and next election date are disclosed for District Board members, and committee appointments are online.	Terms of office for each Board member are listed on the Agency's website. The next election date is disclosed for Board members by year, but not by the specific month and day, and this item could be improved by updating the website. In addition, board committee appointments are not online. It is recommended that the website be updated to list Board committee appointments.

SFWPA-Acc-5	Do elected Board members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training?	Compliance by SFWPA Board members in submitting required forms and receiving required trainings as prescribed by the three state laws regarding accountability and ethics was assessed in this MSR. 1) SFWPA Board members comply with the Political Reform Act by submitting required economic interest forms to the SFWPA Finance Dept. 2) Assembly Bill 1234 (Salinas, 2005) requires ethics training, and compliance with this law is currently in-progress. SFWPA Board members will receive this training in August 2022. It is recommended that the SFWPA website be updated to share certification of training, and 3) Government Code 53237 et. seq. mandates sexual harassment prevention training, and compliance with this law is currently in-progress. SFWPA Board members will receive this training in August 2022. It is recommended that the SFWPA website be updated to share certification of training.
SFWPA-Acc-7	Current litigation and/or grand jury inquiry	The Butte County grand jury has not investigated SFWPA since 2011, which was regarding ensuring SFWPA's continued compliance with the ethics training requirements of AB 1234. SFWPA was involved in eight litigation cases in the year 2020, including seven active cases and one anticipated case. For example, the SFWPA is currently being sued by the North Yuba Water District, asserting a number of legal issues such as "breach of contract and breach of fiduciary duty." Therefore, it is recommended that new SFWPA managerial staff continue their work to reduce the number of concurrent lawsuits.

6.4 Growth & Population Forecasts

The growth and population projections for the affected area is a determination that LAFCO is required to describe, consistent with the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act. This section provides information on the existing population and future growth projections for the South Feather Water and Power Agency. Historical and anticipated population growth is a factor that affects service demand. Appendix A at the end of this MSR/SOI Update provides detailed demographic and socio-economic information for The County of Butte. Economic data, including forecasts for The County of Butte, are provided in Appendix H.

6.4.1 Existing Population

Since census tracts do not directly correspond with Agency boundaries, data is inputted into calculations to provide a close approximation to the existing population for the Agency. Table 6-9 below provides current population estimates for the SFWPA boundary and SOI. A lower population estimate is provided from SFWPA's Urban Water Management Plan (2020), which calculates 16,770 persons residing within the boundary and 21,400 persons within the SOI. A higher estimate was calculated using newer data from the California Department of Finance (DOF) and Butte County Association of Governments (BCAG) Geographic Information Systems (GIS) data estimating 24,300 persons within the boundary and 25,245 persons within the SOI. The provision of both the lower and the higher population estimates is useful for better understanding the possible range of population dynamics, which change periodically depending on local conditions. For example, Butte County's population declined by three percent in 2021 to 202,669 from the 2020 estimate of 208,951. This decline could be due to numerous factors such as age or economics. However, continuing ramifications from the Camp Fire in the Town of Paradise could also be a contributing factor in the decline.

Table 6-9: Existing Permanent Population, SFWPA, 2020

Name of District / Type	Population Boundary	# Registered Voters in Boundary	Population in SOI only
SFWPA Lower Estimate	16,770*	13,316**	21,400***
SFWPA Higher Estimate	24,300****	13,316**	25,245

Data Source:
*SFWPA, UWMP, 2021g, calculated based on 2.45 persons per connection.
**Registered Voter data provided by Butte County Elections Office, Denlay, Keaton, August 9, 2021.
****SFWPA, UWMP, 2021g, based on 2010 U.S. Census data
****Calculated based on 2.13 persons per parcel average in unincorporated Butte County and 2.4 persons per parcel average within the City of Oroville. Calculated using 2020 CA DOF population data and 2021 GIS data.

Since census tracts do not spatially align with the Agency's boundaries, it is difficult to calculate an exact level of the population within SFWPA. However, the "low" and the "high" estimates presented in Table 6-9 above give a range. The actual population level is probably somewhere in the middle of this range. As new data from the 2020 census is released, it may be possible to calculate a more precise estimate.

6.4.2 Existing Population in SOI

The SFWPA's SOI population (outside the Agency's boundary) is estimated to range from a low of 21,400 persons to a high of 25,245 persons, as listed in Table 6-9 above.

6.4.3 Projected Population Growth

Projecting the future population of a District is complicated due to varying annexation rates and census tracts that do not match District boundaries. For purposes of this MSR, data from the California Department of Finance (DOF) was used to project population growth, as shown in Table 6-10 below. The DOF provides population projections at the County level, and the growth rate for the County of Butte is utilized to extrapolate population growth rates for the South Feather Water and Power Agency.

Two growth scenarios are shown in Table 6-10 below. The "Low Start" scenario begins with the lower population estimate of 16,770 provided in the SFWPA's UWMP of 2020 and increases by an average annual growth rate (AAGR) of 0.88 percent to reach a projected population of 20,887 by the year 2045 (an increase of 4,117 persons). Although the "Low Start" scenario begins with a smaller population estimate, it has a slightly higher growth rate than the "High Start" scenario. The "High Start" scenario begins with a population of 24,300 in the year 2020 and projects a numeric increase to 29,375 by the year 2045 (an increase of 5,075 persons.

The projected growth rate for the County of Butte anticipates development throughout the entire County. The addition of 4,117 to 5,075 more people to the SFWPA boundary area by 2045 is possible as the area contains under-developed areas that could potentially be annexed to the City of Oroville or made available for more intensive residential development. Areas located near the City of Oroville have a moderate probability of developing over the next twenty years since the City continues to grow and expand.

6.4.4 Existing Land Use

Land use is a factor that affects population growth and, therefore, demand for public services. However, the SFWPA is not a land-use authority. The Agency's boundary area is bordered on the west by the City of Oroville, to the north by Lake Oroville, and to the east by the Thermalito Diversion Canal. Most of the Agency's boundary area is located within unincorporated Butte County and includes the small communities of Palermo, Kelly Ridge, Wyandotte, and Bangor. Land uses in the unincorporated area surrounding the City of Oroville immediately to the east are largely urbanized. However, further east, the topography gains elevation, and rural and forest uses predominate. Within the SFWPA boundary, single-family residences are the predominant land use type. Oro Dam Blvd. and Foothill Blvd contain several businesses and churches. Land-uses in areas to the north and south are primarily agricultural, with citrus and olives being some

Table 6-10: Total Estimated and Projected Population (2020 – 2045)

	2020	2025	2030	2035	2040	2045	Percent Increase 2020 to 2045	Numeric Increase 2020 to 2045	AAGR 2020 to 2045
Low Start Scenario SFWPA UWMP 2020*	16,770	17,521	18,306	19,125	19,882	20,887	24.6	4,117	0.88%
High Start Scenario	24,300	27,165	27,895	28,525	29,020	29,375	20.9	5,075	0.76%

Data Sources:
**In their 2020 UWMP, the SFWPA utilized long-range population projections from the CA Dept. of Finance dated January 2018 for the period 2018 to 2040. This information was used to establish the control total for BCAG's high forecast scenario for housing at 0.88 percent.*
*** Population projection for SFWPA calculated as a percentage of The County of Butte future growth as projected by the California Department of Finance. Demographic Research Unit. January 2021. Table P-1: Total Estimated and Projected Population for California and Counties: July 1, 2010 to July 1, 2060 in 1-year Increments.*

of the most common crops. Approximately 10,000 acres within the Agency's boundaries produce agricultural crops (personal communication, R. Mosley, 7/11/2022). The predominant land uses in the City of Oroville, and its immediate surroundings include single-family residences, mobile home parks, and schools. Please refer to Chapter 3 for additional detail on land-use within the City of Oroville. In addition, there are several other independent local government agencies that operate within or near the SFWPA boundaries, including five schools (Ishi Hills Middle School, Oroville Union High School, Oroville Elementary School, Palermo Elementary School, and Bangor Elementary School), the Butte County Mosquito, and Vector Control District; Lake Oroville Area Public Utility District, Feather River Recreation and Park District, and the City of Oroville (SFWPA, UWMP, 2021g).

Within the Agency's SOI, there are two tribal reserves, and casinos anchor both reserves. The Tyme Maidu Tribe of Berry-Creek Rancheria holds a 90-acre reserve located off Olive Highway, and it contains the Gold Country Casino. The Concow Maidu Tribe holds the Mooretown Rancheria tribal reserve with lands occupying over 300 acres off Ophir Road, which includes the Feather Falls Casino. Both tribal reserves are within the Agency's Sphere of Influence.

Open Space & Agriculture

Butte LAFCO aims to protect open space and agriculture. For purposes of this MSR analysis, the spatial distribution of agricultural land was derived from the California Department of Conservation. The types of farmlands within the SFWPA boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland, as depicted in Figure 6-4 below. SFWPA does provide raw (untreated) irrigation water to approximately 67 customers. The Agency occasionally provides water services to other open space areas (i.e., non-structural) within its boundaries. However, natural areas and parks may be unconnected to the SFWPA system and, therefore, are rainfall or groundwater-dependent. LAFCO has an interest in documenting the conversion of agricultural and open space lands to other land use types, such as residential use. The SFWPA water services do not play a role in these types of land-use conversions.

Butte County General Plan 2030

The Agency's boundaries and Sphere of Influence area are mostly unincorporated and subject to the land-use policies and regulations of Butte County. Most land-use decisions in unincorporated areas are initiated by private property owners and are secured via entitlements and land-use permits from Butte County and other agencies. In addition, the County plans for its future growth through its General Plan, which is a long-term comprehensive framework to guide physical, social, and economic development within the community's planning area. The General Plan contains a land-use map and associated policies that identify the types and intensities of permissible uses in relation to different land-use designations. The Butte County General Plan 2030 was updated and adopted on October 26, 2010 (County Resolution No. 10-152) and

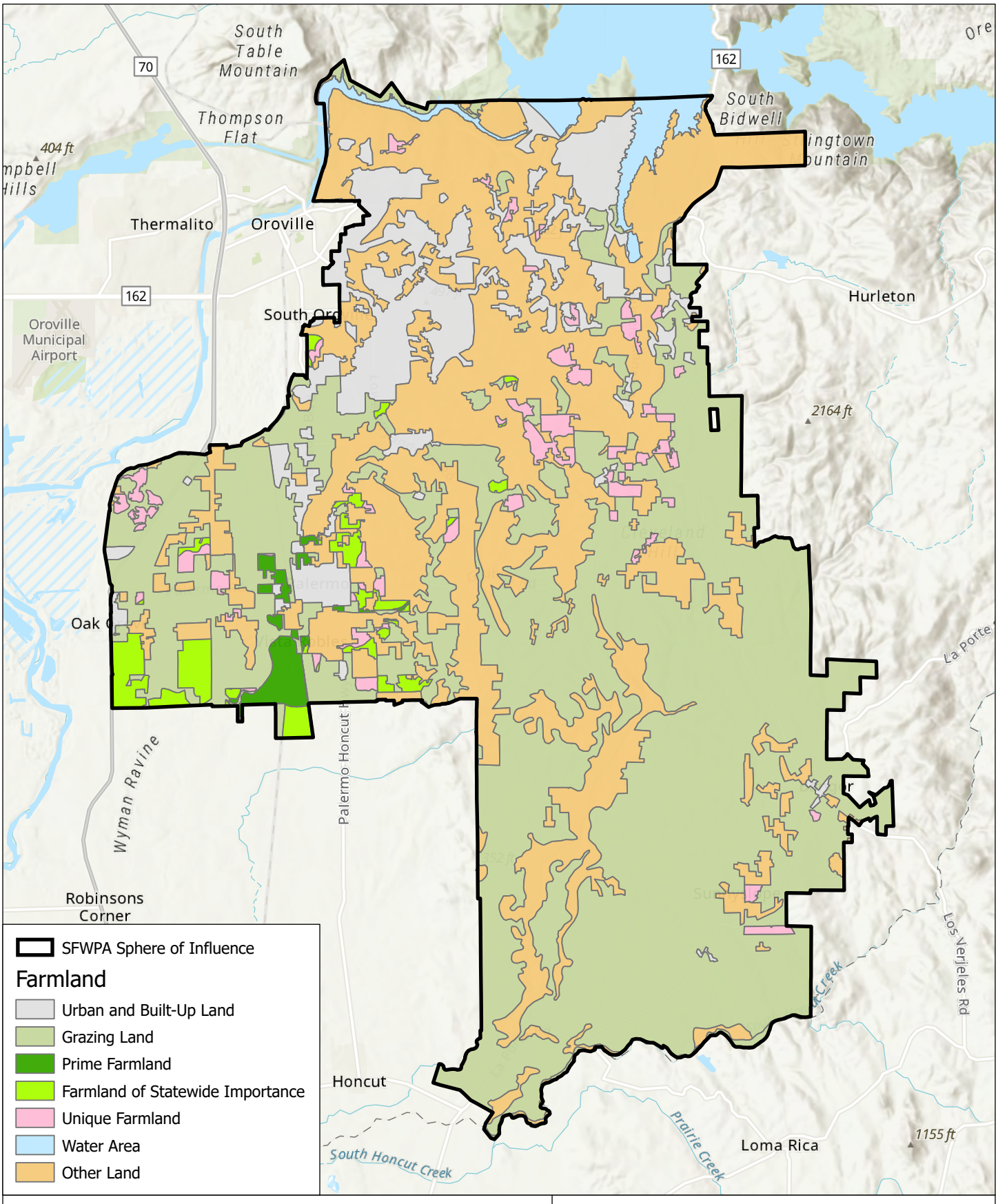


Figure 6-4
SFWPA Farmland

Map Date: 09/29/2021
Data Source: Butte LAFCO;
Farmland Mapping and Monitoring Program (FMMP)

Amended on November 6, 2012 (County Resolution No. 12-124). The Oroville Area Land Use Plan of the Butte County General Plan designates a large portion of the SFWPA boundary and SOI as Agricultural-Residential. This Agricultural-Residential designation allows agricultural uses and single-family dwellings at rural densities. Farms and ranches in this area receive water from various sources, including SFWPA raw irrigation water, rainfall, or groundwater, depending on the specific location. Farms and ranches in the SFWPA boundary and SOI contribute to the agricultural sector's economic prosperity in Butte County by producing a wide variety of farm products.

The County's General Plan Housing Element was subsequently updated on August 26, 2014, through County Resolution No. 14-112. Butte County has opted to update its housing elements every eight years. The 2022 update to the Housing Element will aim to align with their Regional Transportation Plans (which are updated every four years) and the housing plans in the Regional Sustainable Communities Strategy (See BCAG). The County General Plan and associated Housing Element influence both the type and the rate of growth within the unincorporated areas, such as most of the Agency's boundary and SOI.

Figure 6-5 below provides a map that merges the County's General Plan Land Use Map with the City's General Plan Land Use Map through the use of crosswalks to graphically show the spatial relationships in land use designations. In the adjacent area, outside the Agency boundaries, land is primarily characterized by agriculture and open space with limited rural residential uses.

Oroville General Plan 2030

The Oroville 2030 General Plan was adopted in 2009 and updated in March 2015. The General Plan serves as a comprehensive guide for making decisions about land use, community character, circulation, open space, the environment, and public health and safety. The City General Plan contains guiding principles related to livability, enhanced mobility, a vibrant local economy, natural resources, environment, recreation, community infrastructure, health and safety, and an involved citizenry (COOR, 2015). The General Plan provides the legal foundation for the zoning ordinance and other ordinances. The General Plan recognizes the water and wastewater services provided to City residents by other service providers, including Thermalito Water and Sewer District (TWSD), Lake Oroville Area Public Utility District (LOAPUD), South Feather Water & Power Agency (SFWPA), and California Water Service (Cal Water). The City's General Plan contains numerous policies regarding the provision of water and wastewater municipal services.

6.4.5 Potential Future Development

Future population growth within the local community served by SFWPA is dependent upon zoning and general plan policies and land use designations by the City of Oroville and Butte County. The hilly topography to the east somewhat restricts residential growth in that direction, partially due to the increased cost of installing infrastructure in hilly areas. Because of this topographic constraint, most of the residential growth expected to be serviced by the Agency will likely occur in the areas immediately surrounding the City of Oroville and to the south. An extensive amount of land is designated as low-density residential, as shown in Figure 6-5 below. Butte County is embarking on an update of its current General Plan, which may refine development requirements.

Additionally, new state laws encouraging the construction of accessory dwelling units may promote infill development in some neighborhoods. For purposes of this MSR Analysis, it is assumed that the average annual future growth rate (AAGR) within the Agency boundaries will range from 0.76 percent to 0.88 percent, as listed in Table 6-10 above.

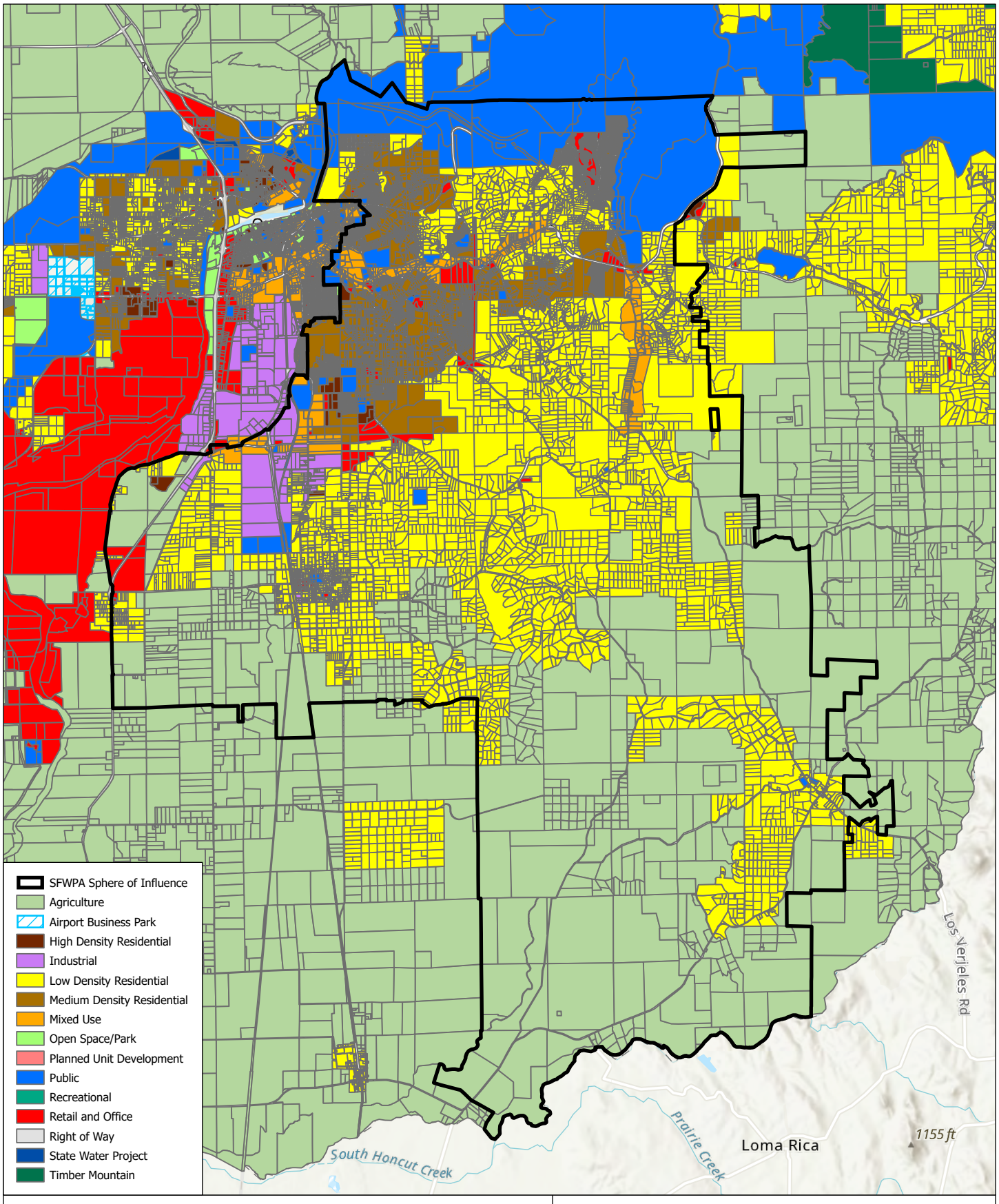
When a private property owner proposes a new development, SFWPA will coordinate with the respective City and County Planning Departments by providing information on the adequacy of its water supply, distribution system, and water rates to meet the area's current and future growth needs. Generally, the Lead Agency (such as the Planning Department for the City/County) will process applications for subdivisions and commercial developments and invite SFWPA to comment on any service-related issues or associated environmental issues. The Agency participates and provides information as requested. (SFWPA, UWMP, 2021g). Several new developments have requested water service from SFWPA over recent years; however, many of these developments have not yet been constructed or approved, including:

- Whisper Ridge;
- Lake Oroville Resort;
- Lake Wyandotte Campus;
- Rio D' Oro, and
- Las Plumas.

6.4.6 Local Hazard Mitigation Plan

The Butte County General Plan's Safety Element [which includes the Local Hazard Mitigation Plan (LHMP)] was adopted by the County Board of Supervisors on November 5, 2019 (Butte OEM, 2019). Butte County, along with five incorporated communities and ten special districts, prepared the 2019 LHMP in order to make the County and its residents less vulnerable to future hazard events. The SFWPA is the subject of a dedicated Appendix (N) in the LHMP, and it lists the following potential local hazards:

- Climate Change;
- Dam Failure;
- Drought and Water Shortage;
- Earthquake and Liquefaction;



Map Date: 09/29/2021
Data Source: Butte LAFCO;
Butte County Association of Governments (2021)

Figure 6-5
SFWPA
City/County General Plan

- Flood: 100-/500-year;
- Floods: Localized Stormwater;
- Stream Bank Erosion; and
- Wildfire.

It is important to note that the SFWPA has both formal and informal emergency response plans and practices. During past emergencies, the Agency has assisted neighboring districts and other government agencies through mutual aid and other informal practices, as described in the following pages.

Climate Change

Climate change is projected to impact the Northern Central Valley (including Butte County) via the following: temperature increases, reduced precipitation, flooding, reduced agricultural productivity, reduced water supply, wildfire, public health, and heat (Butte Co. OEM, LHMP, 2019). The SFWPA Power Division assets could potentially be at the most risk of climate change impacts, primarily due to future increased wildfires as a result of temperature increase, drying soils, and increased wind. SFWPA power assets are located in thick conifer forests and are generally isolated along the South Fork of the Feather River. Reduced precipitation could lead to reduced water storage which fuels the hydro-power project and could affect local water supply. Both of these could potentially have future economic repercussions for the Agency (Butte Co. OEM, LHMP, 2019).

Dam Failure

During periods of prolonged rainfall and flooding, dam failures can sometimes occur. The primary risk associated with dam failure is high-velocity flooding of properties located downstream of the dam. Additionally, secondary losses could include the loss of the multi-use functions of the facility and associated revenues. SFWPA believes that the requirements set forth with the Federal Energy Regulatory Commission (FERC) and CA DWR Division of Safety of Dams (DSOD) effectively reduce vulnerability to dam failure events. Additionally, SFWPA is well-versed in monitoring, documenting, and maintaining their dam and spillway structures to recognize any conditions of weakness (Butte Co, OEM, 2019). The Lake Oroville dam structure managed by CA DWR also bears risk, as evidenced by the Spillway Emergency in 2017, which caused severe flooding of the Kelly Ridge Power House along with impacting the daily operations at the Miners Ranch Reservoir that feeds the Miners Ranch Treatment Plant. Throughout the event, treatment plant operators monitored the reservoir elevation and treated turbidity issues to ensure that the domestic water service was within water quality requirements (Butte Co, OEM, 2019).

Drought

A lack of rain and snow over an extended period (usually a season or more) can result in drought conditions creating water shortages for some human activities and the environment. A drought's impacts result from the interplay between the natural event (less precipitation than expected) and the demand people place on the water supply. Since SFWPA's water supply is wholly made up of surface water, it is a rain and snow-dependent system. However, SFWPA's reservoirs and other infrastructure create storage and add resiliency to the system. Historically, SFWPA operational infrastructure and water supply have recovered from drought during the intervening wetter years (Butte Co, OEM, 2019). The vulnerability of the SFWPA to drought is Agency-wide.

However, impacts may vary, including a reduction in the water supply available for drinking water, irrigation water, fire suppression, and hydroelectric power generation. Also, drought conditions dry out local vegetation, creating dry fuels and increasing fire danger. As a result, voluntary conservation measures are typically implemented during extended droughts (Butte Co, OEM, 2019).

Earthquake and Liquefaction

The Cleveland Hills fault is the only known active fault in Butte County and is the August 1975 Oroville earthquake site. Due to the proximity of the SFWPA to the Cleveland Hills Fault, the Agency is at risk of an earthquake. These earthquakes can also cause liquefaction within the Agency's service area. Liquefaction is a process whereby soil is temporarily transformed into a fluid formed during intense and prolonged ground shaking. Since earthquakes are regional events, the whole of the Agency, including its water distribution system and its power generation facilities, is at risk of an earthquake (Butte Co. OEM, 2019 and SFWPA UWMP, 2021g).

Flooding

The SFWPA boundary and SOI are traversed by several stream systems, which are at risk to the 1 percent and the 2 percent annual chance floods. The General Plan Safety Element noted that the Oroville area has historically been subject to flooding from various rivers and streams, including the Feather River and its tributaries. Flooding was much more prevalent prior to the construction of the Oroville Dam. The Palermo area is prone to flooding; however, Agency staff do not believe this to be an operational challenge at this point. Storm floodwaters are kept within defined areas by various storm drainage and flood control measures. Localized flooding can cause road closures, pavement deterioration, washouts, landslides/mudslides, debris areas, and downed trees. Heavy rains may produce puddles and ponding around storm drains and low-lying areas; however, these events are short in duration and do not typically cause property damage. Localized flooding can also affect the roads that Agency staff drive to reach Agency facilities. Mudslides in watershed areas scarred by past fires are also a concern. SFWPA staff noted that no Agency facilities are at risk of flooding; however, the slight possibility that SFWPA infrastructure could experience impacts remains (Butte Co. OEM, 2019).

Streambank Erosion

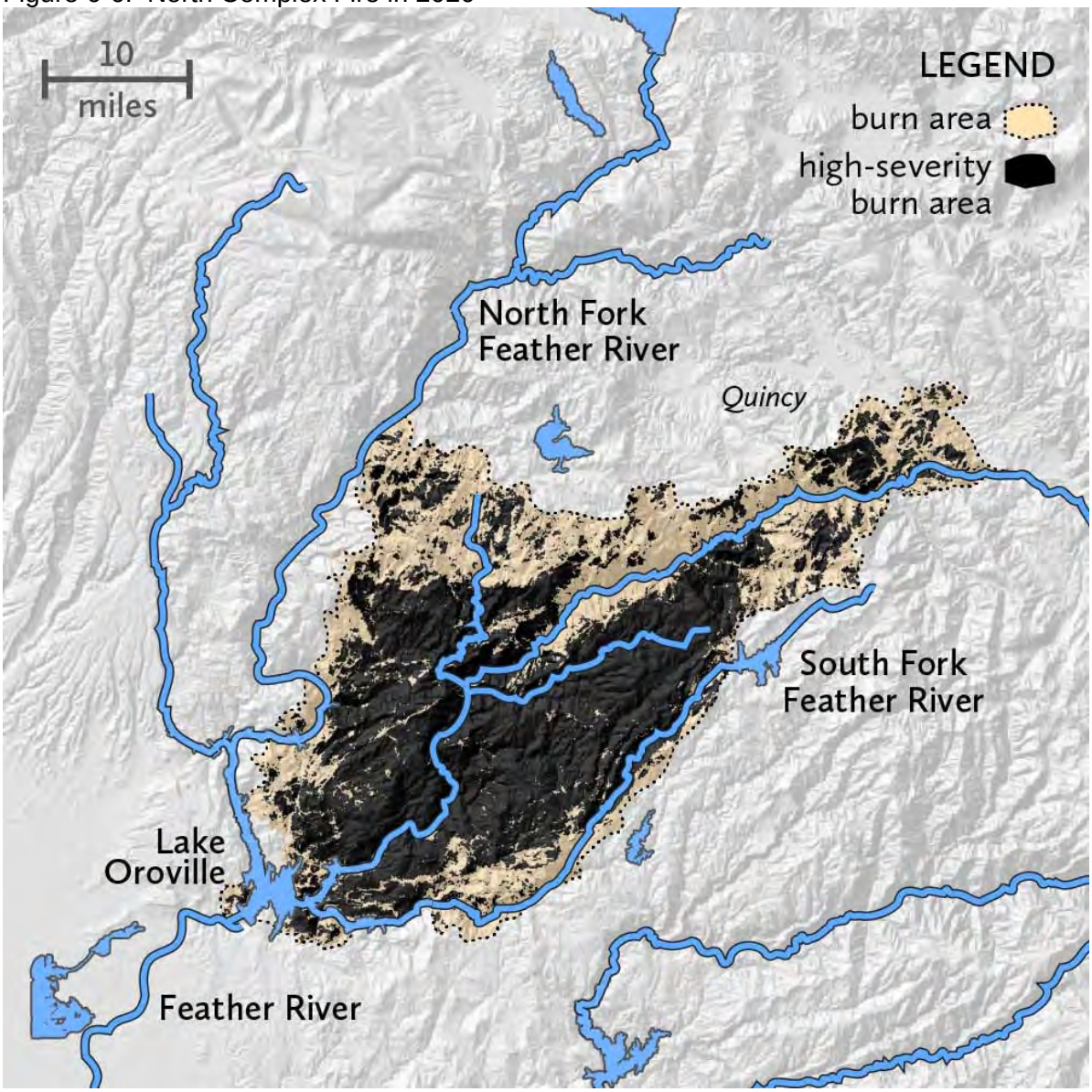
Stream bank erosion occurs on rivers, streams, and other moving waterways, including leveed areas in Butte County. The Oroville Dam and Thermalito Afterbay effectively trap sediment loads. Therefore, the Feather River (the portion located below the dam) has reduced suspended sediment, and this causes the River to become more erosive, transporting mining debris and older alluvium downstream. Erosion is a slow process, taking place over periods of years. However, more significant erosion occurs during periods of high stream flow and during storm and wind events when wave action contributes to the extent and speed of streambank erosion. Erosion has occurred in areas of concern by the SFWPA in recent years. For example, in 2017 and 2019, winter storms exacerbated streambank erosion along the Miners Ranch Canal and the Canal Access Road. (Butte Co, OEM, 2019). Additionally, wildfires can leave local hillsides prone to burn scars. Subsequent heavy winter storms can result in hillside erosion and debris flow issues. SFWPA's canals and water conveyance system are at risk to streambank erosion (Butte Co, OEM, 2019).

Wildfire Risk

The vast distance and topography of Agency asset locations have resulted in severe threats due to wildfire events (Ponderosa, Wall, Bangor, and Lumpkin Fires). CAL FIRE has defined areas of greater wildfire risk through Fire Hazard Severity Zones (FHSZ). The Agency lies in multiple zones, from Non-wildland/Non-Urban to Very High FHSZ. With the exception of the Kelly Powerhouse, the Power Division's hydro assets are located in the very high-hazard zone. Additionally, the hillsides surrounding the Miners Ranch Canal are also highly vulnerable to wildfire risks, which then cause soil erosion issues during the winter months. In the past, damage to SFWPA assets from wildfire has been limited to melted communications equipment during the Ponderosa Fire. Although the Agency was not directly impacted by the Camp Fire, it did engage in Mutual Aid MOU specified assistance with the Paradise Irrigation District by providing equipment and personnel during the initial recovery efforts (Butte Co, OEM, 2019). During the September 2020 North Complex Fire, several residents in the SFWPA boundary area were evacuated (SFWPA, WSCP, 2021d).

Wildfires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the County and Agency by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires may result in casualties and can destroy buildings and infrastructure. All Agency assets are either at High or Very High risk from the wildland fire hazard. Agency efforts to reduce the likelihood of a wildland event include daily ditch-tending along with canal infrastructure, contracting fuel reduction work with the Butte County Sheriff Work Program, and environmental companies that offer goat grazing (Butte Co, OEM, 2019).

Figure 6-6: North Complex Fire in 2020



The North Complex Fire in 2020 burned around the Feather River and Lake Oroville, the largest contributor to the State Water Project. Map provided courtesy of:
https://sierranevada.ca.gov/2020-megafires-create-risks-for-californias-water-supply/

6.4.7 Determinations for Growth and Population

Based on the information included in Sections 6.4 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-11 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 6-11: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

Number	Indicator	Determination
SFWPA-Pop-1	Existing Boundary	SFWPA's 33,718-acre boundary area is located mainly in the unincorporated County of Butte. A small portion of the City of Oroville is within the SFWPA boundary. The boundary area has an irregular shape, and 19 non-contiguous and isolated boundary pockets are located east of the sphere of influence. The boundary includes 11,127 assessor parcels.
SFWPA-Pop-2	Existing Sphere of Influence	The Agency's SOI was last affirmed in the 2011 MSR/SOI for the Agency. The Agency's SOI encompasses 64,125 acres and includes 11,853 parcels. Agency staff believes the Sphere of Influence boundary is adequate for projected future needs. However, in its 2006/07 MSR, SFWPA noted that their Sphere of Influence boundary should be co-terminus with their "place-of-use" boundary as designated by the State Water Resources Control Board to best accommodate future needs regarding the approved area for distribution of water per existing water rights. This issue could be studied in more detail in the next SOI update.
SFWPA-Pop-3	Extra-territorial Services	LAFCO's 2006 MSR (by Kleinschmidt) noted that SFWPA served water to six customers outside its boundaries via surplus water agreements that were considered for renewal annually. These six customers received irrigation water (not potable). However, there are no current surplus water agreements for these six customers. Otherwise, the SFWPA has not provided extra-territorial services outside its District boundary.

Table 6-11: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA		
Number	**Indicator**	**Determination**
SFWPA-Pop-4	Projected population in years 2020 to 2045.	The addition of 4,117 to 5,075 more people to the SFWPA boundary area by the year 2045 is projected as the area contains under-developed areas that could potentially be annexed to the City and/or made available for more intensive residential development. Areas located near the City of Oroville have a moderate probability of developing over the next twenty years since the City continues to grow and expand. This represents an average annual growth rate of less than one percent per year. This could bring the total population within the Agency's service area to approximately 29,375 persons by the year 2045.
SFWPA-Pop-5	District boundaries contain a sufficient land area to accommodate projected growth.	Currently, the Agency's boundary area supports an average of 0.72 persons per acre, which is considered low population density. The County General Plan suggests that growth may occur within the SFWPA boundary. SFWPA boundaries contain a sufficient land area to accommodate projected growth.
SFWPA-Pop-6	Effect that the District's service provision will have on open space and agricultural lands.	SFWPA's boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland. SFWPA provides raw (untreated) irrigation water to approximately 67 customers, thereby supporting agriculture in the community. The Agency occasionally provides water services to other open space areas (i.e., non-structural) within its boundaries. However, natural areas and parks may be unconnected to the SFWPA system and therefore be rainfall or groundwater-dependent. Therefore, water service generally has minimal effect on agricultural land and open space.

6.5 Disadvantaged Unincorporated Communities

Disadvantage Unincorporated Communities (DUCs) are the topic of a mandated LAFCO MSR determination. DUCs are a census "block" where the annual median household income (MHI) is less than 80 percent of the statewide MHI. California's annual median household income (MHI) in 2019 was $75,235 (U.S. Census, 2021). Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. The year 2019 is utilized as the baseline year because it corresponds to the CALAFCO map. Please note that since Oroville is an incorporated City, there are no DUCs within its boundaries.

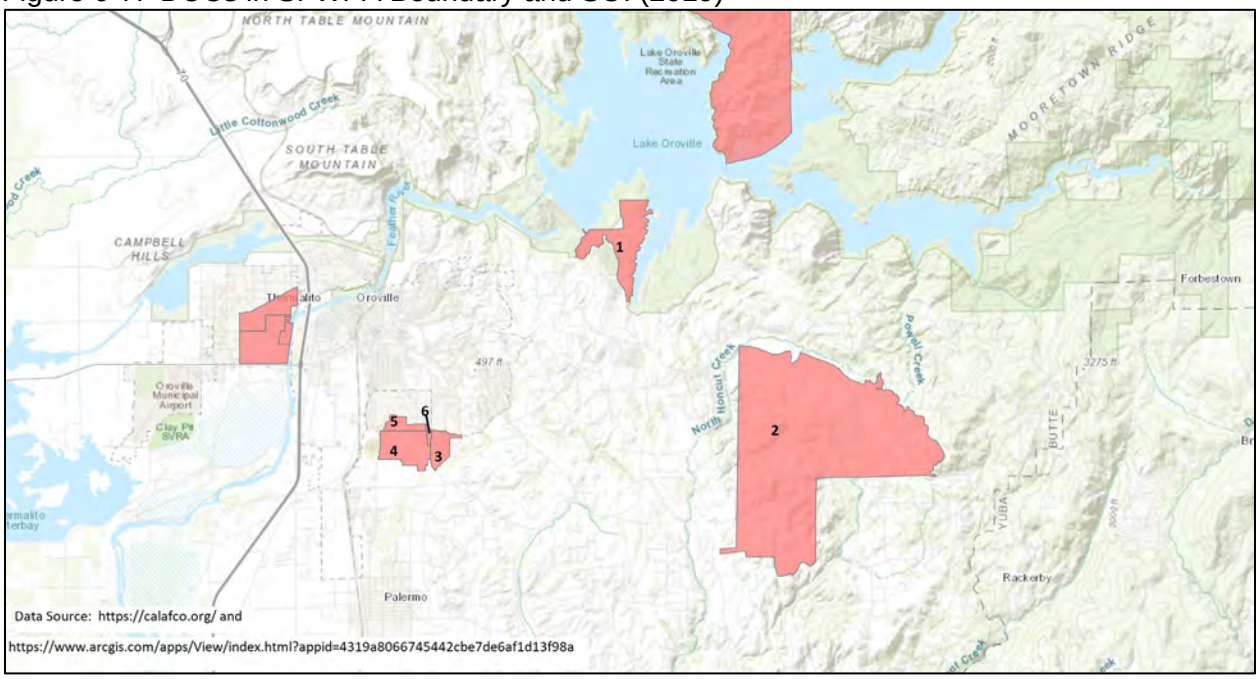
DUCs are defined as areas with the following features:

- Inhabited with ten or more homes adjacent or in close proximity to one another; and

- Either within a city's SOI, islands within a city boundary, or geographically isolated and have existed for more than 50 years; and
- The median household income is 80 percent or less than the statewide median household income.

As shown in Figure 6-7, there are six census "blocks" with median household income below the state threshold within the SFWPA boundary and SOI. These areas are classified as DUC's.

Figure 6-7: DUCs in SFWPA Boundary and SOI (2019)



The six census blocks are marked with numbers 1-6 in Figure 6-7 above, and these numbers correspond to those listed in Table 6-12 below. Table 6-12 provides data for the year 2019 because that relates to the data CALFCO utilized to create the above map.

Table 6-12: DUCs in Census Blocks (2019)

# on Map	Census Block #	2019 MHI Threshold	Block MHI (2019)
1	Block Group 2, Census Tract 26.02	$60,188	$47,426
2	Block Group 3, Census Tract 24	$60,188	$45,850
3	Block Group 4, Census Tract 31	$60,188	$47,961
4	Block Group 2, Census Tract 30.02	$60,188	$46,964
5	Block Group 3, Census Tract 30.02	$60,188	$47,500
6	Block Group 1, Census Tract 30.01	$60,188	$29,792

Data Source: 2019 data from CALAFCO Statewide DUC Map using American Community Survey 5-Year Data (2015-19) Updated Mar 2022.

Please note that newer data based on the 2020 U.S. Census is slowly being released. The statewide annual median household income (MHI) in California for 2022 is $88,930 (ESRI, 2022). Eighty percent of the statewide MHI (2022) equals $71,144.00. The 2020 U.S. Census also created spatial changes such that the geographic layout of census tracts and census blocks may have significantly expanded or contracted. Based on preliminary information from ESRI, it appears that a much larger area of the Oroville region will soon be classified as DUCs or DACs. GIS layers for newly shaped census tracts and census blocks are not yet readily available in a useful format from ESRI.

Within the SFWPA boundary, water service is provided to the DUCs by the Agency. For example, LAFCO approved the annexation of the unincorporated community of Palermo in September 2022. The Palmero annexation consists of approximately 550 parcels added to the SFWPA. The annexation facilitates the Palermo Clean Water Consolidation Project, a partnership between the County of Butte and South Feather Water and Power Agency, to provide safe, clean drinking water to the residents of Palermo who have historically depended on private wells for domestic water.

Outside the SFWPA boundary, individual privately-owned wells provide groundwater as needed. Currently, the Agency is not involved in any new potential consolidation efforts with existing small water systems that supply water in disadvantaged communities within its service area (personal communication, R. Mosley, 7/11/22).

Wastewater collection services are available from the Lake Oroville Area Public Utility District (LOAPUD) to areas within its service area. The Sewerage Commission – Oroville Area (SC-OR) provides wastewater treatment to LOAPUD customers. Outlying areas rely on septic tanks for wastewater service. Fire protection services are provided by the City of Oroville, only to those parcels located within the City. Most of the parcels within the SFWPA boundary and SOI to the north, west, and east (to some extent) are provided fire protection by the Butte County Fire Department (BCFD)/CALFIRE. Butte County Fire/CALFIRE Department provides services to approximately 1,550 square miles of Butte County and approximately 102,000 unincorporated residents from 42 fire stations. CALFIRE also contracts with the COOR[4] to provide fire protection services to the community. Additionally, CAL Fire is the lead fire protection agency for wildland fires in the SOI within State Responsibility Areas (SRAs).

All SFWPA boundary and SOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing SFWPA boundary or SOI lack essential public services, and no public health or safety issues have been identified.

[4] In the past, the El Medio Fire Protection District (EMFPD) provided services to the mostly urbanized unincorporated territory immediately south of and adjacent to the City of Oroville. EMFPD closed in December 2020. Since that time, Oroville Fire Department and CAL FIRE have taken over coverage for their respective territory within the bounds of the district.

Disadvantaged Tracts for Grant Applications

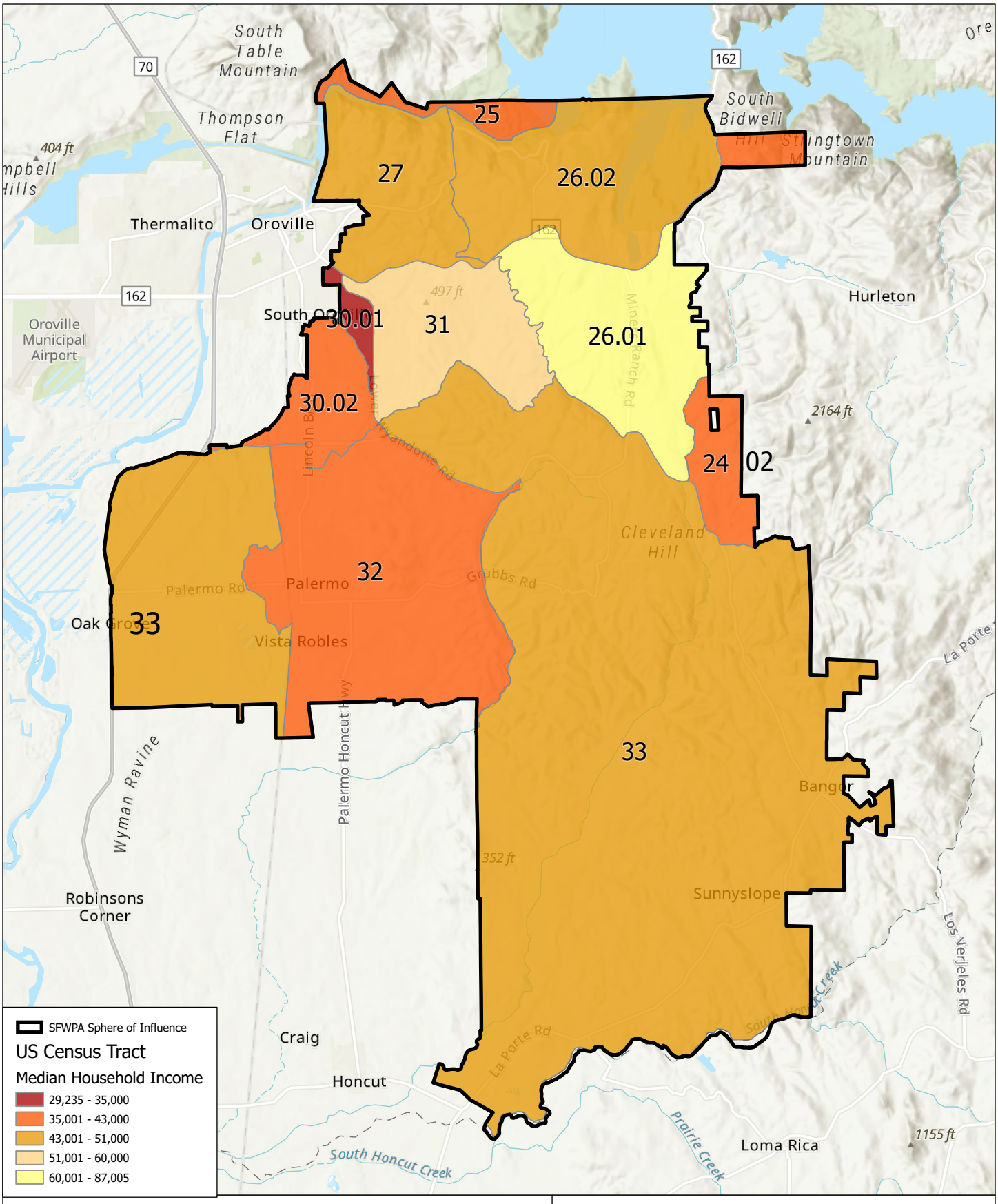
Grant funds are sometimes available from state and federal sources for water infrastructure projects. Typically, these potential grant funders consider service to disadvantaged areas based on U.S. Census Tracts. Therefore, Census Tracts are described herein, based on data collected from the 2019 American Community Survey 5-Year Estimates. A census tract is a geographic area defined by the United States Census Bureau. The geographic size of census tracts varies widely depending on the population density; a census tract typically has around 4,000 residents but can range from 1,200 to 8,000. There are twelve (12) census tracts within the SFWPA sphere of influence, as shown in Figure 6-8. Eleven of these Census Tracts have MHIs below the $60,188 threshold, as listed in Table 6-13 below. Census Tract 26.01 has a MHI that exceeds the threshold ($66,750).

Table 6-13: Median Household Income by Census Tract

Census Tract	Population (2019)	Square Miles	Median Household Income
24.02	3,555	n/a	$40,071
25	5,353	54.94	$37,054
26.01	2,508	7.78	$66,750
26.02	3,661	9.93	$48,090
27	5,965	5.14	$49,029
29	3,310	2.42	$48,897
30.01	3,375	0.89	$29,235
30.02	3,587	6.62	$41,377
31	4,671	4.75	$52,258
32	4,261	15.31	$40,318
33	5,246	119.58	$47,411
37	4,884	48.42	$32,401

Source: US Census, 2019 American Community Survey 5-Year Estimates and *https://tigerweb.geo.census.gov/tigerweb/*

The eleven disadvantaged census tracts are provided public services from numerous local and state agencies.



Map Date: 09/29/2021
Data Source: Butte LAFCO; US Census Bureau American Community Survey (ACS)

Figure 6-8
SFWPA Census Tracts

6.5.1 Determinations for Disadvantaged Unincorporated Communities

Based on the information in Section 6.5 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-14 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution the Commission formally adopts during a public meeting.

Table 6-14: MSR DETERMINATION: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

Number	Indicator	Determination
SFWPA-DUC-1	The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described.	There are six census "blocks" with median household income below the state threshold ($60,188.00) for 2019 within the SFWPA boundary and SOI. These areas are classified as DUC's.
SFWPA-DUC-2	Potential DUCs are considered. The provision of adequate water, wastewater, and structural fire protection services to DUCs is considered.	Due to the identified DUCs receiving essential services of water, wastewater, and structural fire protection, there are not any communities within the existing SFWPA boundary or SOI that lack public services (or a private alternative), and no health or safety issues have been identified.

6.6 Public Services

6.6.1 Service Overview

This Section evaluates the efficiencies of services the South Feather Water and Power Agency provides and the associated infrastructure needs, especially as they relate to current and future users. Infrastructure needs and deficiencies are evaluated in terms of supply, capacity, condition of facilities, and service quality with correlations to operational, capital improvement, and finance plans. In addition, this section addresses the provision of the public services provided directly by the SFWPA to residents within its boundaries as follows:

- Water Supply, Conservation, Treatment, and Distribution;
- Hydro-electric Power Generation; and
- Recreation.

Information was derived from the SFWPA's Urban Water Management Plan (UWMP) 2020, which was written to satisfy the requirements of the California Urban Water Management Planning Act and to inform the public, and local and state agencies of the Agency's water supply availability,

exposure to drought, conservation efforts, and plans for future water supply (SFWPA, UWMP, 2021g). Other information sources, such as GIS data, the State Water Board, and Butte County, were also utilized.

South Feather Water and Power Agency provides the communities of Palermo, Bangor, and eastern Oroville with quality treated drinking water for domestic customers, serving a total of 6,900 households. Additionally, SFWPA provides raw (untreated) water to 500 irrigation customers, who likely utilize it for agricultural purposes (SFWPA, UWMP, 2021g). Additionally, SFWPA provides hydroelectric power and recreation services, as summarized in Table 6-15 below.

Table 6-15: Number of Customers for Key Municipal Services

Service	**Number of Customers in 2021**
Domestic Water	Miners Ranch Treatment Plant: 6,909 connections[1] Bangor Water Treatment Plant: 21 customers (average in 2018)[2].
Raw Water	500 connections
Hydroelectric	One (1) wholesale customer
Recreation	Open to the general public

Data Sources:
[1]:*https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8*

[2:] Butte Co. OEM, LHMP, 2019

6.6.2 Water Service

6.6.2.1 Existing Water Supply, Conservation, and Treatment,

The SFWPA provides both treated domestic water and untreated irrigation water. The existing water supply is derived from surface water diverted from the upper watershed of the South Fork of the Feather River and the upper portion of the Slate Creek watershed. These watersheds are described in detail in Appendix I. This water is transported through a series of dams, canals, and tunnels.

Watershed

SFWPA's water supplies depend on precipitation that falls into the forested watershed and flows into creeks and the Feather River. This process is intimately connected to the water cycle described in Chapter 2, Introduction, and Appendix I. The upper watershed is ruggedly mountainous and bisected by deep canyons in the eastern third of the watershed. The watershed from which SFWPA's supply originates is owned or managed by several governmental and private entities. The United States Forest Service (USFS) manages the Plumas National Forest and is the single largest land owner within the watershed. Private land owners of the forested watershed include the Sierra Pacific Industries, Chy Corporation, and Sillar Brothers (SFWPA, UWMP, 2021g). This watershed falls within the jurisdictions of four adjacent counties: Plumas County, Butte County, Sierra County, and Yuba County. Almost half (49,580 acres or 49.2%) of the watershed is located within the unincorporated boundaries of Plumas County. Approximately

28,440 acres of the watershed (28.2%) are located within the unincorporated boundaries of Butte County. 19 percent (19,160 acres) of the watershed is located within Sierra County. A small portion of the watershed (3,560 acres or 3.5 percent) is located within Yuba County (SFWA, UWMP, 2021g). SFWPA's South Fork Feather River/Slate Creek watershed covers 100,814 acres or 158 square miles of the Sierra Nevada Mountain Range. Principal tributaries include:

- Lost Creek (a tributary of the South Fork Feather River) is a sub-watershed approximately 19,200 acres (30.0 square miles) in size, which represents 19.0 percent of the total South Fork Feather River/Slate Creek watershed area (SFWA, UWMP, 2021g).
- Upper portion of Slate Creek (a tributary of the North Fork Yuba River) is a sub-watershed, approximately 31,600 acres (49.4 square miles), or 31.4 percent of the combined South Fork Feather River/Slate Creek watershed area.

Treated Domestic Water Services

SFWPA serves treated domestic water to 6,900 households located in the communities of Palermo, Bangor, and eastern Oroville. Surface water from the South Fork Feather River and Slate Creek is transported to Miner's Ranch Reservoir, the system's terminal reservoir. SFWPA maintains two water treatment plants that use a combination of filtration and chlorination to remove/mitigate contaminants. After the treatment process, water is distributed through pipelines to one of the four water storage facilities and then for consumption by SFWPA's customers. A total of 141 miles of pipelines transport the water, as shown in Figure 6-9, along the process from water collection, treatment to consumption (SFWPA, UWMP, 2021g). Miners Ranch Water Treatment Plant is water system No. CA0410006, located at 234 Kelly Ridge Road, Oroville, CA 95965, and serves 6,909 connections. This treatment plant started activities on 03-22-1979. It serves 6,714 residential accounts and 194 commercial accounts (State Water Board, 2021). The Bangor Water Treatment plant is water system No. CA0410012, located at 7454 Oro-Bangor Highway. Oroville, CA, 95965, and serves one commercial account and 21 rural residential accounts (State Water Board, 2021). The number of customers accessing the Bangor Water Treatment Plant can sometimes vary. For example, it served a high of 26 customers in July 2016 (Data Source: Butte Co. OEM, LHMP, 2019).

Irrigation Customers

SFWPA provides raw (untreated) water to over 500 customers for irrigation purposes. Much of this water is utilized for local farms and ranches. Raw water is transported to customers through 110 miles of primarily open earthen canals/ditches organized into four lines, as listed in Table 6-16 below. Most of the demand for this water occurs during the dry months of summer and fall.

Table 6-16: Irrigation Water Customers		
Name of SFWPA Water Line	**Peak Number of Customers**	**Average Number of Customers in 2018**
Community Line	78 Customers in September 2015	70
Forbestown Ditch	68 Customers in August 2016	36
Bangor Canal	279 Customers in July 2018	252
Palermo Canal	235 Customers in August 2017	157
Source: Butte Co. OEM, LHMP, 2019		

6.6.2.2 Water Supply Planning

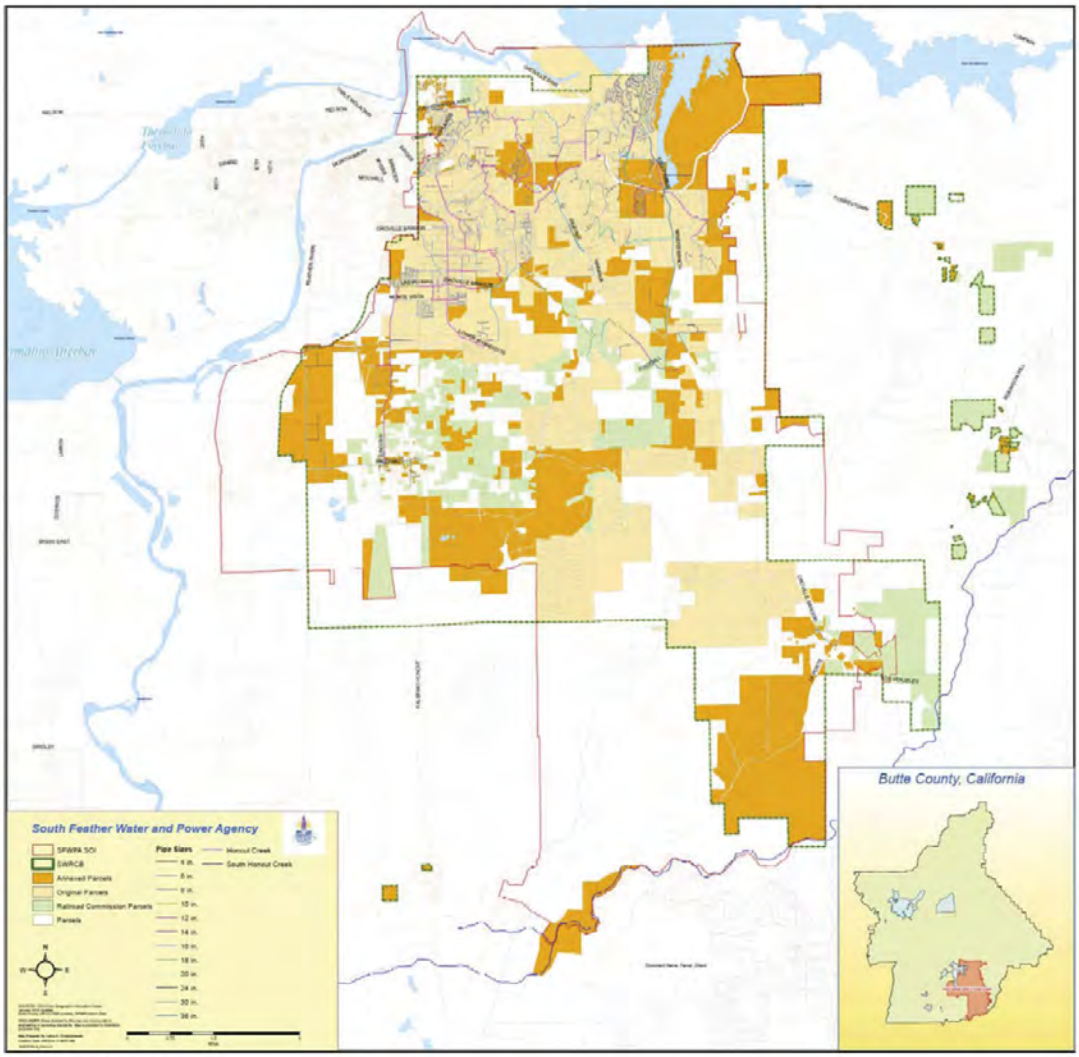
Protecting water quality and maintaining an adequate water supply are critical for the future customers of the SFWPA. Given this importance, the SFWPA and other regional and statewide agencies prepare a range of water resource management plans as described in the following paragraphs.

Urban Water Management Plan. Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. The Urban Water Management Planning Act (CWC §10610 – 10656 supplemented by CWC §10608 et seq) specifies the requirements for UWMPs. The SFWPA submitted its 2020 UWMP to the California Department of Water Resources (CA DWR) on July 21, 2021. This UWMP describes SFWPA's existing water facilities, system water use, baselines, water system supplies, contingency plan, and water demand management measures. (SFWPA, UWMP, 2021g).

Northern Sacramento Valley Integrated Regional Water Management Plan. The SFWPA has participated in developing the Northern Sacramento Valley Integrated Regional Water Management Plan (NSV-IRWMP) (SFWPA, 2021a). Six counties (Butte, Colusa, Glenn, Shasta, Sutter, and Tehama) along with associated water districts worked together for many years to lay the foundation for an integrated regional water management plan to address water-related issues such as economic health and vitality; water supply reliability; flood, stormwater, and flood management; water quality improvements; and ecosystem protection and enhancement. The NSV-IRWMP aims to address water-related issues and offer solutions that can provide multiple benefits to the region. The Northern Sacramento Valley IRMWP was originally approved by the California Department of Water Resources on July 24, 2014. The Plan was subsequently updated on March 2, 2020, to comply with new DWR requirements as detailed on their website at: *https://nsvwaterplan.org/.* It is recommended that SFWPA continue to monitor and participate in future efforts to update the Integrated Regional Water Management Plan and, when appropriate, seek funding opportunities for conjunctive use and water management improvements. The intent of this recommendation is to improve regional water management through enhanced coordination and cooperation among agencies, local entities, and other stakeholders. This coordination and communication will foster the development of consistent local policies and objectives while protecting local uses and the regional environment.

Figure 6-9: SFWPA Distribution of Water Pipes
From Local Hazard Mitigation Plan, Annex N

Figure N-1 South Feather Water and Power Agency



Source: SFWPA

Source (Butte OEM, 2019).

2020 Water Shortage Contingency Plan. SFWPA adopted its 2020 Water Shortage Contingency Plan (WSCP) on June 22, 2021, through Resolution No. 21-06-02 to comply with California Water Code Section 10632, which requires that every urban water supplier prepare and adopt a WSCP as part of its UWMP (SFWPA, WSCP, 2021d). The section below on Water Supply Storage & Treatment describes the WSCP in more detail.

Sustainable Groundwater Management Act. The Sustainable Groundwater Management Act (SGMA) is a state law that authorizes local Groundwater Sustainability Agencies to manage groundwater at the local level through the development and implementation of Groundwater Sustainability Plans. Decisions about groundwater sustainability are made locally through public involvement. The Wyandotte Creek Subbasin is a portion of the larger Sacramento Valley Groundwater Basin covering approximately 59,382 acres. An SFWPA staff member was appointed to the Wyandotte Creek Advisory Committee in October 2020 and is actively participating in the groundwater sustainability plan development. Additional information is available at: wyandottecreekgsa.com. Please note that SFWPA does not utilize groundwater. However, within the SFWPA SOI, some residents may utilize private wells to access groundwater. Therefore, the SFWPA supports collaborative decision-making efforts for local groundwater resources.

Regulatory Compliance

The State Water Resources Control Board – Division of Drinking (SWRCB-DODW) has several regulations (detailed in Appendix H) which the SFWPA routinely complies with as follows:

- SFWPA has an Environmental Laboratory Accreditation Program Certificate No. 1545, which was updated on 7-1-2019 (SFWPA, 2021a). SFWPA's Environmental Laboratory Accreditation inspection was last conducted in 2015.
- SFWPA submits annual reports to the SWRCB-DODW.
- The SWRCB-DODW conducts inspections every 1-3 years, depending on their availability. (SFWPA, 2021a).

Permits: Adopted Decisions and Orders from the State Water Board

The State Water Resources Board has issued several orders related to the South Feather Water and Power Agency, Miners Ranch Water Treatment Plant, as listed below:

- Order No. R5-2018-0055, Rescission of Waste Discharge Requirements R5-2010-0059 and Time Schedule Order R5-2010-0060-01, Adopted on 31 May 2018
- Order No. R5-2010-0060-01, Time Schedule Order as amended by Order R5-2015-0099, Amended on 31 July 2015 - Rescinded by R5-2018-0055
- Order No. R5-2015-0099, Amending Time Schedule Order/NPDES Permit No. CA0083143, Adopted on 31 July 2015
- Order No. R5-2010-0060, Time Schedule Order/NPDES Permit No. CA0083143, Adopted on 27 May 2010 - Amended by R5-2010-0060-01
- Order No. R5-2010-0059, Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0083143, Adopted on 27 May 2010 - Rescinded by R5-2018-0055

Table 6-17: SFWPA Water Rights

Permit #	Application #	Uses (only fill in data for ea use permitted)	Place of Use	Source Water	Storage Facility	Storage Amount	Storage Period	Diversion Point	Diversion Amount	Time of Use	Priority Date	Gage ID No.* (Hydrographer)	Reservoir Spill Info (Hydrographer)
1267	A001651	Domestic	MRTP	SFFR	LGV	**109,012 af**	Oct 1 to Jul 1				2/2/1920	M020257 Little Grass, SF 2 Flow meter model FST020	LGV, SC, Lost
		Irrigation	Bangor Canal	SFFR				SFDD, Fbs Dch, Wdlf Pen	200 cfs **36,036 af** total	Apr 1 to Jul 1			
		Recreation	LGV, Sly, Lost, Pond	SFFR				LCD, Fbs Dch, Wdlf Pen					
1268	A002142	Domestic	MRTP	Lost Creek	Lost Creek	**5,000 af**	Oct 1 to Jul 1				12/17/1920	M020258, Lost Creek Res, SF 12	Lost
		Irrigation	Bangor Canal										
		Recreation	Lost, Pond										
2492	A002778	Domestic	MRTP	Lost Creek	Sly	**25,000 af**	Oct 1 to Jun 1				3/6/1922	M02056, SF11	Sly, Lost
		Irrigation	Palermo Canal	Sucker Run				Sly	50 cfs **6,039 af** total	Apr 1 to Jun 1			
		Recreation	Sly, Lost, Pond	Lost Creek									
1271	A002979	Domestic	MRTP	Lost Creek				LCD	185 cfs	Jan 1 to Dec 31	8/12/1922	M024371, MRTP, SF25	N/A
		Irrigation	Bangor Canal	Lost Creek				Fbs Ditch	excess of allowed under Permit 1268	Apr 1 to Oct 15			

License #	Application #	Uses	Place of Use	Source Water	Storage Facility	Storage Amount	Time of Use	Diversion Point	Diversion Amount	Time of Use	Priority Date	Gage ID No.	Reservoir Spill Info for Storage
10939	A013676 - 11514	Power		SFFR	LGV	77,300	Nov 1 to Jul 1		200 cfs	Jan 1 to Dec 31	4/7/1950	M020257 Little Grass, SF 2 Flow meter model FST020	LGV, SC, Lost
10939	A013676 - 11514	Power		Lost Creek	LGV, Sly, Lost	40,000	Nov 1 to Jul 1		100 cfs		4/7/1950		
10940	A013956 - 11515	Power		Slate Creek	Sly, Slate	35,000	Jan 1 to Jul 1		300 cfs	Jan 1 to Dec 31	9/20/1950	M020260, SC Res, SF11	Sly
10941	A014112 - 11517	Power		SFFR					100 cfs	Jan 1 to Dec 31	12/28/1950	M020258, Lost Creek Res, SF 12	N/A
10941	A014112 - 11517	Power		Lost Creek					200 cfs	Jan 1 to Dec 31	12/28/1950		
S022067	Pre-1914	Irrigation/Stock	Lower Fbs Ditch	Lost Creek					75 cfs	Jan 1 to Dec 31	Pre-1914	M020258, Lost Cr	N/A
S022068	Pre-1914	Irrigation/Stock	Lower Fbs Ditch	Pinkard Creek					275 cfs	Jan 1 to Dec 31	Pre-1914	M024368, SF15,	N/A

Water Supply, Storage & Treatment

The water source for the SFWPA is surface water[5], specifically, the South Feather River and the North Fork Yuba River and several associated tributaries, as listed in Table 6-17 above. In the upper part of the watershed, runoff from rain and snow fills the SFWPA's reservoirs. Water supply data is gathered from the gaging stations throughout the watershed, which is audited by the United States Geological Survey (USGS) annually. The data is published in real-time for regulatory agencies and public review. The Agency retains a hydrographer trained and experienced in water measurement (SFWPA, UWMP, 2021g).

Water supply reliability calculations for the Agency's surface water sources are shown in Table 6-18 below. These are the raw water supplies currently available to SFWPA for the given water year scenario types. Based on the Agency's average annual watershed production of 254,015 acre-feet (81,968 to 82,783 Million Gallons (MG)) and its ability to store 165,016 acre-feet (53,779 MG), SFWPA believes that its sources of developed water supply will continue to more than adequately meet the current and the foreseeable demand through 2045 (SFWPA, UWMP, 2021g).

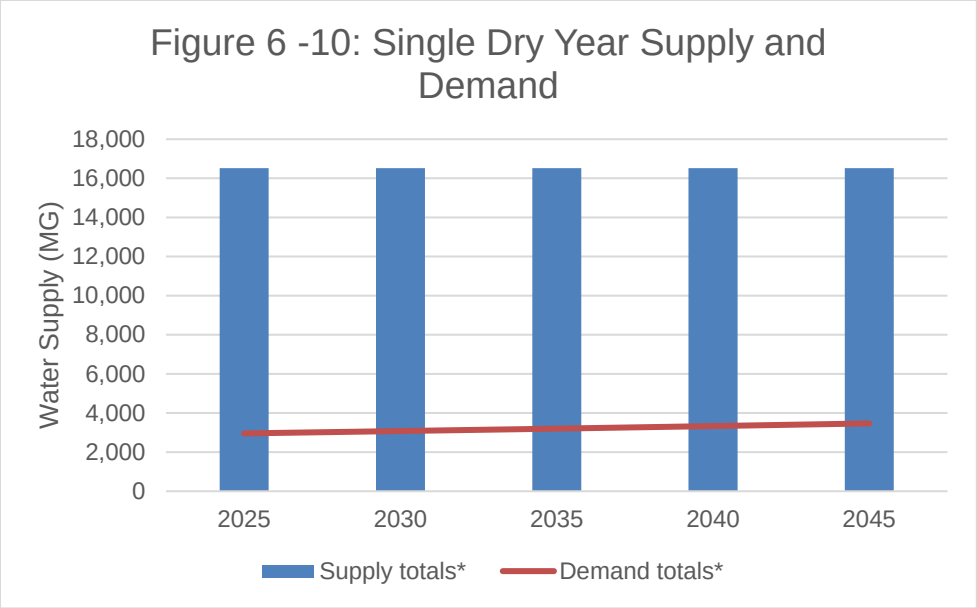
Table 6-18: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year	Volume Available (MG)	Percent of Average Supply
Average Year	1966	81,968	100%
Single Dry Year	1977	16,516	20%
Consecutive Dry Years 1st Year	1931	19,896	24%
Consecutive Dry Years 2nd Year	1932	66,375	81%
Consecutive Dry Years 3rd Year	1933	32,239	39%
Consecutive Dry Years 4th Year	1934	36,402	44%
Consecutive Dry Years 5th Year	1935	77,069	94%

Data Source: SFWPA, UWMP, 2021g

During a Single Dry Year type of water year, SFWPA estimates that it will have 16,516 MG of water supply available that year. However, total water demand is projected to be much less, at 3,208 MG for a Single Dry Year (SFWPA UWMP, 2021g). This indicates that SFWPA will have sufficient water supplies during a Single Dry Year, as shown in Figure 6-10 below.

[5] SFWPA does not utilize groundwater. The Butte County Water & Resource Conservation Department issues groundwater related reports.



Source: SFWPA UWMP, 2021g

If the SFWPA has an under-utilized water supply, it has the option to sell water. Historical water transfers originating from SFWPA have been single-year transfers to users south of the Sacramento-San Joaquin Delta; not multi-year transfers that would unduly impact the Delta long-term or create an out-of-the-region dependency on the SFWPA watershed (SFWPA, UWMP, 2021g).

Raw irrigation water and treated water are supplied to South Feather Water and Power Agency customers in Butte County and North Yuba Water District in Yuba County (SFWPA, UWMP, 2021g). The Agency does not purchase water from other agencies (SFWPA, 2021a). Factors that influence the Agency's ability to supply and deliver water to its customers include the functionality of surface water storage, canal conveyance status, and the status of the water treatment plant (SFWPA, 2021a).

Water Demand Details

In Butte County, the average per capita water demand is 252 gallons per capita per day (NSV-IRWMP, 2020). However, in SFWPA, per capita daily demand is estimated to be larger, at 323 gallons (SFWPA, UWMP, 2021g). There are several potential explanations about why daily water demand is higher in SFWPA's area:

- SFWPA provides raw water to agricultural areas, and this is included in its gross water demand;
- SFWPA's UWMP estimated its population at 16,770 persons, which may be a low estimate. However, suppose the larger population estimate listed in Table 6-18 of 24,300 persons is utilized. In that case, average per capita water demand drops to 222 gallons per capita per day, which is lower than that of Butte County as a whole.

The existing water demand to serve all SFWPA customers in the year 2020 is measured as 2,944 million gallons, as shown in Table 6-19 below.

Table 6-19: Retail Demands for Potable and Non-Potable Water		
Use Type	2020 Actual	
Drop Down List	**Level of Treatment When Delivered**	**Volume[2]**
Single-Family	Drinking Water	1,427
Multi-Family	Drinking Water	110
Commercial	Drinking Water	148
Industrial	Drinking Water	0
Institutional/Governmental	Drinking Water	51
Landscape	Drinking Water	1
Agricultural irrigation	Drinking Water	24
Agricultural irrigation	Raw Water	958
Losses	Drinking Water	225
	TOTAL	**2,944**
Recycled water demands are NOT reported in this table. *Data Source: SFWPA, UWMPA, 2021g. All numbers shown are Million Gallons*		

Table 6-19 above lists water loss at 225 million gallons per year. Water loss occurs due to natural processes in the watershed, such as evapotranspiration from the reservoirs and pipe leakage. The loss volume of 225 million gallons represents a very small percentage of the actual demand, and it is typical for a water system and hydro-electric system in the Sierra Foothill area.

To provide a slightly different perspective on existing water demand, SFWPA's Treatment Plant Superintendent indicates that annual demands throughout the year range between 1.97 million gallons per day (mgd) to 11.52 mgd. The recent maximum daily demand for total production on August 18, 2020, was 11.52 mgd. The peak hour demand occurred on September 9, 2020, at 16.56 mg. The highest production month was in August 2020 at 287.12 mg (SFWPA, 2021a).

Existing water demand calculations also include exit flows for the Agency's drinking/agricultural system, calculated monthly using flows above Kelly Ridge Power House, and power run times (SFWPA, 2021a). Regarding domestic and irrigation water service, the Agency does not anticipate any major operational changes in the near-term future (Butte Co OEM and SFWPA LHMP, 2019).

Surplus Water

If SFWPA has surplus water stored in its reservoirs, it may sometimes choose to sell that water. For example, in the past, SFWPA entered into a Purchase Agreement for Water Transfer with the State Water Project Contractors Authority buyers group to transfer 10,000 acre-feet of water from the Agency's Ponderosa Reservoir to Lake Oroville. From Lake Oroville, the water was distributed to various state water contractors in the Bay Area and/or south of the Delta. Please

note that the SFWPA does have specific policies and guidelines to discern when the transfer of any water would be appropriate.

Future Water Demand

LAFCO is interested in studying projected future water demand to understand whether there is sufficient supply to serve future needs. Several factors contribute to future water demand, including population growth, types of agricultural crops grown and associated demand, evapotranspiration rates, and several other factors. Growth of housing and other types of development will influence future water demand, and therefore the Agency keeps track of "Will Serve Letters" or promises made to supply water. SFWPA has issued will-serve letters to the following residential developments:

- Heritage Estates – Senior Apartment Complex located within the City of Oroville;
- River Ranch Estates – General Housing (130 units), located in the unincorporated area of Butte County; and
- The Ridge Phase 2 (81 units) – located in the unincorporated area of Butte County.
- One-year expiration provisions for fees [?] (SFWPA, 2021a).

After considering all these factors, the SFWPA's UWMP developed a model and predicts that in the year 2045, water demand will reach 3,664 million gallons per year. Table 6-20 below shows demand for potable and raw water in five-year increments out to 2045 by customer type.

Table 6-20: Demands for Potable and Raw Water

Use Type	Projected Water use *Report To the Extent that Records are Available*				
Drop Down List	**2025**	**2030**	**2035**	**2040**	**2045**
Single-Family	1,491	1,558	1,627	1,700	1,776
Multi-Family	115	120	125	131	137
Commercial	155	162	169	176	184
Industrial	0	0	0	0	0
Institutional/Governmental	53	56	58	61	63
Landscape	1	1	1	1	1
Agricultural irrigation	25	26	27	29	30
Agricultural irrigation	1,001	1,046	1,093	1,141	1,193
Losses	235	246	257	268	280
Total	**3,076**	**3,215**	**3,357**	**3,507**	**3,664**

Note: Recycled water demands are NOT reported in this table. Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP.

Data Source: SFWPA UWMP, 2021g. Units for all numbers shown are million gallons

The SFWPA's most recent Urban Water Management Plan, 2020, analyzed the reliability of water sources during "average year," "single year," and "multiple-dry years" to plan for "worst-case" water supply situations. Multiple Dry Years are occurring on a more frequent basis. Table 6-21 below calculates projected future demand in the event a drought covering multiple years were to occur.

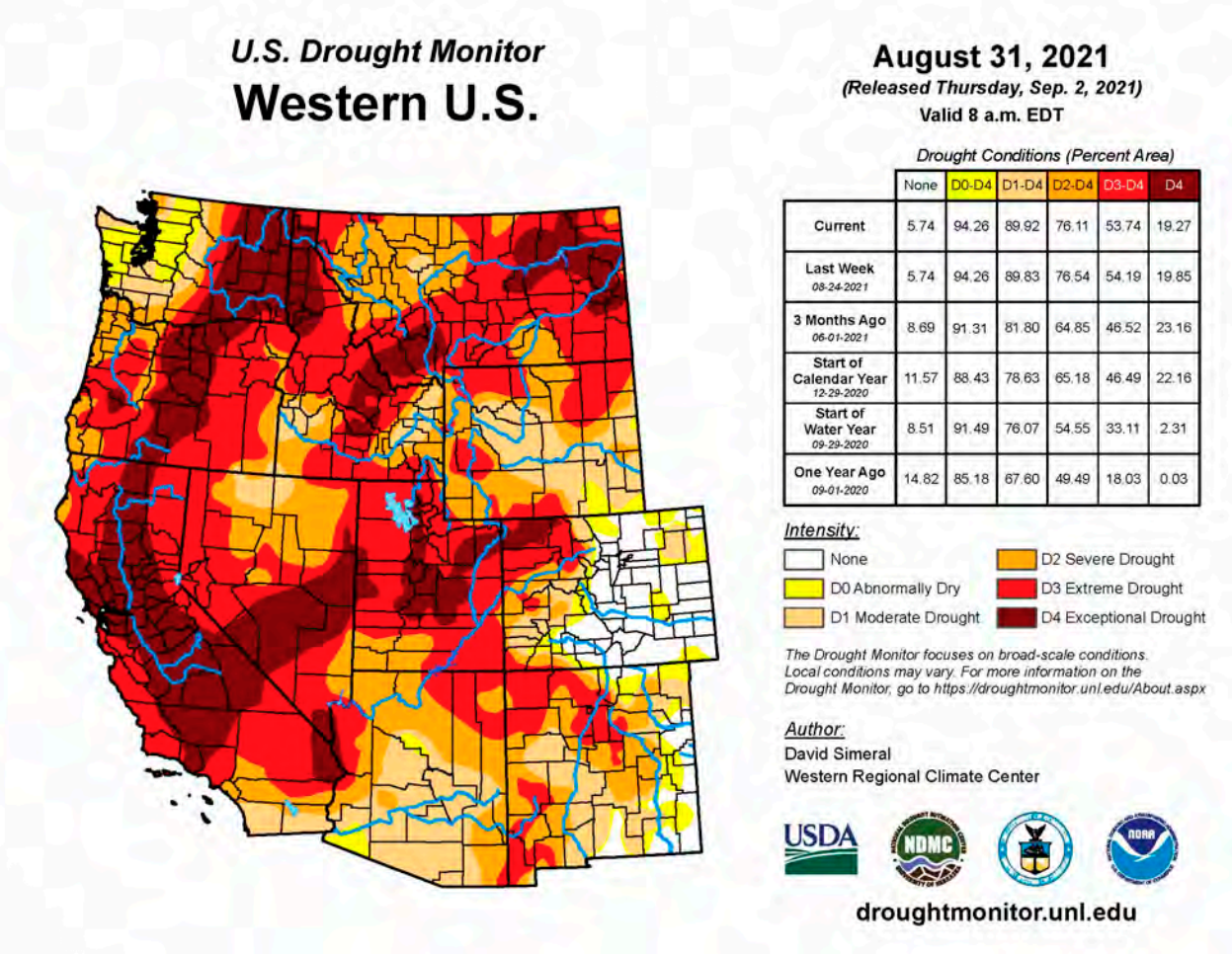
Table 6-21: - Multiple Dry Year – Supply and Demand

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2025*	2030*	2035*	2040*	2045* (Opt)
First year	Supply totals	19,896	19,896	19,896	19,896	19,896
	Demand totals	2,957	3,077	3,203	3,334	3,468
	Difference	16,939	16,819	16,693	16,562	16,428
Second year	Supply totals	66,375	66,375	66,375	66,375	66,375
	Demand totals	2,957	3,077	3,203	3,334	3,468
	Difference	63,418	63,298	63,172	63,041	62,907
Third year	Supply totals	32,239	32,239	32,239	32,239	32,239
	Demand totals	2,957	3,077	3,203	3,334	3,468
	Difference	29,282	29,162	29,036	28,905	28,771
Fourth year	Supply totals	36,402	36,402	36,402	36,402	36,402
	Demand totals	2,957	3,077	3,203	3,334	3,468
	Difference	33,445	33,325	33,199	33,068	32,934
Fifth year	Supply totals	77,069	77,069	77,069	77,069	77,069
	Demand totals	2,957	3,077	3,203	3,334	3,468
	Difference	74,112	73,992	73,866	73,735	73,601
Sixth year *(optional)*	Supply totals					
	Demand totals					
	Difference	0	0	0	0	0
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*						
NOTES: Based on five driest years from historical period of record 1912-2020.						

Data Source: SFWPA UWMP, 2021g. Units for all numbers shown are million gallons

Drought Management and Water Conservation

Water is generally considered a renewable resource, replenished by annual winter precipitation. However, during times of drought and extreme drought, water can also be an exhaustible resource. Those times of water scarcity compel us to value water as a precious commodity to be conserved and carefully managed. According to the U.S. Drought Monitor, during the week of August 16, 2021, Butte County (along with roughly 47% of California) fell into the Exceptional Drought category, which is the worst in that ranking system. In addition, the Butte County Drought Task Force reported that July 2021 was the driest month, and the year 2021 is the 8th driest year over the past 127 years of record-keeping for Butte County.



The Agency has made significant reductions in its water use during the past few years through pipeline replacements, leak detection and repair, efficiency improvements in treated water production, customer leak notification, and public response to the statewide drought (SFWPA UWMP, 2021g). To continue its resource management during drought, the Agency submitted its Water Shortage Contingency Plan (WSCP) to CA DWR on July 21, 2021, as required by state law. SFWPA's WSCP describes six stages of water shortage ranging from Level 1, where water supplies are reduced up to ten percent, to Level 6, where water supplies are reduced by 50

percent or more. At each level of water shortage, the WSCP outlines strategies and actions the SFWPA will take to reduce water demand. For example, a Level 1 action is: Expand Public Information Campaign. A Level 6 action is: Prohibit vehicle washing except at facilities using recycled or recirculating water (SFWPA, WSCP, 2021d). Regardless of the severity of the water shortage, communication is a key aspect to encouraging water conservation, and SFWPA utilizes a number of strategies to communicate with customers and land use planning entities for the City of Oroville and County of Butte, as well as community partners, including:

- Supply clear, consistent, and understandable messaging to encourage increased voluntary conservation via billing inserts and on the Agency website.
- Collaborate with City and County partners to develop effective communications regarding current conditions, specifically the Agency's WSCP.
- Regularly communicate with local, state, and other elected officials in the region about the importance of achieving voluntary water conservation and encourage them to publicly promote such efforts (SFWPA, WSCP, 2021d).

A drought does have financial implications for SFWPA. Therefore, SFWPA staff is working to establish a rate structure that would be implemented by the Board of Directors during a declared water shortage emergency. Further analysis is needed to determine the financial impacts on hydropower operations and water distributions during times of emergency (SFWPA, WSCP, 2021d). Compliance and enforcement with water conservation measures are mandated by the California Water Code Sections 376 and 10632, such that a water supplier is required to penalize or charge end users for excessive water use. SFWPA plans to implement this in the future in accordance with a forthcoming Water Shortage Contingency Plan Resolution (SFWPA, WSCP, 2021d).

On average, during the past ten years, SFWPA customers have utilized 308 gallons per customer per day. In the year 2020, SFWPA customers utilized 301 gallons per customer per day. The Agency set a goal to encourage water conservation and invited customers to reduce water use to 240 gallons per customer per day; however, customers did not quite achieve this reduction goal. (SFWPA UWMP, 2021g). However, implementing the Agency's new Water Contingency Plan and other conservation measures will hopefully improve water conservation on a district-wide level.

In summary, "based on the supply and demand assessments conducted by the Agency (See UWMP Chapter 7), SFWPA believes that its sources of developed water supply will continue to more than adequately meet the current and the foreseeable demand through 2045" (SFWPA, Water contingency Plan, 2021c). Additionally, SFWPA's UWMP 2020 states that the surface water supply available to SFWPA is projected to be capable of serving all demands under all hydrologic conditions.

Water Recycling

Under ideal circumstances, using recycled water could potentially reduce future demand for drinking and irrigation water that would otherwise be used for water landscaping. However, the sewage collection systems of the City of Oroville and LOAPUD each terminate at Sewage

Commission – Oroville Region's (SCOR) treatment facility that is west of and not within the SFWPA boundary area. SCOR's treated effluent is discharged to the Feather River below Lake Oroville. Although the SC-OR wastewater treatment plant recycles a small amount of wastewater for utilization on SC-OR's landscaped grounds, it does not currently have an off-site recycled water program, as described in Chapter 5. Therefore, SFWPA does not currently make use of recycled water, nor is there any wastewater recycled for direct reuse within the Agency's boundary area (SFWPA UWMP, 2021g). Implementing a recycled water program within the SFWPA boundary area would need to involve longer-term measures and require regional participation by other agencies (SFWPA UWMP, 2021g).

6.6.2.3 Water Supply Conservation and Treatment Service to the SOI

SFWPA's existing SOI is quite large and comprises 64,125 acres. There are several possible scenarios under which a parcel within the SFWPA might request annexation into the SFWPA boundary to receive water service. Two hypothetical examples are listed below:

- Many parcels with the SFWPA rely on privately owned wells to provide groundwater. It is possible that during a prolonged drought that, a privately owned well could run dry. In this hypothetical situation, the property owner might consider asking for annexation into the SFWPA boundary to receive water service.
- New development could also spark requests for annexation into the SFWPA boundary to receive water service. For example, as parcels within the SOI are developed and potentially annexed into the City of Oroville in the future, SFWPA may have the capacity to provide water service to these areas.

Although additional annexations of land to the SFWPA have the potential to increase water demand, the SFWPA does not anticipate any additional annexations of parcels that are not included within the City of Oroville's General Plan over the next several years. Any new annexations would be determined on a case-by-case basis with a full review of anticipated water demand, conservation measures, and updated inventories of supplies. All new development in the SFWPA must provide for its fair shares of pipes, pipelines, and reservoirs. Additionally, before considering any other future annexation proposals, environmental review, approval from LAFCO, and other planning permits may be needed.

6.6.3 Water Quality

This section focuses on one aspect of water quality, namely the quality of drinking water. The quality of water discharged into natural streams, rivers, and lakes is described in relation to the SC-OR wastewater treatment plant in Chapter x.

When drinking a glass of water, it is important for customers to understand whether this water is safe for consumption and free from pollution to protect their health and safety and promote overall wellness. SFWPA's water quality monitoring program includes taking samples of raw and treated water throughout the year from many locations in the Agency's service area. SFWPA's annual Consumer Confidence Report (CCR) demonstrates a consistent delivery of high-quality drinking

water. To further consider SFWPA water quality in additional detail, four online databases were queried, including the California Drinking Water Watch; the California Integrated Water Quality System Project; and the Human Right to Water Tool.

California Drinking Water Watch

- SFWP – Strawberry Campground (Water System No. CA0400138)
  - No violations
- SFWP – Miners Ranch (Water System No. CA00410006)
  - No violations
- SFWP – Bangor (Water System No. CA0410012)
  - No violations
- SFWP – Sly Creek Campground (Water System No. CA0400137)
  - No violations

No violations were found in the SFWPA's water systems listed on the Safe Drinking Water Information website (California Drinking Water Watch, 2021).

California Integrated Water Quality System (CIWQS): South Feather Water and Power Agency – Miners Ranch

The CIWQS database is available online at: *http://www.waterboards.ca.gov/ciwqs/*. This database query showed no current active violations at the SFWPA Miners Ranch Water Treatment Plant. But the Agency does have an enforcement action as recent as March 2016. The enforcement type was Oral Communication, and its enforcement ID is 405322. (CIWQS, 2021)

Human Right to Water Data Tool

The State of California Office of Environmental Health Hazard Assessment has assessed various water quality parameters for community water systems throughout the state and posted the information to the online database called the "Human Right to Water Data Tool." The database analysis utilizes a scoring system to assess and rate various water quality parameters. The scores have a possible range: 0 – 4, with zero being the best and four (4) being the worst. This database was queried, and the results for the SFWP-Miners Ranch (PWSID: CA0410006) are described below.

The SFWP-MINERS RANCH system serves 24,846 people. Miner's Ranch received a Water Accessibility Composite Score of two-and-one-half (2.50) and a Physical Vulnerability to Water Outages Score of two-and-one-half (2.50), which is "moderate" for both variables. This indicator assesses how vulnerable a water system is to a supply outage (or shortage). The physical vulnerability score considers that this water system does not purchase water and has only one source (OEHHA, 2021). The Water Quality Composite Score: 0.12, which is a very low score indicating very good water quality. The database indicates this system had no contaminants at possible high potential exposure. The Compliance with Primary Drinking Water Standards Score was zero (0), and this low (i.e., very good) score was given because this system had no contaminants. The Data Availability Score was three (3), which is medium-high, indicating that some improvement in data sharing or communication may be needed (OEHHA, 2021).

In summary, SFWPA sources its surface water from a watershed that historically provided a high-quality raw water supply (SFWPA, Water Contingency Plan, 2021c). These watersheds include South Fork Feather River, Lost Creek (a tributary of the South Fork Feather River), and Slate Creek (a tributary of the Nork Fork Yuba River). SFWPA easily meets all the current legal requirements for water quality. Additionally, local hazards, such as wildfires, pose a potential future threat to the watershed and the associated water quality derived therefrom. This indicates that continued water quality monitoring will be an ongoing effort by the SFWPA.

Lead Service Pipe Study

Section 116885 of the California Health and Safety Code (H&S Code, Lead Service Lines in Public Water Systems – Senate Bill 1398) requires all public water systems to compile an inventory of known partial or total lead user service lines in use in its distribution system. The deadline to compile the inventory was July 1, 2018. SFWPA completed the required inventory each year for the years 2017, 2018, and 2019. Each year it was found that "No lead/no unknown materials user service lines" (SWRCB, DDW, 2021).

6.6.4 Storm Water Drainage

In unincorporated Butte County, stormwater generally flows overland into storm drains along roadway corridors and moves downhill (via gravity) to local creeks and streams. As new residential developments are built, they typically construct a stormwater detention basin designed to avoid increases in off-site peak flow and ensure that stormwater complies with State Water Resources Control Board standards before metered discharge into the Feather River or its tributaries. The Central Valley Regional Water Quality Control Board (CVRWQCB) requires a National Pollutant Discharge Elimination System (NPDES) Permit for storm water discharges and other substances to surface waters. The SFWPA does not have responsibility for storm water. However, new technologies are being developed that could allow storm water harvesting such that water can be stored in lagoons and put through biofiltration systems to create a means of augmenting water supply for irrigation, etc., or to replenish a groundwater basin. The SFWPA may wish to informally monitor the storm water situation to ensure clean water is discharged and to keep apprised of new technological developments.

6.6.5 Electric Power Services

6.6.5.1 Existing Hydro-electric Services

SFWPA generates both hydroelectric power and solar-powered electricity through a photovoltaic array. Hydroelectric power is generated from the South Feather Power Project (SFPP, FERC No. 2088), a water supply/hydropower project located within Plumas, Yuba, and Butte counties in the Sierra Nevada Mountain Range in Northern California, which is owned and operated by SFWPA. SFPP is located within the Middle Fork Feather River watershed; the South Fork Feather River watershed, including Lost Creek, a tributary to the South Fork; and Slate Creek, a tributary to the North Yuba River watershed. The SFPP facilities occupy approximately 1,977 acres of federal lands administered by the Plumas National Forest and 10.57 acres of federal lands administered by the United States Bureau of Land Management. The Project can store approximately 172,000

acre-feet (AF) of water (gross storage) and annually generates an average of about 514.1 gigawatt-hours of power (SWRCB, 2017).

The South Feather Power Project was completed in 1963 at the cost of $62 million and was financed through the sale of revenue bonds secured by the projected revenues from power generation. Those bonds were defeased (a bond that has its outstanding debt collateralized by cash equivalents or risk-free securities) in 2009. The Project reservoirs include Little Grass Valley Reservoir, Sly Creek Reservoir, Lost Creek Reservoir, Ponderosa Reservoir, and Miners Ranch Reservoir, with a total storage of 164,577 acre-feet (AF) (SFWPA, UWMP, 2021g). Traditionally, the electricity generated by the hydroelectric facilities was sold wholesale to Pacific Gas & Electric (SFWPA, 2021a). However, the Agency's contract to sell wholesale power to PG&E expired on December 18, 2021 (SFWPA, 2021a). Today, the Agency sells power to the Northern California Power Agency (personal communication, R. Mosley, 7/11/22).

Operation of the reservoirs to meet competing demands is a key skill of SFWPA staff. Typically, the Little Grass Valley and Sly Creek Reservoirs get filled with runoff from snow melt and rainfall by the end of spring. The Reservoirs are gradually drawn down during the summer to provide consumptive water supply, power generation, and instream aquatic habitat. Additionally, a water supply is retained in the Reservoirs for recreational purposes. The end-of-the-year storage (December 31) in Little Grass Valley is typically 45,000 – 50,000 AF, and the storage in Sly Creek Reservoir is 10,000 – 15,000 AF, for a combined end-of-year storage total of about 60,000 AF. (Minasian et al., 2015).

FERC Relicensing Status

The hydropower project operates under a license from the Federal Energy Regulatory Commission (FERC License No. 2088). FERC issued the original Project license on July 21, 1952, to the Oroville-Wyandotte Irrigation District. This license expired on March 31, 2009. SFWPA has utilized FERC's Traditional Licensing Process since 2003. SFWPA filed an application for a new license on March 7, 2007 (SFWPA, 2021a). FERC issued its Final Environmental Impact Statement in June 2009 and subsequently requested Endangered Species Act (ESA) consultation with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) regarding salmon living in the River. NOAA Fisheries issued an ESA Letter of Concurrence in 2016. The State Water Resources Control Board[6] issued its Section 401 Water Quality Certification for the Project in 2018. As of July 2022, the new FERC license is under review by the official entity and is awaiting approval (personal communication, R. Moseley, 7/11/22).

[6] Additional information regarding hydro relicensing status is available at this website: *https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/southfeather_ferc2088.html*

Kelly Ridge Powerhouse Settlement Agreement

Since the construction of the Oroville Dam by DWR, the point of discharge for the Kelly Ridge Powerhouse has become the Thermalito Diversion Pool, a feature of the State Water Project, located downstream of Oroville Dam and upstream of the Feather River Fish Hatchery. SFWPA's water discharges into the Thermalito Diversion Pool have the potential to increase the water temperature in the Feather River and affect the ability of DWR to meet specific Feather River water temperature objectives stipulated in the March 2006 Settlement Agreement for the Licensing of the Oroville Facilities Project. To address this issue, SFWPA, DWR, and State Water Contractors, Inc. executed the Kelly Ridge Powerhouse Settlement Agreement on October 23, 2012. The Settlement Agreement includes several stipulations related to the communications and operation of SFWPA facilities (SWRCB, 2017).

Future Challenges

The hydroelectric power facilities could potentially face future operational and regulatory[7] challenges. For example, communities in California are occasionally opting for a Community Choice Aggregation program. SFWPA staff believe that a Community Choice Aggregation program could potentially have a negative economic impact due to the value of hydro energy on the open market, depending on future conditions (SFWPA, 2021a). Wildfires also pose a unique risk to hydroelectric facilities. For example, PG&E plans to shut energy provision down during times of high wildfire risk. This could potentially affect the SFWPA's hydro power program through financial impact due to lost hydro production. However, PG&E shutdowns are not expected to impact public water service because generator backups are in place to deliver water (SFWPA, 2021a). Long-term or extreme drought conditions also create challenging conditions for hydropower production across the Western United States. To cope with the most recent drought, the SFWPA re-balanced pre-curtailment diversions to storage in a manner that allows for the continued operation of all of its powerhouses. Another regulatory issue is dam safety. The California Water Code entrusts dam safety regulatory power to DWR, Division of Safety of Dams (DSOD). DSOD inspections of all nine Agency dams occurred on October 2019-2021. The Agency does not have plans to expand the power plant within the near-term future (Butte Co OEM and SFWPA LHMP, 2019).

6.6.5.2 Solar Power

The Miners Ranch Treatment Plant 566-kW Solar Energy System was installed in 2005 to defray utility costs to operate the treatment facility. The system produces solar-powered electricity through a photovoltaic array. Power performance capabilities are monitored in real-time, and monthly analysis is conducted. For the Calendar Year 2020, approximately 86 percent of power demand for the treatment plant operation was provided by on-site solar (SFWPA, UWMP, 2021g).

[7] Please note that the hydro-electric facilities are regulated by FERC. SFWPA does not interact with the California Public Utilities Commission.

6.6.6 Recreation Service

As part of the FERC license on the hydroelectric facilities, the South Feather Water and Power Agency has some responsibilities for recreation in the upper watershed landscape. Specifically, SFWPA operates the following:

- Little Grass Valley Reservoir;
- Sly Creek Boat Launch;
- Sly Creek Campground;
- Sly Creek Road; and
- Strawberry Campground.

Little Grass Valley Reservoir

The Little Grass Valley Reservoir is a lake that is operated for the SFWPA hydroelectric power generation. Little Grass Valley Reservoir is a 1,616 surface-acre lake, sitting at a 5,040-foot elevation. The USFS manages the recreational facilities around the lake. The facilities include a public hiking trail around the lake, three boat ramps, swimming at two day-use beaches, and camping at five developed campgrounds. The U.S. Forest Service currently manages the Little Grass Valley campgrounds. The five campgrounds are handled on a first come first serve basis, including the RV Camp, Little Beaver, Black Rock, Peninsula Tent, and Wyandotte campgrounds. The five campgrounds offer over 300 campsites and three paved launch ramps. The Little Grass Valley Reservoir Recreation Facility includes an amphitheater and fishing trail access for disabled persons. Fishing, swimming, picnicking, and hiking are popular recreational activities (SWRCB, 2017).

Sly Creek Campground, Boat Launch, and Road

This facility is situated on Sly Creek Reservoir, a 562 surface-acre lake, at a 3,500-foot elevation and surrounded by a forested watershed. The Sly Creek Campground consists of 23 campsites, operating on a first come first serve basis. The SFWPA operates and maintains the campground under close coordination with the Feather River Ranger District since the campground is located in the Plumas National Forest. As of April 2, 2021, this recreation site remains closed due to a Forest Closure Order in response to dangerous conditions related to recent wildfires. The campground will be closed until March 10, 2023. Site amenities include an accessible boat ramp, tent camping, trailer camping, picnic tables, toilets, drinking water, and parking. Fees are $20 per site per night. The regular open season is [10/7/19 - 5/22/20].? This campground does experience periods of heavy usage. Restrictions on usage include a 14-day maximum stay, and Off-Highway Vehicle (OHV) use is prohibited in the campground area. Water service includes potable water availability. Restroom service consists of Vault toilets. South Feather Water & Power operates the campground with Special Use Permit from the USFS.

Strawberry Campground

The Strawberry Campground contains 17 camping spaces, which are offered on a first come first serve basis. The SFWPA operates and maintains the campground under close coordination with the Feather River Ranger District since the campground is located in the Plumas National Forest. This campground is closed for the winter season and typically re-opens for the summer season. Reservations are not accepted at this facility. Area amenities include tent camping, trailer

camping, picnic tables, toilets, drinking water, and parking. Fees charged to campers are $20 per site. The busiest season is summer. Use Restrictions include a 14-day maximum stay. OHV use is prohibited in the campground area. Potable water is available. Restrooms consist of vault toilets. South Feather Water & Power operates the campground by Special Use Permit from the USFS.

6.7 Infrastructure and Public Facilities

Infrastructure development and maintenance is an important part of the service that the SFWPA provides. SFWPA has infrastructure and facilities associated with its drinking water, raw agricultural water, hydroelectric, solar electric, and recreational programs. The Agency's facilities include several canals, ditches, reservoirs, water treatment plants, and various offices and warehouses. (LAFCO/Kleinschmidt, 2006). A summary of the critical infrastructure and public facilities managed by the SFWPA is provided in Table 6-22 below.

Table 6-22: Critical Facilities, Infrastructure, and Other Agency Assets - SFWPA

Name of Asset	Facility Type	Replacement Value	Hazard Information
Power Generation and Distribution	Buildings & Equipment	$110,964,090	Fire, Flood, Drought, Landslide, Dam Failure
Water Treatment & Distribution	System Components	$13,316,226	Earthquake, Dam Failure
Communications	Buildings & Components	$4,189,310	Fire
Water Transmission	System Components	$337,852	Fire, Flood, Earthquake
Water Storage Infrastructure	Various infrastructure	$3,831,012	Fire, Flood, Earthquake, Dam Failure
District Business & Compliance	Buildings & Historic Files	$9,731,468	Fire
Total		**$142,369,958**	
Source: Butte County OEM and SFWPA, LHMP, 2019			

Land

SFWPA owns 56 parcels covering 1,471 acres (SFWPA, 2021a). Additionally, SFWPA has easements and permits allowing it to occupy land in the Plumas National Forest.

Administrative Facilities

The Agency's offices are located in the City of Oroville on Oro Quincy Highway and provide room for staff and administrative functions. These facilities house a laboratory for water quality testing.

The SWRCB accredits this laboratory through Certificate No. 1545, dated June 2020. SFWPA also maintains several general maintenance facilities.

6.7.1 Water Facilities

Water Conveyance Facilities

The SFWPA's 2004 report entitled "Water System Conveyance Evaluation" provides details and analysis of the Agency's water conveyance system and facilities. SFWPA maintains over 112 miles of irrigation canals, ditches, and pipelines that originally were intended for mining purposes. Historically, ditches may have lost as much as 90 percent of the water in the system before reaching a paying customer. However, the Agency has taken a programmatic approach to improve the irrigation distribution system and implement prioritized canal lining projects over the past decade. Many sections of the canals have been lined with gunite to remedy more severe leakage problems (LAFCO/Kleinschmidt, 2006). Since the mid-1990s, the agency has been implementing its Capital Improvement Plan to replace aging water conveyance infrastructure.

Miners Ranch Canal

The Miners Ranch Canal is the water conveyance facility connecting the penstock to the Kelly Ridge Hydroelectric Power House. The Miners Ranch Canal also connects to the raw water storage area at the Miners Ranch Treatment Plant for treatment and distribution to municipal water customers. The Miners Ranch Canal is seven miles long and is constructed into the hillside, where concrete panels interlock at the floor and up the other side to create a flume-like structure. The Canal's concreate panels are 20 feet long, and thickness varies from 8 inches at the bottom to 4 inches at the top. The original construction was done over 100 years ago, and the structure is emptied once a year for preventative maintenance. Flow gauges located along the canal can send a notification to staff when water or environmental conditions change that may necessitate changes to the Canal's operation. In addition, an access road is used to monitor and make repairs when necessary to the Canal. This road is constructed on an easement provided by California DWR as a result of the Lake Oroville water project (Butte Co., OEM, LHMP, 2019).

Raw Water Conveyance

Three linear ditches/canals move raw water to agricultural customers for irrigation purposes, including the Forbestown Ditch, the Bangor Canal, and the Palermo Canal.

Tunnel

SFWPA maintains a tunnel through the Gibsonville Ridge to move water from the upper portion of Slate Creek (a tributary of the North Fork Yuba River) to SFWPA facilities in the South Fork Feather River watershed (SFWPA, UWMPA, 2021g).

Water Storage

SFWPA retains an extensive reservoir system that stores both raw untreated water upstream and treated water. In the upper watershed, SFWPA's hydroelectric facilities utilize dams that create reservoirs that store a raw water supply. The five raw water reservoirs located in the upper

watershed include the Little Grass Valley Reservoir, Sly Creek Reservoir, Lost Creek Reservoir, Ponderosa Reservoir, and Miners Ranch Reservoir; with a combined storage of 164,577 acre-feet (AF) as listed in Table 6-23 below (SFWPA, UWMP, 2021g).

Table 6-23: Storage Reservoirs

Reservoir and Year Constructed	Maximum Acre Feet Storage Capacity	Height (in feet)	Type of Dam	Current Storage (Acre Feet)
Little Grass Valley, 1962	89,804	202	Earth	88,000
Sly Creek, 1962	64,338	289	Earth	60,600
Lost Creek, 1924	5,780	112	Concrete	4,000
Ponderosa, 1962	4,750	160	Earth	3,540
Miners Ranch, 1962	896	57	Earth	680
Data Source: Stiffel, 2016				

Treated water is stored in four water tanks with a combined capacity of 5.2 MG (million gallons) LAFCO/Kleinschmidt, 2006). In 2015, a 2-million-gallon concrete Clearwell tank was built to increase treated water storage capacity near the Miners WTP.

6.7.2 Water Treatment Facilities

Two water treatment plants (Miners and Bangor) are part of SFWPA's physical water system. SFWPA's primary water treatment plant is located at the Miners Ranch Reservoir. The Miners Ranch Treatment Plant is designated as Water System No. CA00410006. Originally completed in 1981, with significant upgrades completed in 2018, the treatment plant has the capacity to treat 21 million gallons per day (MGD) (SFWPA, UWMP, 2021g). These upgrades also included replacing one raw water pump, installing a new jet diffusion pump mixing station, installing new absorption clarifiers, and expanding filter capacity. Miners Ranch Water Treatment Plant currently serves 6,909 water connections, and this includes 6,714 residential accounts and 194 commercial accounts (State Water Board, 2021). Miners Ranch Water Treatment Plant is located at 234 Kelly Ridge Road, Oroville, CA 95965. (Refer to Figures 6-10 and 6-11, and Table 6-24 for details.) The water treatment process utilizes a combination of filtration and chlorination to remove/mitigate contaminants. Following the treatment process, water is distributed through SFWPA's pipelines to one of its four storage facilities and from there to consumption by SFWPA's customers. Miners Ranch has a peak design capacity of 21 MGD. The plant's current maximum demand equals 55% of the peak design capacity, and the average demand is approximately 35% (SFWPA, 2021a). Since maximum demand is significantly less than peak design capacity, it indicates there is sufficient capacity remaining in the system to accommodate projected future growth. The recently completed improvements to the Miners Ranch Treatment Plant increased capacity by an additional 50% and are sized to accommodate projected increases in water demand through the year 2046 (Stiffel, 2016).

The State Water Resources Control Board conducts regular inspections of the Miners Ranch Treatment Plant and issues an Inspection Report. On July 29, 2020, James Reade of SWRCB

inspected the South Feather Water and Power Agency's Miners Ranch water system. The water system was found to be well-maintained and operated. No deficiencies were noted during the inspection process (SWRCB, 2020).

The Agency has compiled an Emergency Response Plan (ERP) for the Miners Ranch Treatment Plant in conformance with America's Water Infrastructure Act of 2018, Section 2013(b). SFWPA obtained approval and adoption by the Board of Directors and submitted the plan to the Environmental Protection Agency as required. The current ERP is an internal document containing critical infrastructure information. The Board of Directors has approved the ERP contents through the Policy and Contracts Committee, and the Agency has self-certified the contents with the Environmental Protection Agency.

Figure 6-11: SFWPA Facilities

Table 6-24: Miners Ranch Water Treatment Plant Details	
Name:	Miners Ranch Water Treatment Plant
Address:	234 Kelly Ridge Road, Oroville, CA 95966
FIPS_Code:	06007
PGM_SYS_ID:	CA0083143
Registry_ID:	110000518869
Data Source:	*https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110000518869*

The Agency has operated the Bangor Water Treatment Plant since 1989. The Bangor Water Treatment Plant[8] is designated as Water System No. CA0410012. Its Waste Discharger

[8] Additional information on the Bangor Water Treatment Plant can be found here:

Identification (WDID) number is 5A040119001. The Bangor Water Treatment Plant served an average of 21 customer accounts during the year 2018 and served a total population of approximately 73 persons. The Bangor Water Treatment plant is located at 7454 Oro-Bangor Hwy. Oroville, CA 95965. The water treatment process utilizes a combination of filtration and chlorination to remove/mitigate contaminants. Following the treatment process, water is distributed for consumption by SFWPA's customers. The Bangor Water Treatment Plant is currently operating at approximately 85 percent capacity (Stiffel, 2016).

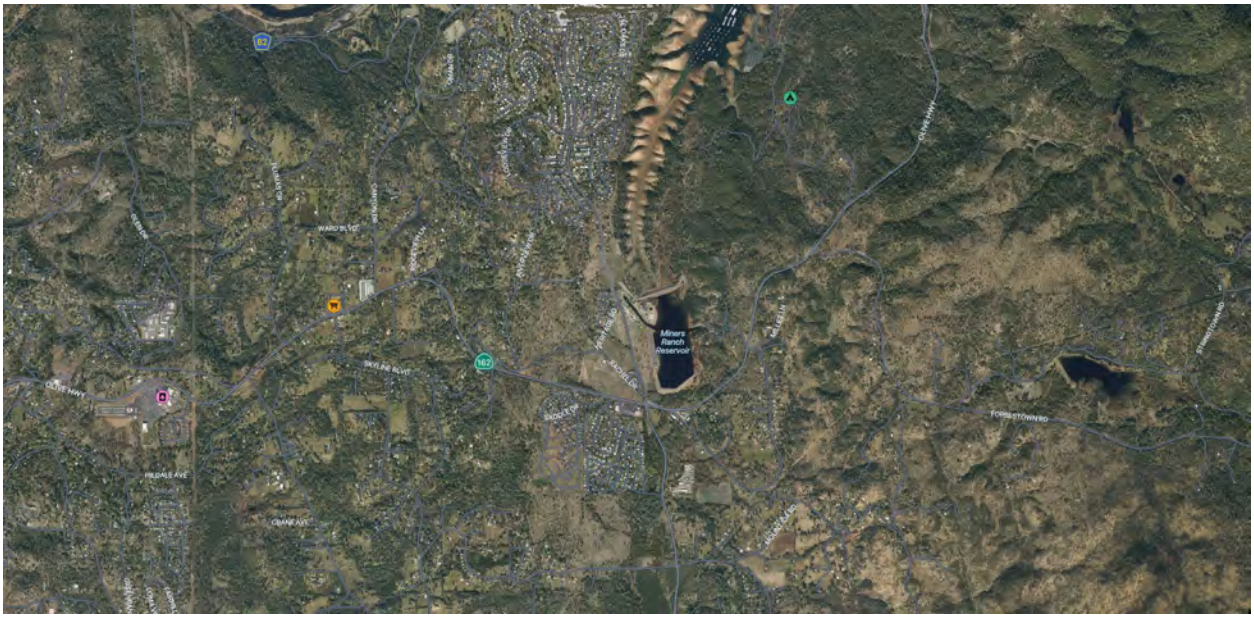


Figure 6-12: Aerial Image of Miners Ranch Reservoir

Infrastructure Inefficiency

The SFWPA Miners Ranch Water Treatment Plant is one of three water treatment plants that currently serve the Oroville region. Each of the three water treatment plants (SFWPA, TWSD, and Cal Water) require individualized treatment, operations, maintenance, capital improvements, and regulatory oversight. Given that Oroville (and its environs) is a small to medium city (in relation to population size), having three water treatment plants isn't the most efficient approach. If, in the future, an opportunity to reduce the number of treatment plants were to arise, it is possible that the improved efficiency could be beneficial to the community. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for treatment plant consolidation in the future. It should be noted, however, that the actual potential for this will be limited due to the very different ownership models of the entities. The Authors of this MSR concur with this recommendation of LAFCO's 2018 Oroville Region Water Service Study.

https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=103&tinwsys_st_code=CA

Maintenance

The Agency regularly undertakes dredging projects to remove sediment and debris from specific locations throughout the entire water conveyance infrastructure. Years of sediment and debris build-up at varying spots throughout the entire project have resulted in impaired water flow (Butte Co. OEM, LHMP, 2019). For example, if sediment were allowed to fill up the Miners Ranch Reservoir, it would reduce water storage capacity, and this capacity is necessary to ensure the treatment plant receives an adequate supply.

Another example of infrastructure improvement is the Lost Creek Dam Crest Modification Project in Strawberry Valley, CA. The construction work included increasing the dam spillway openings, raising the crest outside the spill section, reinforcing the downstream face, protecting the plunge pool area to prevent scouring of the foundation material, and replacing the dam crossing road. The rehabilitated dam is estimated to withstand potential floods and earthquakes for another century. Work began in the spring of 2017 and was completed in the fall of 2018 through a contract awarded to Granite Construction Incorporated (NYSE:GVA) for $20 million.

6.7.2.3 Water Facilities to the SOI

The SOI is currently unincorporated and located within the jurisdiction of Butte County. Parcels located in the SOI do not receive municipal (treated) water, and therefore municipal water facilities are not located in the SOI. However, should a parcel (or parcels) be annexed to the SFWPA's service area, the extension of SFWPA water service to these parcels could be under consideration to provide drinking water (or other raw water supply) and associated facilities.

6.7.3: Hydro-Electric Facilities

The South Feather Hydro-Electric Project consists of four hydroelectric components:

1. Sly Creek;
2. Woodleaf;
3. Forbestown; and
4. Kelly Ridge.

Collectively, the Project consists of five dams and five reservoirs (Little Grass Valley, Sly Creek, Lost Creek, Forbestown, and Ponderosa), four powerhouses (Sly Creek, Woodleaf, Forbestown, and Kelly Ridge), three diversion dams (South Fork, Forbestown, and Kelly Ridge), six conduit tunnels, and associated equipment and transmission facilities (SWRCB, 2017). An open conduit includes elevated flume and siphon sections (SFWPA, WSCP, 2021e). [Please note that SFWPA also owns two additional dams (Lake Wyandotte and Miner's Ranch), however, these two dams are not part of the power facilities]. Little Grass Valley Dam is located at about 5,050 feet above sea level, and this is the highest elevation facility. The canals and conduits total approximately 21 miles in length. There are three hydroelectric power plants (Sly Creek, Woodleaf, and Forbestown) and 21 miles of road (SFWPA, UWMP, 2021g). Kelley Ridge Powerhouse, the lowest elevation facility, is located about 225 feet above sea level. Water captured in the reservoirs and utilized by the hydroelectric facilities but not consumed by the customers of these two organizations is released to the State Water Project's Feather River facilities (FERC No.

2100) at either Lake Oroville or Thermalito Diversion Dam (SFWPA, WSCP, 2021e). Compliance with the Federal Energy Regulatory Commission (FERC) and California Division of Safety of Dams (DSOD) requirements is an ongoing endeavor for SFWPA. Annual inspections and safety practices are conducted to ensure the safety and stability of the dams.

The SFWPA's South Feather Hydroelectric Project is FERC Project No. 2088, located on the South Fork Feather River (SFFR) and Lost and Slate Creeks in Butte, Yuba, and Plumas Counties, California. The 127.2-megawatt (MW) Project includes four hydroelectric developments with associated infrastructure and facilities (SWRCB, 2017).

Sly Creek

The Little Grass Valley Dam on SFFR forms the Little Grass Valley Reservoir. South Fork Dam on SFFR has South Fork Tunnel that diverts water from SFFR into Sly Creek Reservoir. Slate Creek Dam on Slate Creek (North Yuba River) has Slate Creek Tunnel that diverts water into Sly Creek Reservoir. Sly Creek Dam on Lost Creek forms Sly Creek Reservoir, which has Sly Creek Penstock that delivers water into Sly Creek Powerhouse/Switchyard (13.2 MW). Both Reservoirs have recreation facilities.

Woodleaf

Lost Creek Dam on Lost Creek forms Lost Creek Reservoir. Woodleaf Tunnel delivers water from Lost Creek Reservoir into Woodleaf Penstock, which delivers water into Woodleaf Powerhouse/Switchyard (60 MW).

Forbestown

Forbestown Dam on SFFR forms Forbestown Impoundment. Forbestown Tunnel diverts water from Forbestown Impoundment into Forbestown Penstock and into Forbestown Powerhouse/Switchyard (41 MW).

Kelly Ridge

Ponderosa Dam on SFFR forms Ponderosa Reservoir (spills into SFFR Arm of Lake Oroville of P-2100 Project). Ponderosa Tunnel diverts water from Ponderosa Reservoir into Miners Ranch Canal. Miners Ranch Canal has siphons across McCabe and Powell Creeks of Lake Oroville, delivers water from Ponderosa Tunnel into Miners Ranch Tunnel, and delivers water into Miners Ranch Reservoir. Miners Ranch Dam on Miners Ranch Canal forms Miners Ranch Reservoir. The Kelly Ridge Tunnel diverts water from Miners Ranch Reservoir into Kelly Ridge Penstock and on into Kelly Ridge Powerhouse/Switchyard. This 13 MW powerhouse discharges just downstream of Oroville Dam (i.e., near the Thermalito Diversion Pool).

6.7.4: Park and Recreation Facilities

SFWPA manages several reservoirs in the upper watershed and associated recreational facilities as described above in Section 6.7.3. Some of the facilities are managed by the US Forest Service. SFWPA manages other recreational facilities under a permit from the US Forest Service. Due to the geographic isolation of the recreation facilities, the only readily available cost avoidance or facility-sharing opportunities open to the Agency is a partnership with the US Forest Service. This

partnership has been ongoing for the past few decades and is expected to continue into the future successfully.

6.7.5. Infrastructure Needs and Deficiencies

The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging drinking water infrastructure as outlined in Appendix K and as summarized below:

- Address Aging Infrastructure Needs.
- Continue To Make Conservation A California Way Of Life.
- Increase Regional Self Reliance And Integrated Water Management Across All Levels Of Government.
- Achieve The Co-Equal Goals For The Delta.
- Manage And Prepare For Dry Periods.

Infrastructure needs and deficiencies are a common feature of large facilities, such as a water district. To address its specific needs, ideally, a water district would prepare a capital improvement plan. SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting (personal communication, R. Moseley, 7/11/22).

The SFWPA does have an Equipment Maintenance Summary for the Miners Ranch Water Treatment Plant in an Excel format. This Equipment Maintenance Summary lists the tasks associated with regular maintenance of the Treatment Plant features, including the Decanter, Sludge Collection, Vertical Turbine Pumps, Vertical Inline Pumps, Polymer Dilution System, Clarifier, Tank Mixer, Progressive Cavity Pump, Metering Pump, Blower, , Troughs, Gas Scrubber, Conveyor, Manual Plug Valve, PRV, Manual Butterfly Valve, Check Valve, ARV, EMO Butterfly Valve, EMO Plug Valve, Retrofit Actuator, Electric Actuator, MCC, and Instrumentation.

Hydroelectric facilities, such as powerhouses, need continual maintenance. Therefore, SFWPA staff periodically updates the Board of Directors about maintenance activities on the hydroelectric facilities.

Infrastructure needs or deficiencies (i.e., pipelines, hydrants, tanks, reservoirs, etc.) are described by SFWPA staff as aging pipeline infrastructure and the need for additional fire hydrants (SFWPA, 2021a). SFWPA's pipelines are likely constructed from a range of materials such as metal, cement, or similar materials. Plastic pipelines are commonly used by water districts in California to transport water to customers, as described in the footnote[9] below. Data about any use of plastic pipelines by SFWPA was not readily available for this MSR.

[9] Plastic pipes are often less expensive to install than metal alternatives, which hold up against high heat but are vulnerable to corrosion. A new study has shown that pipelines constructed of plastic, including high-density polyethylene (HDPE), crosslinked polyethylene (PEX), polyvinyl chloride (PVC) and chlorinated polyvinylchloride (CPVC) experience problems during and after fires and associated high heat exposure. Specifically, fire and heat-damaged plastics can directly leach dozens of toxic chemicals, including carcinogens such as benzene, into local water systems. The Town of Paradise experienced this

6.7.5.1 Determinations for Infrastructure and Public Facilities

Based on the information included in Section 6.7 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-25 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution the Commission formally adopts during a public meeting.

Table 6-25: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

Number	Indicator	Determination
SFWPA-PUB-1	Has the Agency been diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner.	SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting. Implementation of these plans in the future will help ensure that infrastructure needs and deficiencies are addressed in a timely manner.
SFWPA-PUB-2	Does the District provide sufficient services to meet current and future demands with: 1) water supply in relation to water demand, 2) hydro-electric supply in relation to demand, and 3) recreation services?	SFWPA provides sufficient services to meet current and future demand as follows: 1) Based on the water supply and water demand assessments conducted by the Agency, SFWPA believes that its sources of developed water supply will continue to more than adequately meet the current and foreseeable demand through 2045. 2) SFWPA generates electricity using hydroelectric and solar electric facilities. The hydro-electric power is sold wholesale to the Northern California Power Agency. Although a prolonged drought can decrease power production, the infrastructure functions as designed, and power sales usually contribute significant funding to the SFWPA.

issue after the 2018 Camp Fire. A community can stop water contamination from spreading if damaged pipes can be quickly isolated. Without isolation, the contaminated water may move to other parts of the water system, across town or within a building, causing further contamination. Water districts can install network isolation valves and backflow prevention devices, to prevent contaminated water moving from a damaged building into the utility pipe network (Isaacson et. al., 2021).

		(continued) 3) SFWPA provides recreational services, including camping, hiking, boating, and fishing, along its reservoirs located in the upper watershed.
SFWPA-PUB-3	Does the District have a reliable, sustainable source of water? Can the District and its partners develop additional local and regional water sources through wastewater reclamation, stormwater capture, and/or environmentally sustainable desalination projects?	SFWPA's water supply is derived from surface water diverted from the upper watershed of the South Fork of the Feather River and the upper portion of the Slate Creek watershed. SFWPA prepared an Urban Water Management Plan in 2021 and a 2020 Water Shortage Contingency Plan. Based on the data described in these plans and based on historic weather patterns, SFWPA believes the local watershed is a reliable, sustainable source of water. SFWPA has not identified a need to study the future potential for developing additional local and regional water sources (such as wastewater reclamation, stormwater capture, and/or environmentally sustainable desalination projects). However, if a need for additional sources arises in the future, these and other options could be studied.
SFWPA-PUB-4	Is there duplicate infrastructure by other agencies nearby?	Several nearby agencies offer drinking water services similar to that of the SFWPA (such as TWSD and the private California Water Company). The North Yuba Water District provides raw water to agricultural customers in Yuba County. However, within the SFWPA's boundary area, the SFWPA is the only water service provider (with the small exception of a geographic overlap with the service area of the private California Water Company). If, in the future, an opportunity to reduce the number of treatment plants were to arise, it is possible that the improved efficiency could be beneficial to the community. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for treatment plant consolidation, in the future. It should be noted however, that the actual potential for this will be limited due to the very different ownership models of the entities. The Authors of this MSR concur with this recommendation of LAFCO's 2018 Oroville Region Water Service Study.

SFWPA-PUB-5	The Agency has preventative maintenance measures and has planned for the replacement of aging infrastructure.	The Agency has conducted preventative maintenance on its infrastructure. Additionally, to guide future preventative maintenance, SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting. Additionally, the Agency's General Fund Financial Projections show that it plans to spend $750,000 per year through the year 2026 on Capitol Expenses. The Agency's Joint Facilities Operating Fund Projections show that it plans to spend $3,00,000 annually through the year 2026 on Capitol Expenses. SFWPA staff have identified infrastructure needs and deficiencies as aging pipeline infrastructure and the need for additional fire hydrants.
SFWPA-PUB-6	Evaluation of agency's capacity to assist with or assume services provided by other agencies.	The SFWPA has demonstrated capacity to assist with or assume services provided by other agencies. For example, the SFWPA has a solid financial basis due to the revenue generated by the hydroelectric facilities. However, this power revenue is not guaranteed every year since drought decreases generation capacity. SFWPA has retained staff engineers and other professionals necessary to serve leadership roles, and these skilled staff persons have the ability to assist with or assume services provided by other agencies. Additionally, SFWPA has close collaborative relationships with nearby independent government agencies, as demonstrated through its collaboration with the U.S. Forest Service. SFWPA successfully communicates with nearby local agencies such as the City of Oroville, Butte County, and TWSD. SFWPA's leadership capacity has recently improved by resolving outstanding litigation and developing clear capital improvement plans.

6.8 Financial Ability To Provide Services

6.8.1 Introduction to Financial Metrics

LAFCO is required by the CKH Act to make a determination regarding the financial ability of the South Feather Water and Power Agency to provide public services. This Section provides an overview of financial health and provides a context for LAFCO's financial determinations. The audited Comprehensive Annual Financial Reports (CAFR) from the District for the fiscal years 2018, 2019, and 2020 are the primary source of information. Based on recent recommendations from the Little Hoover Commission, this determination on the financial ability to provide services

is based upon several key financial performance indicators that LAFCO's throughout the State consider in MSRs.

In California, special districts are classified as enterprise or non-enterprise districts based on their source of revenue:

- Enterprise Districts: The funding of district operations is via fees for public service. Under this model, the customers that utilize goods or services such as drinking water, raw water, sewage disposal, or electricity pay a fee. Rates are set by a governing board, and there is a nexus (direct connection) between the costs of providing services and the rates customers pay. Sometimes an enterprise district may also receive property taxes and other revenues, which comprise a portion of its budget.
- Non-enterprise Districts: Districts that receive property taxes are typically classified as non-enterprise districts. Services that indirectly benefit the entire community, such as police or fire protection, community improvements, recreation and library services, reclamation and flood improvements, and cemetery districts, are often funded through property taxes.

SFWPA primarily functions as an enterprise district, charging fees for water supply, water treatment, and distribution services. However, there are some unique circumstances in that SFWPA does collect property taxes, and the revenue from hydroelectric power generation is utilized to subsidize the price of water for retail customers. Together, the property taxes and the hydro revenue mean that water customers do not pay the full cost of water delivery.

The District's annual financial statements describe two designated funds: the General Fund; and the Joint Facilities Operating Fund.

In April 1995, the Agency approved the formation of the Oroville-Wyandotte Irrigation District Financing Corporation (the Corporation). This Corporation is a nonprofit public benefit corporation organized under the Nonprofit Public Benefit Corporation Law (commencing at Section 5110 of the California Corporations Code). This type of relationship is commonly referred to as a blended component unit. The purpose of this Corporation is to provide assistance to the SFWPA in the financing, acquiring, constructing, rehabilitating, or financing various public facilities; and land and equipment for the use, benefit, and enjoyment of the public. Although the Agency and Corporation are legally separate entities, the Agency exercises oversight responsibility over the Corporation. The Corporation is reported as if it were part of the primary government because it shares a common Board of Directors with the Agency, and its sole purpose is to provide financing to the Agency under the debt issuance documents of the Agency. Therefore, debt issued by the Corporation is reflected as the debt of the Agency in these financial statements. The Corporation has no other transactions and does not issue separate financial statements (SFWPA, 2018). As of December 31, 2020, the outstanding principal balance due on the 2016 Certificates of Participation associated with the Miners Ranch Treatment Plant Solar Photovoltaic Project and Office Remodel/Addition Project was $25,010,000, with a final maturity of April 1, 2046. The Financing Corporation has no other debt at this time.

6.8.2 Financial Policies & Transparency

The District prepares an annual budget and a schedule of fees, typically approved by the Board of Directors at their December public meeting. The Agency's budget includes both the water and hydroelectric operations and finances. The fiscal year (FY) runs concurrently with the calendar year, beginning on January 1 and ending on December 31. The current and past budgets going back to 2014 are available on the District's website at <*https://southfeather.com/publications/financial-reports/*>.

Every year the District publishes an audited Annual Financial Statement (AFS). The California Government Code requires an annual independent audit of the District's financial records by a certified public accountant who serves as an independent auditor. The current Audited Financial Statement and past financial statements to 2004 are also available to the public via the District's website. There are four types of audit opinions: unqualified, qualified, adverse, and disclaimer. An unqualified opinion is a 'clean' opinion, meaning the entity passed its audit. A qualified opinion means the entity passed the audit with notable exceptions. A disclaimer or adverse opinion essentially means the entity flunked its audit. The independent audit on FY 2020 was performed by Richardson & Company (SFWPA, 2021h). The auditors issued an "unqualified" opinion as stated: "In our opinion, the financial statements . . . present fairly, in all material respects, the financial position of the Agency, as of December 31, 2020, and 2019 and the changes in financial position and cash flows thereof for the years then ended in conformity with accounting principles generally accepted in the United States of America. . . "(SFWPA, 2021h).

A District's financial policies function as business rules that ensure an agency's transactions are recorded consistently and correctly. Therefore, it is vital for a District's financial policies to be made available to the public. SFWPA's financial policies are described in the AFS for 2019, and several financial policies are listed below:

- Basis of Presentation: The Agency's resources are allocated to and accounted for in these basic financial statements as an enterprise fund type of the proprietary fund group.
- Basis of Accounting: The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The enterprise fund type is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets, deferred outflows, liabilities, and deferred inflows associated with the fund's operation are included in the statement of net position.
- Under the accrual basis of accounting, revenues are recognized when earned, and expenses are recorded when the liability is incurred or the economic asset is used.
- Cash and Cash Equivalents: For the purposes of the Statement of Cash Flows, the Agency's cash and cash equivalents include restricted and unrestricted cash on hand, bank deposits, and short-term investments with original maturities of three months or less from the date of acquisition, including investments in the California Local Agency Investment Fund (LAIF).
- The Agency has adopted a formal investment policy as required by Section 53600et seq., of the California Government Code. The Agency Treasurer is responsible for selecting depositories and investing idle funds according to the adopted investment policy.

- Capital Assets: Capital assets, which include property, plant, equipment, and infrastructure assets, are reported on the Statement of Net Position.
- Long-Term Liabilities: Long-term liabilities and other long-term obligations are reported on the Statement of Net Position. Initial issue bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method.
- Interfund Transactions: Transactions between combining units of the Agency are recorded as inter-fund transfers on the Combining Schedule of Revenues, Expenses, and Changes in Net Position. The unpaid balances at year-end, as a result of such transactions, are shown as due to and due from other funds. These amounts are eliminated for reporting in the enterprise fund financial statements.
  (Data Source: SFWPA AFS, 2020).

In addition to the accounting policies listed in its AFS, the SFWPA also has an adopted set of Rules and Regulations, most recently updated in August 2021. The Rules and Regulations list rules related to charges and fees, and several are summarized below:

- Annexation Processing Fee: In addition to fees levied by the County Clerk, LAFCo, State Board of Equalization, and any other public agency having jurisdiction over the annexation approval process, SFWPA shall require payment by the applicant of a Processing Fee prior to engaging its annexation-processing consultant.
- Financial Responsibility for Cost of Extending Mains: It is the policy of the Agency to allow reasonable extensions of its facilities for a growing community, provided that such extensions do not place an unfair burden on property owners already receiving service. All costs associated with the extension of Agency facilities, together with the installation of private service lines from said facilities, shall be the responsibility of the owner(s) of the parcel(s) to be served or the developer of a project to be served.
- Inspection of Construction Fee: The Agency's engineer or their agent(s) shall inspect the construction of the project's domestic water system to assure that the works are installed in accordance with the approved plans and specifications. Said inspection shall be funded by a Plan Check Fee and Inspection Fee paid by the developer. Construction of the water system shall not commence until said fee is paid.
- Payment of Bills: Bills are due and payable on the date they are mailed and are delinquent ten (10) days thereafter. A delinquency penalty charge as determined by the Board of Directors and as shown in the schedule of Fees and Charges.
  Data Source: SFWPA, 2021i

The Agency has a published policy for reserve funds, and the requirements are documented in the 2005 Agreement between SFWPA and NYWD (personal communication, R. Moseley, 7/11/22).

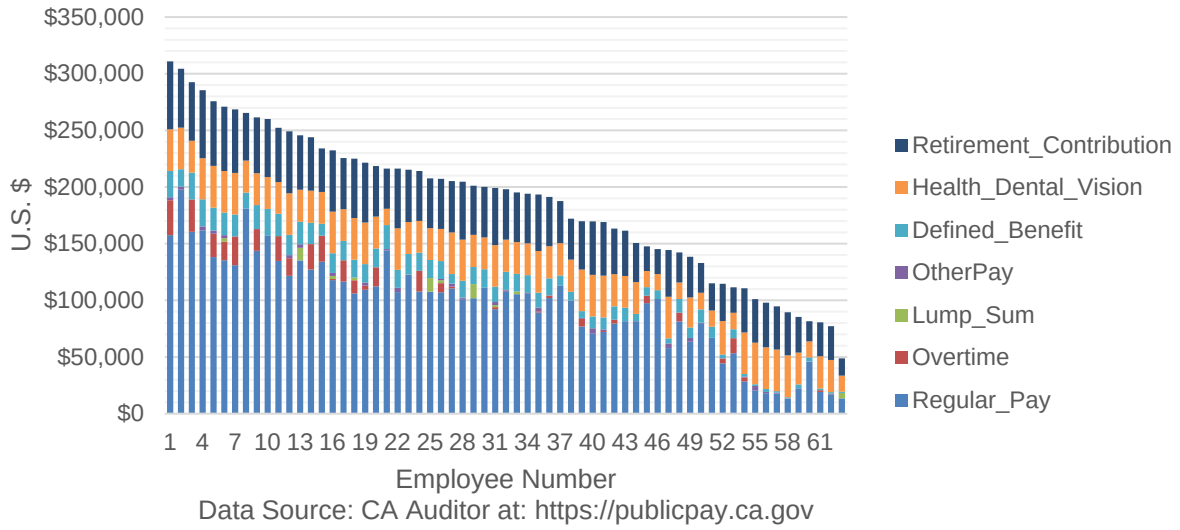
Data Transparency

Financial data transparency promotes accountability and provides information to citizens about what their local government is doing. Transparency allows residents to stay informed and learn about local government revenue, spending, and debt. The Finance Director makes regular reports

to the Board of Directors regarding fund balance etc., and this information is available to the public via the public meeting agenda packet.

Transparency with salary data is also an important attribute for special districts in California. The South Feather Water and Power Agency provides competitive compensation and a benefits package to full-time, regular employees, as shown in Figure 6-13 below. The employee wage scale is available on the SFWPA website. Additionally, the South Feather Water and Power Agency forwards reports to the California State Controller for Government Compensation in California per Government Code Section 53891 and to the State Auditor. SFWPA has a total of 68 employees and paid Total Wages of $6,555,602 and Total Retirement & Health Contribution of $2,643,163 in the year 2020 (CA Auditor, 2021). SFWPA compensation data is reported to the California Auditor and is shown in Figure 6-13 below.

Figure 6-13: SFWPA Employee Compensation, 2020



Data Source: CA Auditor at: https://publicpay.ca.gov

The determinations for SFWPA's financial policies and fiscal transparency are listed in Table 6-33.

6.8.3 Revenues, Expenditures, and Net Position

Revenues

SFWPA has two basic types of revenue:

- Operating revenues consisting primarily of charges for services; and
- Non-operating revenues and expenses related to financing and investing-type activities.

The District has multiple sources of revenue, including sales to customers, interdepartmental sales, standby fees, other investment income, and gain on disposition of assets. In 2020

SFWPA's total revenue[10] was $17.4 million, and most (69 percent) of this revenue resulted from the sale of electricity from the hydropower plants, as shown in Figure 6-14 below.

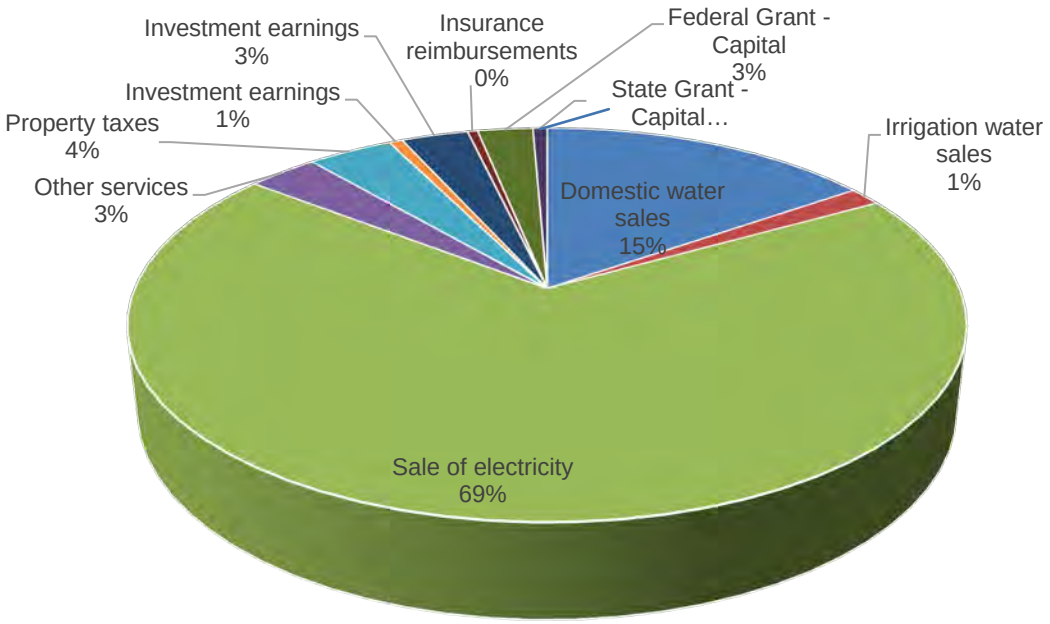


Figure 6-14: Sources of Total Revenue FY20 (SFWPA)

Operating revenues consist of domestic and irrigation water sales, generation of hydroelectric power, water transfer sales, customer services, and installations. Operating revenues were $15,466,177 in 2020 and $24,949,202 in 2019. In 2018, operating revenue was $18,088,788. Non-operating revenues come from property taxes, investment earnings, insurance refunds, and any gains or losses on the sale or disposal of an asset. Non-operating revenues account for $1,297,666 (or 7%), $2,128,205 (or 8%), and $5,100,548 (or 20%) of total revenue in 2020, 2019, and 2018 respectively. Total revenue is the sum of operating and non-operating revenue, and it declined by $9,877,830 (or 36%) between 2020 and 2019. This decline was due to less electricity sales because of the drought in 2020 (as compared with water availability in prior years). Total revenue increased by $1,260,527 (or 5%) between 2019 and 2018 due to unusual hydropower generation pricing in February and March, and wetter than average winter storms in 2019 (SFWPA, AFS, 2021h). With a total revenue of $17,391,542 in 2020 and a boundary area of 33,718 acres, the revenue generated per acre of boundary land is $516.

Property tax revenue totaled $681,269 in 2020. Since there are 69,500 water connections in SFWPA, the tax revenue per water connection ratio can be calculated as 9.8, meaning that each water connection paid an average of $9.80 in property tax for the year 2020.

[10] The 2021 annual financial statement will be presented at the July 26, 2022 SFWPA board meeting.

Expenses

In FY 2020, total expenses (including both operating and non-operating) were $21 million. The largest expense was water plant operations and maintenance at $6.9 million (33%), and the second-largest expense was depreciation at $3.88 million (18%), as detailed in Figures 6-15 and 6-16 below.

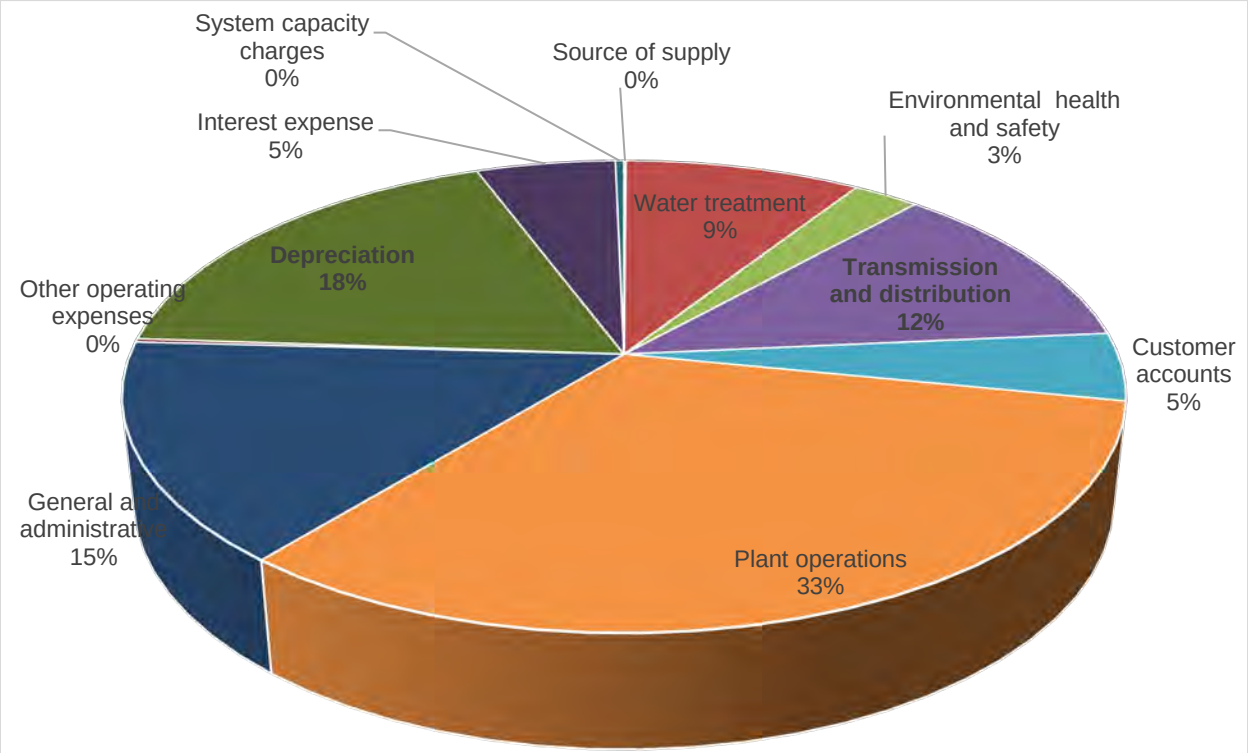


Figure 6-15: Total Expenses FY20 (SFWPA)

Source: SFWPA, AFS, 2021h

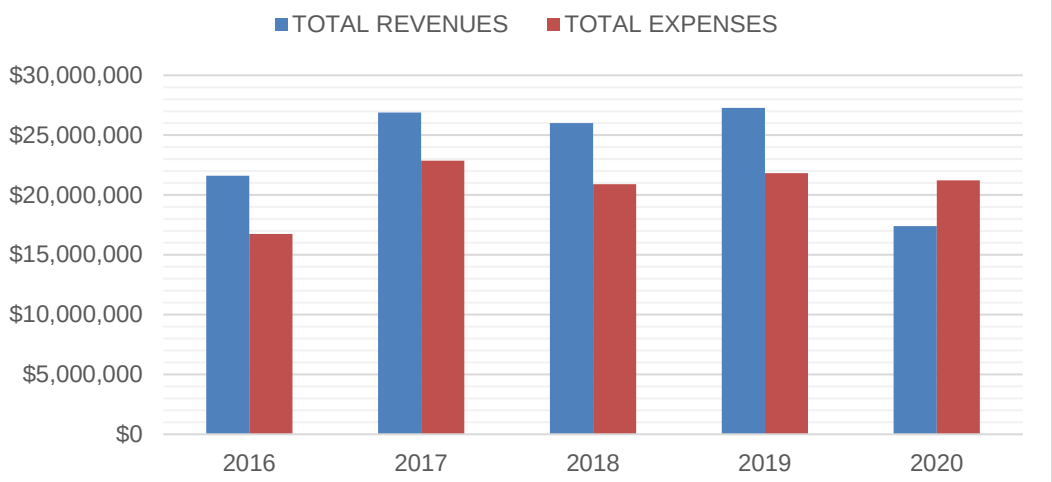
SFWPA's per capita expenditures amounted to $1,265 per permanent resident in 2020. Other significant expenses in 2020 include the following:

- The Agency's capital contributions increased by $435,734 to the 2020 amount of $627,699, which includes grants for the Miners Ranch Canal road repairs offset by a decrease in system capacity charges levied (SFWPA AFS, 2021h).
- Construction-in-Progress decreased by $311,060 from last year to $113,317. The projects in progress on December 31, 2020, included the water distribution system remote monitoring program, Community Line, Foothill Blvd/Oro Bangor Hwy-Grange domestic water project, the Oro Bangor Hwy/Red Hawk Ranch irrigation water project, replacement of the Kelly Ridge Powerhouse septic system and the California Independent System Operator (CAISO) meter installation project (SFWPA AFS, 2021h).

- Relicensing costs accumulated through 2012 in the amount of $5,716,306 were amortized over the life of the license, beginning when the FERC license is issued. Costs incurred after 2012 have been expensed (SFWPA AFS, 2021h).

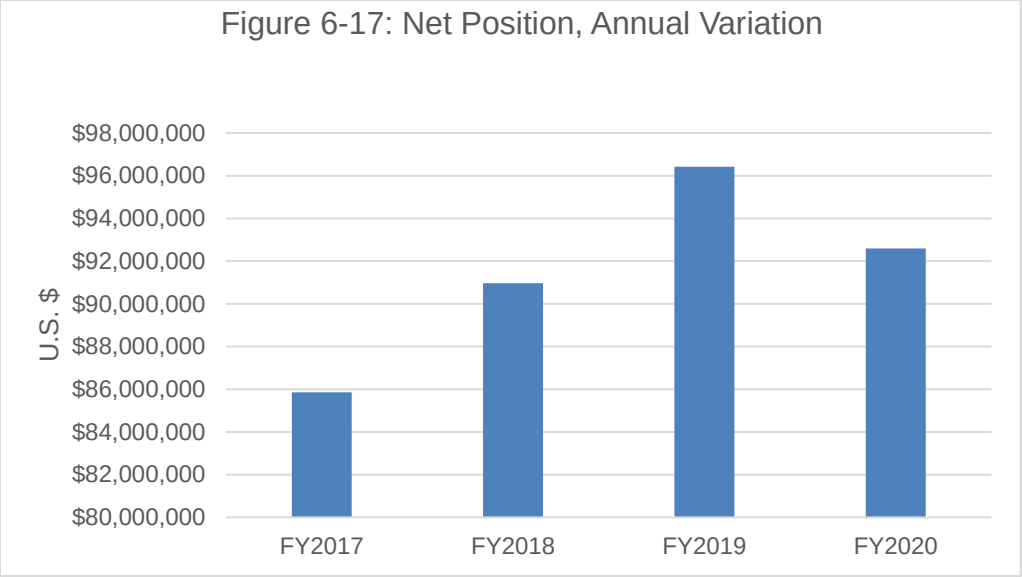
Total Revenues were compared to Total Expenses for a five-year time period, as shown in Figure 6-16 below. Both revenues and expenses vary year-to-year. Total revenues exceeded total expenses during four years of the five-year study period. The decline in revenue in FY2020 was due to the drought, resulting in a decline in hydroelectricity production.

Figure 6-16 Revenues and Expenses



Net Position

The Statement of Net Position provided in Table 6-26 (next page) includes all of the District's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, which provide information about the nature, and amounts, of investments in assets and obligations to District creditors. They also provide the basis for computing rates of return, evaluating the capital structure of the District, and assessing financial flexibility of the District. As shown in more detail in Table 6-26 below, the South Feather Water and Power Agency December 31, 2020, the net position of $92,594,339 was a decrease of $3,827,965 (3.97%) when compared with the December 31, 2019, net position of $96,422,304 (SFWPA AFS, 2021h. The Agency's net position relates to operating revenues which decreased by $9,483,025 (or 38.0 %) from the prior year. Drought conditions caused revenue from hydropower generation to be significantly less than historically received. The Agency's 2020 operating expenses decreased slightly by $491,102 (or 2.39%) from 2019 (SFWPA AFS, 2021h).



Source: SFWPA Audited Annual Financial Statement for FY2020 (2021h)

The Net Position of the three-year time period of December 31, 2020, December 31, 2019, and December 31, 2018, is studied in more detail in Table 6-26 below.

Table 6-26: South Feather Water & Power Agency's Changes In Net Position

	2020	2019	2018
REVENUES			
Operating Revenues			
Domestic Water Sales	$2,674,305	$2,138,729	$2,151,414
Irrigation Water Sales	$263,727	$218,507	$222,699
Sales of Electricity	$11,962,972	$21,848,149	$14,811,825
Other Services	$565,173	$743,817	$902,850
Total Operating Revenue	$15,466,177	$24,949,202	$18,088,788
Non-Operating Revenues:			
Property Taxes	$681,269	$663,748	$585,383
Investment Earnings	$535,945	$859,928	$422,595
Insurance Refund	$80,452	$601,929	$2,612,050
Gain or Loss on Sale of Fixed Assets		$2,600	$(619,010)
Miscellaneous Non-Operating Revenue			$2,099,530
Total Non-Operating Revenue	$1,297,666	$2,128,205	$5,100,548
Capital Contributions	$627,699	$191,965	$2,819,509
TOTAL REVENUES	$17,391,542	$27,269,372	$26,008,845
EXPENSES			
Operating	$20,084,321	$20,575,423	$19,816,365
Non-Operating	$1,135,186	$1,243,331	$1,080,524
TOTAL EXPENSES	$21,219,507	$21,818,754	$20,896,889

CHANGE IN NET POSITION	$(3,827,965)	$5,450,618	$5,111,956
NET POSITION AT BEGINNING OF YEAR	$96,422,304	$90,971,686	$85,859,730
NET POSITION END OF YEAR	$92,594,339	$96,422,304	$90,971,686

LAFCo's determinations for SFWPA's revenues, expenditures, and net position are listed in Table 6-33.

6.8.4 Capital Improvement Plan

As part of its annual budgeting process, the Agency briefly describes the proposed capital improvement projects to be funded and their estimated budget. This is based on the Agency's rolling three-year capital improvement plan reviewed each budget cycle (SFWPA, 2021a). Specifically, the 2021 Proposed Capital Budget includes the Irwin, Experanza, Williams pipeline project; replacement of 12 vehicles; several powerhouse upgrades, repairs and parts replacements; waterways dredging; SCADA upgrade; and communication upgrades to accommodate CAISO meter communications. Capital Budget appropriations account for materials, and outside service costs only. Labor charges are assigned to the operating departments allowing for more effective administrative control of these personnel costs (SFWPA Budget 2020c).

The Agency has prepared ten-year General Fund Financial Projections for the time period from 2017 to 2026. This projection estimates that $967,000 will be directed to capital improvements in 2021. During the years 2022 to 2026, it is estimated that $750,000 per year will be budgeted for capital improvements.

6.8.5: Reserves

In California, many independent special districts have accumulated reserves. There are no standards guiding the size and use of reserve funds. Reserve funds are useful for SFWPA because their contribution towards capital improvement projects reduces the potential need to accumulate a high debt load. The District's investment policy and the California Government Code allow the District to invest, provided the issuers' credit ratings are acceptable to the District and approved percentages and maturities are not exceeded. SFWPA has a contingent reserve, and operating reserve accounts for potential liabilities (SFWPA, 2021a). The 2021 Adopted Budget estimates a reserve balance of $20,063,853. A reserve set aside for retiree benefits was $1,617,546 from the Facility Operating Fund and $1,977,001 from the General Fund (SFWPA, 2020c). Within the Joint Operating Facility Fund, there is a special reserve to comply with the North Yuba Water District agreement, with a 15% working capital reserve of $1,125,850 and $18,000,000 contingency reserve as required (SFWPA, 2020c).

Reserves are typically held in investment funds. SFWPA utilizes eight investment types: cash, deposits with financial institutions, money market funds, Local Agency Investment Fund (LAIF), certificates of deposit, US treasury note, US government agency securities, and the Investment Trust of California. For example, in 2020, $19.2 million was held in LAIF. The Agency is a voluntary participant in the California Local Agency Investment Fund (LAIF) that the California Government Code regulates under the oversight of the Treasurer of the State of California. LAIF is stated at amortized cost, which approximates fair value. The LAIF is a special fund of the California State Treasury through which local governments may pool investments. The State Treasurer manages LAIF. The amount invested in LAIF was 3.28% and 2.79% on December 31, 2020, and 2019 in structured notes and asset-backed instruments (SFWPA, AFS, 2021h).

Table 6-27: Agency Cash On Hand and Investments

NOTE B – CASH AND INVESTMENTS

Cash and investments were classified in the financial statements as shown below at December 31:

	2020	2019
Cash and cash equivalents	$ 22,495,182	$ 23,332,937
Restricted cash and cash equivalents	576	574
Investments	8,300,223	8,587,288
Total cash and investments	$ 30,795,981	$ 31,920,799

Cash and investments were comprised of the following at December 31:

	2020	2019
Cash on hand	$ 950	$ 950
Deposits with financial institutions	1,823,060	1,170,713
Total cash	1,824,010	1,171,663
Money market mutual funds	13,260	223,568
Local Agency Investment Fund (LAIF)	19,232,796	20,558,987
Certificates of deposit	6,982,758	7,195,825
U.S. Treasury note	251,681	248,599
U.S. government agency securities	1,065,784	1,142,864
Investment Trust of California (CalTRUST)	1,425,692	1,379,293
Total investments	28,971,971	30,749,136
Total cash and investments	$ 30,795,981	$ 31,920,799

(Data source for Table 6-27, above is SFWPA, AFS, 2021h)

As shown in Table 6-27 above, of December 31, 2020, and 2019, the carrying amount of the Agency's bank deposits totaled $1,823,060 and $1,170,713, and the bank balances totaled $1,901,292 and $1,272,095, respectively. The differences between the carrying amounts and the bank balances are due to the normal deposits in transit and outstanding checks. On December 31, 2020, and 2019, the uninsured balances were $1,401,292 and $841,274, respectively, which were collateralized by securities held by the pledging financial institution, but not in the name of the Agency. Negotiable certificates of deposit, which are all below the federal depository insurance limit, are excluded from the amounts above. U.S. Treasury and U.S. Government Agency securities in the amount of $1,31 7,465 and $1,391,463 as of December 31, 2020, and 2019, respectively, were held.

6.8.6 Outstanding Debts and Liabilities

For local government agencies, liabilities typically include current liabilities such as accounts payable, salaries payable, bond interest payable, and long-term liabilities such as serial bonds payable, installments payable, and contracts payable. For the SFWPA, current assets exceeded current liabilities by $22,613,748. Liabilities for both pension and Other Post-Employment Benefits (OPEB) are accounted for in full compliance with current governmental accounting standards (SFWPA, AFS, 2021h). In FY 2020, the total of the Agency's long-term liabilities was almost $54 million (due after one year from FY 2020), as shown in Table 6-28, an increase of $885,696 over the previous year due to the annual calculation of the liabilities associated with pension and other post-employment benefits (SFWPA AFS, 2021h).

Table 6-28: Long-Term Liabilities

	January 1, 2020	Additions	Reductions	December 31, 2020	Due Within One Year	Due After One Year
2016 Certificates of Particpation	$ 25,610,000		$ (600,000)	$ 25,010,000	$ 615,000	$ 24,395,000
Installment Purchase Agreement	7,226,452		(1,476,612)	5,749,840	1,547,584	4,202,256
Total	32,836,452		(2,076,612)	30,759,840	2,162,584	28,597,256
Unamortized premiums	453,582		(16,903)	436,679		436,679
Total Debt and Loans	33,290,034		(2,093,515)	31,196,519	2,162,584	29,033,935
Compensated absences	1,200,748	$ 622,496	(646,639)	1,176,605	396,893	779,712
Net pension liability	5,238,532	701,997		5,940,529		5,940,529
Net OPEB liability	15,826,053	2,874,078	(506,488)	18,193,643		18,193,643
Total Long-Term Liabilities	$ 55,555,367	$ 4,198,571	$ (3,246,642)	$ 56,507,296	$ 2,559,477	$ 53,947,819

The South Feather Water and Power Agency Financing Corporation can issue debt on behalf of the District, such as the 2016 Certificates of Participation. Specifically, payments for both the 2016 Miners Ranch Water Treatment Plant Improvement Project Certificates of Participation (COP) and the 2019 Installment Payment Agreement (IPA) had a due date of April 1, 2020, and were paid the last week of March. The remaining outstanding balances are $25,010,000 for the COPs and $6,496,810 for the IPA.

The debt service coverage ratios for FY2020 and FY2019 are presented in Table 6-29 below. In 2020 the debt coverage ratio was 0.17, and this is less than the required ratio of 1.25. The ratio decline is likely due to the reduced hydroelectric revenue resulting from the drought in 2020.

Table 6-29: Debt Service Coverage Ratios

	2020	2019
ACTUAL DEBT SERVICE PAYMENTS (CASH BASIS)		
2016 Certificates of Participation - principal	$600,000	$580,000
2016 Certificates of Participation - interest	$844,675	$862,075
Installment Purchase Agreement - principal	$1,476,612	$773,548
Installment Purchase Agreement - interest	$325,928	$127,722
TOTAL ACTUAL DEBT SERVICE PAYMENTS	$3,247,215	$2,343,345
Debt Coverage Ratio - Actual	**0.17**	**4.36**
Required Ratio	**1.25**	**1.25**
DEBT SERVICE COVERAGE RATIO WITH FULL YEAR OF INSTALLMENT PURCHASE AGREEMENT PAYMENTS		
Net revenues	$564,155	$10,225,671
Total 2016 Certificates of Participation debt service payments	$1,444 ,675	$1,442 ,075
Installment Purchase Agreement - principal (represent 2020 payments) *	$1,476,612	$1,547,585
Installment Purchase Agreement - interest (represent 2020 payments) *	$325,928	$254,955
Total	$ 247,215	$3,244,615
Debt Coverage Ratio - Including Full Year of Installment Purchase Agreement Payments	**0.17**	**3.15**
Required Ratio	**1.25**	**1.25**

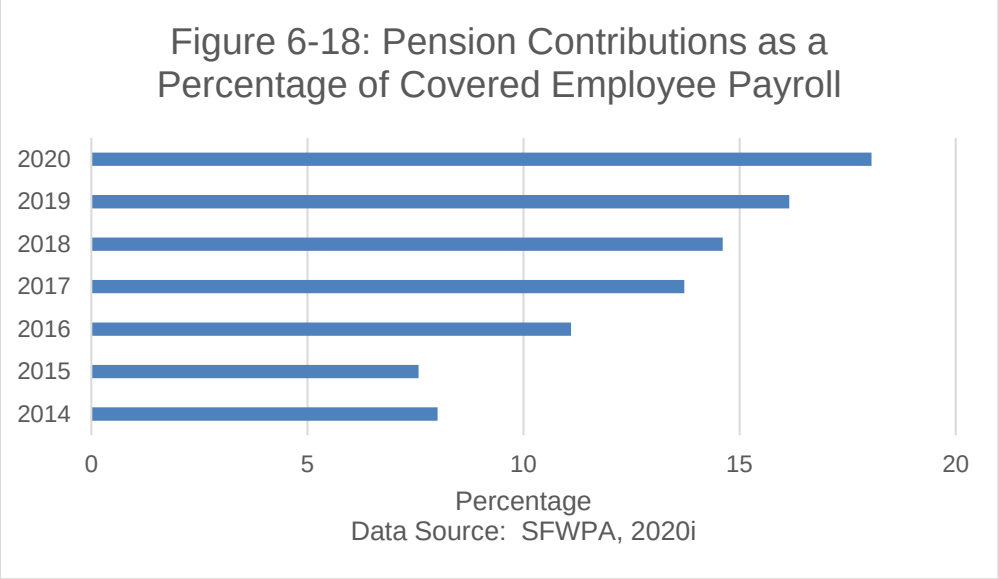
Note: * Payments represent calendar year 2020 payments, which is the first calendar year that both semi-annual payments will be made.

Data Source: SFWPA, AFS, 2021h

Bond Ratings: The Standard & Poor's publishes credit ratings, and they periodically review SFWPA in relation to its obligations with the 2016 Miners Ranch Treatment Plant Improvement Project Certificates of Participation. Their review concluded with no change in the "A" rating/stable outlook.

Pension Payments: On behalf of its full-time employees, SFWPA contributes the pension payments to the California Public Employees Retirement System (CalPERS), a multiple-employer public employee defined benefit pension plan. CalPERS provides retirement, disability, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including SFWPA. Copies of CalPERS' annual financial report may be obtained from its website and its executive office at 400 Q Street, Sacramento, California 95811. The pension contribution requirements of plan members and SFWPA are established and may be amended by the SFWPA Board of Directors. SFWPA also provides continued health insurance coverage for retired Agency employees, officials, and dependents who meet CalPERS eligibility requirements and have been employed by the Agency for a minimum of ten years (Stiffel, 2016). Please note that SFWPA has designated $3,660,895 in its Retiree Benefits Fund for the OPEB. However, since these funds are not held in an irrevocable trust specifically for retiree health benefits, these amounts are not considered to be plan assets. They do not offset the total OPEB liability.

Figure 6-18, below, depicts the relationship between pension contributions as a percentage of covered-employee payroll. GASB 68 revised and established new financial reporting for pensions effective for 2015. This percentage is calculated using the following formula: contributions in relation to the actuarially determined contribution divided by covered payroll.



The percentage of pension contribution is increasing each year, and the higher percentage reflects that a greater percentage of funds are dedicated to pension contributions in comparison to covered-employee payroll. SFWPA's pension contribution to payroll ratio remains less than (i.e., better than) the percentage paid by other similar water districts, such as the El Dorado Irrigation District, which was 30.8 percent in 2019. Ideally, LAFCO will continue to monitor net pension liability and the pension contribution to payroll ratio to consider long-term fiscal trends as a more extensive time series of data becomes available. Details about SFWPA's pension liabilities are provided in Table 6-30 below.

Table 6-30: Net Pension Liability

SCHEDULE OF THE PROPORTIONATE SHARE OF THE
NET PENSION LIABILITY
Last Ten Years

	Year Ended December 31:						
	2020	2019	2018	2017	2016	2015	2014
Proportion of the net pension liability	0.140835%	0.130820%	0.121640%	0.120450%	0.111181%	0.101384%	0.110077%
Proportionate share of the net pension liability	$ 5,940,529	$ 5,238,532	$ 4,584,129	$ 4,748,058	$ 3,862,276	$ 2,781,438	$ 2,720,542
Covered payroll - measurement period	$ 5,949,907	$ 5,867,873	$ 5,952,396	$ 5,627,825	$ 5,570,519	$ 5,746,942	$ 5,118,332
Proportionate share of the net pension liability as a percentage of covered payroll	99.84%	89.27%	77.01%	84.37%	69.33%	48.40%	53.15%
Plan fiduciary net position as a percentage of the total pension liability	81.64%	82.26%	83.29%	81.13%	74.06%	78.40%	79.82%

Notes to Schedule:
Change in Benefit Terms: None.

Changes in assumptions: In 2017, the accounting discount rate was reduced from 7.65% to 7.15%.

SCHEDULE OF CONTRIBUTIONS TO THE PENSION PLAN - MISCELLANEOUS PLAN
Last 10 Years

	2020	2019	2018	2017	2016	2015	2014
Contractually required contribution employer calendar year	$ 1,064,159	$ 970,912	$ 861,704	$ 801,403	$ 596,806	$ 729,747	$ 431,342
Contributions in relation to the contractually required contributions	(1,064,159)	(970,912)	(861,704)	(801,403)	(596,806)	(729,747)	(431,342)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Covered - employee payroll - calendar year	$ 5,896,357	$ 6,012,159	$ 5,897,229	$ 5,843,236	$ 5,374,903	$ 5,527,640	$ 5,382,338
Contributions as a percentage of covered - employee payroll	18.05%	16.15%	14.61%	13.72%	11.10%	7.57%	8.01%
Date contributions were computed:							
July 1 to December 31	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012
January 1 to June 30	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011
Valuation date:	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Measurement date:	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Methods and assumptions used to determine contribution rates:							
Actuarial method	Entry age normal cost method						
Amortization method	Level percentage of payroll, closed						
Remaining amortization period	Not stated						
Asset valuation method	5-year smoothed market						
Inflation	2.625%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%
Salary increases	Varies by entry age and service						
Investment rate of return	7.25%	7.375%	7.50%	7.50%	7.50%	7.50%	7.50%
Retirement age	50-67 years						

Note: The 2017 contributions in the table above were revised in 2018 to represent accrual basis contributions.

Omitted years: GASB Statement No. 68 was implemented during the year ended December 31, 2014. No information was available prior to this date. Future years will be added prospectively as they become available.

CalPers recognizes that the scale and multi-faceted nature of climate change presents a systemic risk to retirement portfolios across the board. The risks include:

- disruption to portfolio companies' supply chains and operations,
- heightened volatility to financial markets,
- reduced economic growth,
- fixed assets (e.g., real estate), and
- impacts to the financial success of existing business models and portfolio companies

CalPers has implemented its Sustainable Investments Program in an attempt to mitigate these systemic risks (CalPers, n.d.)

6.8.8 Rates

The rates charged by the three water service providers (SFWPA, TWSD, and Cal Water) in the Oroville Area were recently studied in a 2018 report entitled "Oroville Region Water Service Study "prepared by Northstar Engineering for Butte LAFCO (Northstar, 2018).

SFWPA charges fees for water supply, water treatment, distribution service, and capital improvement costs. Typically, during its December meeting, the Board of Directors approves a schedule of fees, rates, and charges for the fiscal year commencing January 1 of the following year. The District Board adopts and publishes its water rate schedule as part of its Rules and Regulations Governing Water Service document (SFWPA, 2021i). Monthly rates charged to customers for potable water have three components, including 1) monthly service charge, 2) rates of use charge, and 3) meter charge, as listed in Table 6-31 below.

Table 6-31: Potable Water Rates, 2021

Potable Water-

Service Charge (per month) ..... $19[74]
Multi-Family Residential Units Service Charge ..... $7.90[75]
(per occupied unit per month)
Rates-of-Use (in addition to Service Charge)[76]:
First 100 Units (10,000 cubic feet) $0.42/unit
After First 100 Units (over 10,000 cubic feet) $0.31/unit
Non-Beneficial Use ..... $1.85/unit[77]
Oversized Meter Charge (in addition to Service Charge; not applicable to mobile home parks, apartment complexes, duplexes, multiple commercial units, etc.[78]):

Meter Size	Monthly Charge
1"	$6.00
1½"	$16.00
2"	$20.50
3"	$50.00
4"	$72.50
6"	$105.00

(Data Source: SFWPA, 2021i)

Charges are also collected for non-potable water, which is raw water often used for agricultural irrigation. Non-Potable Water Charges include a monthly service fee of $21.50 and a rate-of-use charge, as listed in Table 6-32 below.

Table 6-32: Non-Potable Water Charge

Non-Potable Water-

Service Charge (per month)	$21.50[79]
Rates-of-Use (in addition to Service Charge):	
Miners Inch Accounts	$1.95/MI[80]
Metered (unit = 100 cubic feet)	8.67¢[81]
Flat Rate Accounts (per month)	$60.50[82]
(All non-potable rates-of-use equate to $39.00 per acre-foot.)	

(Data Source: SFWPA, 2021i)

In addition to monthly service fees, the Agency also has standard charges for one-time, non-routine items such as a new service charge at $40.84, account transfer charge at $20.85, development plan check charge at 3 percent of the engineer's estimate, and several other similar charges. SFWPA's Rules and Regulations indicate that fees can increase on an annual basis in accordance with the Engineering News Record's National Construction Cost Index.

Based on the information included in Section 6.8 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-33 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

TABLE 6- 33: MSR DETERMINATIONS FINANCIAL ABILITY TO PROVIDE SERVICES

	Indicator	**Determination**
SFWPA-FIN-1	Summary financial information presented in a standard format and simple language.	Financial information is clearly articulated in the Annual Audited Financial Statement and budgets, which are prepared on an annual basis with a fiscal year that begins January 1st. The SFWPA annual budget and financial statement are available to the public through the District website.
SFWPA-FIN-2	District has a published policy for reserve funds, including the size and purpose of reserves and how they are invested.	SFWPA's policy for reserve funds is formally described in the 2005 agreement between SFWPA and the NYWD.
SFWPA-FIN-3	Other financing policies are clearly articulated.	SFWPA's Annual Financial Statement contains a list of its accounting policies. Additionally, the District's Rules and Regulations describe a list of fees and financial responsibilities. The District Rules and Regulations document is readily available on the SFWPA's website.
SFWPA-FIN-4	Compensation reports and financial transaction reports that are required to be submitted to the	The Schedule of Employee Pay Ranges are approved annually by the Board of Directors and available on the SFWPA website. Required reports

	State Controller's Office are posted on the district website.	are sent to the California State Controller for Government Compensation.
SFWPA-FIN-5	Revenues exceed expenditures in 50% of studied fiscal years	Total revenues were greater than the total expenditures in four of the five study years.
SFWPA-FIN-6	Increases or decreases in net position	Changes to the Net Position are shown to be highly variable. Although the general trend of the Net Position is to increase year over the year, 2020 saw a decline in the Net Position due to reduced sale of hydroelectric power due to the drought.
SFWPA-FIN-7	Tax Revenues/Connection Ratio	Each water connection paid an average of $9.80 in property tax for the year 2020. This ratio is based on property tax revenue of $681,269 in 2020 and 69,500 water connections in SFWPA.
SFWPA-Fin-8	Rates were adopted by the Board of Directors	The SFWPA Board of Directors adopts and publishes its water rate schedule as part of its Rules and Regulations Governing Water Service document.
SFWPA-Fin-9	Rates are consistent with requirements of the State Water Resources Control Board, and the process for adopting rates are consistent with Proposition 218	Monthly rates charged to customers for potable water have three components, including: 1) monthly service charge, 2) rates of use charge, and 3) meter charge. SFWPA's Rules and Regulations indicate that fees can increase on an annual basis in accordance with the Engineering News Record's National Construction Cost Index.
SFWPA-Fin-10	Rates are readily available to constituents	Rates are displayed in the Rules and Regulations document on the District's website under the "publications" tab at: <*https://southfeather.com/publications/*

6.8.9 Risk Management

Managing risks helps special districts reduce unforeseen costs associated with risks. Insurance policies assist special districts in managing risks. The Agency obtains insurance through the Association of California Water Agencies' Joint Powers Insurance Authority (ACWA/JPIA) as follows:

- Property insurance up to $150 million, with up to $10,000 deductible per occurrence;
- Flood insurance applies to vehicles and mobile equipment only and has a $5 million program aggregate;
- Auto Insurance and General Liability Insurance up to $58,000,000 per occurrence with a $25,000 retrospective allocation point; and
- Worker's Compensation Insurance meets the statutory employer's liability limit of $2 million excess per accident and per disease (Stifel, 2016).
-

ACWA/JPIA is self-insured up to a certain point per occurrence and then maintains reinsurance coverage through a larger insurance company.

6.8.11: Financial Challenges

Water districts sometimes face challenges that could affect their budget or financial ability to provide services. For example, SFWPA staff indicated that new changes to regulations from Federal and State agencies such as FERC, DSOD, SWRCB occur on an annual basis, and expenses associated with regulatory changes could potentially have a negative effect on each year's fiscal budget (SFWPA, 2021a).

The finances of the SFWPA are affected by its 2005 Agreement with North Yuba Water District (NYWD), which was adopted to help both agencies settle disputes about the utilization of water in the South Fork Feather River and the North Fork Yuba River. Litigation filed by NYWD against SFWPA claiming breach of contract and money owed could also impact the Agency's budget (SFWPA, 2021a).

The MSR consultants have noted that trends indicate that SFWPA may face issues in the future associated with aging water pipes, roadways, and other infrastructure. Additionally, other costs associated with being a water and hydroelectric utility may also increase in the future. Some costs may be beyond the direct control of the Agency. Therefore, the Board of Directors may wish to study various cost and funding options as future needs arise. For example, a proposition 218-notice process could facilitate adding capital infrastructure surcharges to the annual billings.

6.9 Joint Power Authorities

Effective January 1, 2017, Government Code §6503.6 and §6503.8 require LAFCo to be a repository for all Joint Powers Authority Agreements (JPA) within a county related to municipal service provisions. SFWPA participates in one JPA, as listed in the following paragraph.

The Agency is a member of the Association of California Water Agencies (ACWA) Joint Powers Insurance Authority (JPIA), which provides SFWPA's property, liability, auto, worker's compensation, and employee crime insurance policies. This is a pooled insurance coverage plan (SFWPA, 2021a). SFWPA staff regularly interface and have meetings with JPIA on general updates and items of specific interest to SFWPA (SFWPA, 2021a).

6.10 Cost Avoidance & Facilities Sharing

Cost Avoidance

This section highlights cost avoidance practices given necessary service requirements and expectations. Ideally, proposed methods to reduce costs would not adversely affect service levels. In general, water systems have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, SFWPA pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level, as listed below.

- Cooperates with other municipal water purveyors and fire departments in Butte County and the City of Oroville to plan for the implementation of new fire safety regulations (SFWPA, UWMP, 2021g);
- Carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs;
- Participates in one Joint Powers Authority (ACWA JPIA), a pooled insurance program;
- Utilization of a three-party bid process; and
- Utilization of an electronic payment system.
  (Data Source: SFWPA, 2021a).

Additionally, agreements with Yuba County Water District were originally intended as cost avoidance measures. "SFWPA closely coordinates with the North Yuba Water District (NYWD) regarding water supplies and their management (NYWD shares water storage facilities with SFWPA, as well as one of SFWPA's distribution facilities)." (SFWPA, UWMP, 2021g). It is anticipated that as the recent lawsuit from NYWD gets resolved, the cost management of this agreement will improve.

SFWPA successfully reduced overhead in 2020 through a functional reorganization of its staff (SFWPA, 2021a). The new organizational structure is shown on the org chart in Figure 6-3

SFWPA communicates directly with the Butte County Office of Emergency Management (OEM) during disasters or large-scale incidents and non-emergency (regular) periods to work on disaster planning, community preparedness, mitigation, and training. Additionally, SFWPA participated in the 2019 update of the Butte County Local Hazard Mitigation Plan.

Facilities Sharing

SFWPA has successfully shared recreation facilities with the Plumas National Forest, as detailed in the Recreation Service Section 6.6.6. SFWPA and the Plumas National Forest have worked together for many years, and this partnership enables SFWPA to implement the requirements of its FERC license. Additionally, several SFWPA hydroelectric facilities are located within the Plumas National Forest. This facility sharing results in cost savings for both agencies and provides a needed public service for both local families and tourists. Outdoor recreation is an important economic sector for the Oroville Region.

Another example of facilities sharing is the contractual agreement on hydro operations and water conveyance with North Yuba Water District (SFWPA, 2021a).

LAFCO Reorganization

It is sometimes beneficial for an agency to pursue structural or jurisdictional reorganizations to save money and avoid future overhead costs. SFWPA staff has indicated that there are no functional or structural reorganizations that the Agency is evaluating to benefit recipients of services or improve the provision of water collection services at this time.

Goals and Challenges

SFWPA's primary goals are to continue fulfilling its Mission Statement and implementing its new Urban Water Management Plan, new Strategic Plan, and similar plans.

Similar to most water districts in California, SFWPA will likely face several challenges in future years. Solving challenges is tricky because the needs of each water district are unique, and solutions are not one-size-fits-all. However, considering trends and issues yields some potential future challenges that water districts may face, as listed below:

- Responding to future events or opportunities;
- Implementing innovative technology to improve the performance of water systems. For example, SFWPA may find practices to optimize its existing renewable energy program. New technologies like pumped hydro may become cheaper and more versatile in the future. As another example, in California recycled wastewater and captured stormwater are gaining in popularity;
- Regulatory constraints and associated cost concerns are a potential future challenge. Specifically, in regards to the new FERC license for SFWPA, new conditions of approval or mitigation may be challenging to achieve or may become a financial challenge (SFWPA, 2021a);
- Infrastructure resiliency and emergency preparedness are important. For example, communities in California are considering the need to make their water utility systems more resilient, especially during natural disasters and changes in weather patterns; and
- Using alternative financing techniques such as grant applications or revenue bond issuance to finance construction and infrastructure replacement.

Mutual Aid

SFWPA has four Mutual Aid agreements with the following agencies: NYWD, Lake Madrone CSD, Berry Creek CSD, and Paradise Irrigation District (SFWPA, 2021a). These mutual aid agreements allow for SFWPA to perform emergency work (labor, equipment, parts) at "cost" to the receiving entity at the time of emergency need. The agreements are periodically reviewed (personal communication, R. Moseley, 7/11/22). Typically, these types of maintain mutual aid agreements with neighboring purveyors, along with contingency water supply resources, can help an Agency address potential future emergency conditions which could result in lost water supply. This is the reason why LAFCo supports mutual aid agreements.

6.10.1 Determinations for Shared Facilities

Based on the information included in Section 6.10 above, the following written determinations make statements involving each service factor which the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-34 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 6-34: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES		
Number	**Indicator**	**Determination**
SFWPA-SHA-1	The Agency collaborates with multiple other agencies for the delivery of services within its boundary.	SFWPA collaborates with multiple other agencies for the delivery of services within its boundary. For example, SFWPA closely coordinates with the Plumas National Forest to provide recreation facilities.
SFWPA-SHA-2	Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality.	SFWPA has Four Mutual Aid agreements with the following agencies: NYWD, Lake Madrone CSD, Berry Creek CSD, and Paradise Irrigation District. The Agreements for mutual aid periodically reviewed to ensure fiscal neutrality.
SFWPA-SHA-3	Other practices and opportunities that may help to reduce or eliminate unnecessary costs are examined by the District periodically. Ideally, there is a balance between cost efficiency and risk reduction strategies.	In the recent past, SFWPA has implemented an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level, including cooperation with other municipal water purveyors and fire departments in Butte County to implement new fire safety regulations, utilizing its budgeting processes to avoid unnecessary costs, three-party bid process, and electronic payment system. No other cost-efficiency or risk-reduction strategies have been identified.

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