



MIDDLE FORK PROJECT
FINANCE AUTHORITY



Oxbow Powerhouse - July 2019

Budget
2020



MIDDLE FORK PROJECT FINANCE AUTHORITY

The Middle Fork Project Finance Authority was established on January 10, 2006, under a Joint Exercise of Powers Agreement by and between the County of Placer and the Placer County Water Agency.

Purpose of the Authority

The purpose of the Authority is to serve the mutual interests of the County and the Agency, exclusively, to provide for the financing required to obtain a new Federal Energy Regulatory Commission (FERC) license, to approve Future Electrical Energy Sales, and to distribute revenues from Future Electrical Energy Sales.

The Powers of the Authority are specified in the Joint Powers Agreement and among some of these include:

- Review and approve the annual MFP budget
- Contract for the sale of electrical energy
- Distribute the net revenues from the sale of electrical energy
- Incur debt

Structure of the Authority

The Authority Board of Directors consists of 4 members: 2 members from the County Board of Supervisors and 2 members for the Agency Board of Directors.

Board of Directors of Authority for 2019*

Placer County Board of Supervisors

- Jim Holmes**
- Robert Weygandt

Placer County Water Agency

- Primo Santini***
- Mike Lee

** Chair for 2019

*** Vice Chair for 2019

Officers of MFP Finance Authority

- Executive Director: Agency General Manager, Einar Maisch
- Secretary: Placer County Executive Officer, Todd Leopold
- Treasurer: Agency Director of Financial Services, Joseph Parker
- Legal Advisor: Agency Legal Counsel, Scott A. Morris, Kronick, Moskovitz, Tiedemann & Girard

***Sitting Board who approved the 2020 Budget**

Approved by Authority Board of Directors October 10, 2019

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**MIDDLE FORK PROJECT FINANCE AUTHORITY
TABLE OF CONTENTS
2020 BUDGET**

Overview and Transmittal Memorandum	1
Budget Schedule	6
Reserve Schedule	8
MFP Capital Plan	10

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M E M O R A N D U M

TO: Board of Directors Middle Fork Project Finance Authority

FROM: Joseph H. Parker, CPA, Treasurer

DATE: October 10, 2019

RE: Adopted 2020 MFP Finance Authority Annual Budget

Overview

Attached herewith is the Adopted 2020 Middle Fork Project Finance Authority Budget, totaling \$43.8 million, which is comprised of a \$33.7 million operating budget and a \$10.1 million capital budget. The 5-year Budget is provided with 2019 (Adjusted and Projection), the Adopted 2020 Budget (amounts **bolded**), as well as the following four years (2021 - 2024) in the following attached schedules:

- Budget Schedule Years 2019 - 2024
- Reserve Schedule Years 2019 - 2024
- MFP Capital Plan as funded by the Authority 2020 - 2024

In accordance with the Board's General Financial Policies, the budget was prepared with the consultation and involvement of both PCWA and Placer County staff for presentation to the Authority Board.

The following pages provide additional details regarding budgetary changes from 2019, discussion and analysis, and other background information.

2020 Adopted Budget - Overview

Power Sales:

The adopted 2020 Power Sales revenue reflects a \$1.2 million increase, or 3.2% from the Adjusted 2019 Budget. Power Sales revenue is comprised of two primary revenue sources: Energy and Energy Products. Energy and ancillary services are sold directly to the CAISO while Energy Products are conveyed through bilateral agreements resulting in net revenue.

The Energy component of the Power Sales budget is based on 80% of average generation, or 800,000 MWh each year and projected energy prices. Energy prices have increased because of several factors: Growth of solar generation in California has given rise to the “duck curve” in daily grid demand, whereas an abundance of solar power generation supplies substantial mid-day demand thus, causing daily steep ramping energy requirements from other sources in the late afternoon/early evening hours, when solar power diminishes. As a result, energy prices are more volatile, spiking more frequently and with more severity. Additionally, a reduction in Pacific Northwest power imports as a result of increasing local demands and natural gas transport limitations have pushed up future energy prices.

The Energy Products component of the Power Sales budget include resource adequacy, renewable energy credits and carbon-free credits. The pricing and revenue from the bilateral contracts remains unchanged in the 2020 Adopted Budget as compared to the 2019 Adjusted Budget.

The 2020 **Total Operating Expenditures** are increased by \$2.0 million, or 6.3% compared with the Adjusted 2019 Budget. The following discussion provides a comparison between the Adjusted 2019 Budget and the Adopted 2020 Budget for the Operating Budget Expenditures:

Administration:

The Adopted 2020 Budget amounts are similar to the 2019 Budget with a slight increase in administration expenses of \$28,000.

PCWA Power Division – Operating:

Power Operations is decreased by a net \$200,000, or 1.4% from the Adjusted 2019 Budget. The net decrease is the result of the following:

- A decrease in operating services for less facilities and equipment repair and maintenance work totaling \$519,000
- An increase in labor for the estimated 2% COLA (floor), a negotiated 2% EPMC phase-out and other benefit changes totaling \$109,000
- A shift in employee benefit expenses for OPEB (retiree health care), CalPERS unfunded liability, and workers’ compensation claim allowance totaling \$622,000 from Department Budgets to General and Administration
- An increase in Contracted Services for additional consulting for a new Probable Maximum Flood Study, the Afterbay slope investigation, and Inundation Maps
- An increase in shop supplies totaling \$47,000

General and Administrative is increased by \$1.1 million, or 18.5%, primarily the result of an increase in Personnel Services totaling \$1 million as benefit payments that were previously included in Department Budgets moved into the General and Administrative Budget, in addition to an increase in labor due to an estimated 2% COLA increase, a 2% negotiated EPMC phase-out and other benefit changes. Operating Services also increased due to rising insurance costs totaling \$330,000, which was partially offset by a decrease in consulting service needs totaling \$250,000.

Natural Resources Management is increased by \$1.2 million, or 40.7%, which is primarily attributed to the anticipated additional FERC Licensing Implementation costs. The FERC License issuance is anticipated in late 2019 or early 2020 thus, increasing the budget by \$849,000. Required monitoring and related studies will commence with the new license issuance, such as implementing a Sediment Management Plan, a Fish Population Monitoring Plan, and developing an Entrainment Study Plan. Consulting service needs increased \$140,000 in addition to an increase in the environmental budget of \$120,000 for Weather Modification Services (cloud seeding).

Power Resources Management for the energy marketing activities is expected to decrease by a net \$41,000, or 2.4% compared to the Adjusted 2019 Budget. Personnel Services decreased by \$50,000 due to benefit payments totaling \$87,000 that were previously included within the Department Budget moved to General and Administration partially offset by an increase in labor of \$37,000. Additionally, power settlements increased \$21,000 while membership dues decreased \$13,000.

Routine Capital is decreased by \$147,000, or 20.5%. The Routine Capital Budget is for the purchase of replacement or new vehicles and equipment and varies annually based on needs.

Debt Service is the same as the Adjusted 2019 Budget with semi-annual principal and interest payments of \$2.8 million.

Capital Plan – The 2020 Capital Projects appropriations and 5-Year Capital Plan reflect necessary additional investments in infrastructure, as determined by three significant factors: the age of the existing capital infrastructure, the revenue benefits that derive from being available to generate energy at all times for the California energy market, and the requirements of the new FERC license, which is anticipated to be issued in late 2019 or early 2020.

The Adopted 2020 MFP Capital Plan appropriations total \$10.1 million, and are segmented into three broad categories:

1. Upgrade or Enhancement Projects,
2. Renewal, Replacement and Reliability Projects, and
3. FERC License Implementation Projects.

Over the next 5-years, the Upgrade or Enhancement Projects total \$6.0 million or 10% of the 5-year amount and are considered “one-time” expenditures (performed every 20 – 30 years) as these projects implement new technology and enhance generation flexibility for more efficient, effective and improved generating or operating capabilities of the MFP.

The second category of Renewal, Replacement and Reliability Projects total \$17.3 million or 28% of the 5-year amount, with an annual average total of \$3.5 million.

The FERC License Implementation Projects are also considered “one-time” capital projects which total \$39.5 million or 63% of the 5-year total Capital Plan. With the FERC license anticipated in late 2019 or early 2020, these capital projects have specific implementation requirements based on the new FERC license.

For years beyond 2024, capital projects, primarily renewal and replacement projects, are currently estimated to be approximately \$2 - \$6 million per year. In addition, there will be a few upgrade or enhancement projects to be completed as well as certain FERC license implementation projects and annual resource needs.

Reserves – The Authority’s General Financial Policies adopted in April 2013 requires reserve funding which is rooted in the Authority’s JPA requirement to establish and maintain prudent reserve levels. This Policy sets forth three reserve categories: Operating, Capital, and Emergency. Reserve funding and reporting is to be part of the annual budget process. The reserve category full funding targets in priority funding order with the funding amount set by the Authority Treasurer, as follows:

Operating Reserve: Operating reserve target amount is currently at \$25.75 million, which is approximately one year of operating expenses.

Emergency Reserve: Emergency reserve target is based on the total amount of emergency funds considered necessary under a severe outage contingency and will be

evaluated with other funding/financing resources. The emergency reserve target is currently set at \$2.0 million for insurance deductible and other immediate needs.

Capital Reserve: The current capital reserve funding target is \$20 million, however, given the continual resource needs for unforeseen and unplanned capital projects this amount may need to be raised in the future to \$30 million. These recent unforeseen capital project resource needs have been the sediment removal, core raise of Hell Hole dam, leaking surge shaft, and the LL Anderson spillway modification.

Currently, the Capital Reserve target funding is \$20 million and is not yet funded to its current target level. The Capital Reserve functions as a “sinking-fund” for annual capital project appropriations and thus help supplement capital project funding.

Pursuant to the Authority Policy, the appropriation for next year’s budget (2020) will be funded when approved by the Board.

Five Year Budget Schedule (2020 – 2024)

In the Budget Schedule, Power Sales revenue exhibits an increase in 2020 as a result of higher anticipated increase in energy prices. In years 2021-2024 revenue projections increase as prices for resource adequacy bilateral contracts have increased.

Also worth noting is that the 5-year Capital Plan increased \$17.1 million from the 2019 5-year Capital Plan to \$62.7 million as the FERC License issuance is anticipated in late 2019 or early 2020 and there are mandatory project implementation requirements within the first 5 years. The Adopted 2020 5-year Budget is expected to use the Capital Reserves for years 2020 – 2024. Once FERC License Implementation is near completion, the Capital Reserves will be replenished and are expected to be fully funded by the end of 2024.

MIDDLE FORK PROJECT FINANCE AUTHORITY

Budget Schedule

Years 2019 - 2024

	Adjusted 2019	Projection 2019
Revenue:		
Power Sales <i>(Note 1)</i>	\$ 37,440,000	62,000,000
Interest Income	200,000	1,000,000
Total Revenue	<u>37,640,000</u>	<u>63,000,000</u>
Expenditures and Other Uses:		
Administration:		
Operating Supplies/Services	2,000	2,000
Administration	70,000	73,000
Professional Services	50,000	50,000
Total Administration Expenditures	<u>122,000</u>	<u>125,000</u>
PCWA Power Division - Operating:		
Power Operations	14,336,817	13,736,817
General and Administrative	6,122,672	6,122,672
Natural Resources Management	2,997,311	1,247,311
Power Resources Management	1,686,253	1,686,253
Routine Capital	716,800	716,800
Total PCWA Power Division - Operating	<u>25,859,853</u>	<u>23,509,853</u>
Debt Service <i>(Note 2)</i>	<u>5,690,730</u>	<u>5,690,730</u>
Total Operating Expenditures	<u>31,672,583</u>	<u>29,325,583</u>
Capital Investment Program Appropriations:		
Upgrades	6,100,000	6,100,000
Renewal, Replacement and Reliability	3,475,000	3,475,000
FERC License Implementation Projects	1,549,000	1,549,000
Hell Hole Dam Core Raise	8,300,000	8,300,000
Total Appropriations to Capital Projects	<u>19,424,000</u>	<u>19,424,000</u>
Total Expenditures and Appropriations	<u>51,096,583</u>	<u>48,749,583</u>
Revenue over/(under) Expenditure and Appropriations	(13,456,583)	14,250,417
Appropriation for Next Yrs Budget (Sec 3.2.6)		(4,098,337)
(To)/From Reserves	<u>13,456,583</u>	<u>(10,152,080)</u>
Net Revenue	<u>\$ -</u>	<u>-</u>
Reserves - Projected Year-End Balances:		
Operating Reserve - Target \$25.75M	\$ 25,750,000	25,750,000
Emergency Reserve - Target \$2.0M	2,000,000	2,000,000
Capital Reserve - LT Target \$20.0M	<u>3,869,767</u>	<u>19,678,430</u>
Total	<u>\$ 31,619,767</u>	<u>47,428,430</u>

General Note: The amount encumbered for consulting and construction contracts that span more than one fiscal year totals approximately \$10.9 million.

Note 1: Power Sales are subject to significant fluctuation in both energy prices and hydrology. Revenue is budgeted based on 80% of average generation, relying on operating reserves to cover short periods of drought or mechanical outages. Energy Products are budgeted based on bilateral contracts. Years 2020-2024 are based on projections determined by the Energy Marketing Management team.

Note 2: At December 31, 2019, the debt outstanding totals \$71 million.

Adopted 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024
38,643,064	47,309,260	47,607,820	48,866,380	49,484,940
1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
39,643,064	48,309,260	48,607,820	49,866,380	50,484,940
2,000	2,100	2,200	2,300	2,400
98,000	100,600	103,200	106,700	110,200
50,000	51,300	52,600	54,000	55,400
150,000	154,000	158,000	163,000	168,000
14,134,915	14,700,000	15,288,000	15,900,000	16,536,000
7,252,397	7,542,000	7,844,000	8,158,000	8,484,000
4,216,251	4,947,000	4,347,000	2,905,000	2,765,000
1,645,742	1,712,000	1,780,000	1,851,000	1,925,000
570,000	593,000	617,000	642,000	668,000
27,819,305	29,494,000	29,876,000	29,456,000	30,378,000
5,690,730	5,690,730	5,690,730	5,690,730	5,690,730
33,660,035	35,338,730	35,724,730	35,309,730	36,236,730
3,350,000	1,300,000	290,000	450,000	575,000
3,550,000	2,000,000	3,500,000	6,050,000	2,150,000
3,181,366	8,690,216	16,039,458	10,322,250	1,231,600
-	-	-	-	-
10,081,366	11,990,216	19,829,458	16,822,250	3,956,600
43,741,401	47,328,946	55,554,188	52,131,980	40,193,330
(4,098,337)	980,314	(6,946,368)	(2,265,600)	10,291,610
4,098,337	(980,314)	980,314	-	-
-	-	5,966,054	2,265,600	(8,553,224)
-	-	-	-	1,738,386
25,750,000	25,750,000	25,750,000	25,750,000	25,750,000
2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
19,678,430	19,678,430	13,712,376	11,446,776	20,000,000
47,428,430	47,428,430	41,462,376	39,196,776	47,750,000

MIDDLE FORK PROJECT FINANCE AUTHORITY

Reserve Schedule

Years 2019 - 2024

	Adjusted 2019	Projection 2019
Operating Reserve [First Priority - (Note 1)]:		
Beginning of Year	\$ 25,750,000	25,750,000
Contributions and Uses	-	-
Balance End of Year	<u>\$ 25,750,000</u>	<u>25,750,000</u>
Emergency Reserve [Second Priority - (Note 2)]:		
Beginning of Year	\$ 2,000,000	2,000,000
Contributions and Uses	-	-
Balance End of Year	<u>\$ 2,000,000</u>	<u>2,000,000</u>
Capital Reserve [Third Priority - (Note 3)]:		
Beginning of Year	\$ 17,326,350	17,326,350
Contributions to Reserve	5,967,417	21,776,080
Appropriation to Projects from Reserve	(19,424,000)	(19,424,000)
Subtotal	<u>13,456,583</u>	<u>(2,352,080)</u>
Balance End of Year	<u>\$ 3,869,767</u>	<u>19,678,430</u>
Amount Needed to Meet Target, if any	<u>\$ (16,130,233)</u>	<u>(321,570)</u>
Total Reserve Balance	<u>\$ 31,619,767</u>	<u>47,428,430</u>

Note 1: The **Operating Reserve** funding target is currently set at \$25.8 million to meet operational needs.

Note 2: The **Emergency Reserve** funding target is currently set at \$2 million to provide immediate and designated funds for deductible(s) and seed monies to commence any significant unforeseen capital expenditures, thus enabling PCWA to respond immediately to the emergency condition. PCWA will annually assess the level of Emergency Reserve, balancing the trade off between insurance emergency reserve funds and alternative funding, and propose recommended changes as needed.

Note 3: The **Capital Reserve** funding target is currently set at \$20 million. Per policy, the Capital Reserve serves as a sinking fund, hence the annual capital investment program appropriations are drawn from the Capital Reserve, and annual contributions to the Capital Reserve are based on total revenue less total operating expenditures up to the funding target.

Adopted 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024
25,750,000	25,750,000	25,750,000	25,750,000	25,750,000
-	-	-	-	-
25,750,000	25,750,000	25,750,000	25,750,000	25,750,000
2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
-	-	-	-	-
2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
19,678,430	19,678,430	19,678,430	13,712,376	11,446,776
10,081,366	11,990,216	13,863,404	14,556,650	10,509,824
(10,081,366)	(11,990,216)	(19,829,458)	(16,822,250)	(1,956,600)
-	-	5,966,054	2,265,600	(8,553,224)
19,678,430	19,678,430	13,712,376	11,446,776	20,000,000
(321,570)	(321,570)	(6,287,624)	(8,553,224)	-
47,428,430	47,428,430	41,462,376	39,196,776	47,750,000

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020-2024

Project No.	Project Description	Project Lead	Project Type	Total Estimated Project Cost (Note 2)	Prior Funding
MINOR PROJECTS - TOTAL					
MAJOR PROJECTS - AUTHORIZED: (Note 1)					
17004P	French Meadows Forest Management	PWR	Environmental	\$ 2,200,000	375,000
14007P	French Meadows Powerhouse Reliability Upgrades	PWR	Plant	Ongoing	3,800,000
14003P	Hell Hole Powerhouse Reliability Upgrades	PWR	Plant	Ongoing	750,000
14009P	Middle Fork Powerhouse Reliability Upgrades	PWR	Plant	Ongoing	4,100,000
14010P	Oxbow Powerhouse Reliability Upgrades	PWR	Plant	Ongoing	1,150,000
14012P	Ralston Powerhouse Reliability Upgrades	PWR	Plant	Ongoing	2,900,000
14013P	FERC License Implementation - Project Infrastructure	PWR	Plant	28,464,000	12,350,000
14014P	FERC License Implementation - Project Recreation Facilities	ENG	Environmental	16,686,000	2,225,000
17013P	Sediment Removal	PWR	Plant	Ongoing	6,000,000
SUBTOTAL - MAJOR AUTHORIZED PROJECTS					
TOTAL CAPITAL PROJECTS					

Note 1: **Major Projects** are projects that exceed \$1 million in total estimated project cost. These projects may be comprised of a variety of sub-projects for which appropriations will be allocated, administered and accounted for as separate "Projects" at the PCWA project management level, as PCWA is the lead entity for MFP projects.

Note 2: **Total Estimated Project Cost** may include prior funding and completed sub-projects. These costs for the powerhouse reliability projects are defined as "Ongoing" because underlying sub-projects will be added, completed and removed over time. Stand alone Project Cost estimates are continually updated as the scope of the project may evolve over time.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020-2024

Adopted 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	TOTAL 2020-2024
\$ -	-	-	-	-	-
650,000	250,000	100,000	50,000	-	1,050,000
450,000	750,000	2,670,000	450,000	400,000	4,720,000
1,100,000	650,000	-	-	-	1,750,000
1,450,000	1,250,000	-	100,000	250,000	3,050,000
950,000	100,000	700,000	650,000	75,000	2,475,000
800,000	300,000	320,000	250,000	1,000,000	2,670,000
2,507,840	7,533,060	6,717,200	2,406,600	51,600	19,216,300
673,526	1,157,156	9,322,258	7,915,650	1,180,000	20,248,590
1,500,000	-	-	5,000,000	1,000,000	7,500,000
10,081,366	11,990,216	19,829,458	16,822,250	3,956,600	62,679,890
\$ 10,081,366	11,990,216	19,829,458	16,822,250	3,956,600	62,679,890

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

French Meadows Forest Management

Project Number: 17004P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Environmental

The Agency is partnering with the Tahoe National Forest, The Nature Conservancy, American River Conservancy, and the University of California, Sierra Nevada Research Institute on the French Meadows Forest Resilience Project. The aim of the French Meadows Forest Resilience Project is to increase the pace and scale of forest restoration in a critical municipal watershed, using an approach of ecologically-based forest management.



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	\$ 2,200,000	650,000	250,000	100,000	50,000	-	1,050,000

This project is a Major Project, or project category, with a total estimated project cost at more than \$1 million, as defined by MFPFA policy as Potential, Planned or Authorized. Major Projects may be comprised of a variety of sub-projects that will be allocated, administered and accounted for as separate "Projects" through PCWA's accounting system, as PCWA is the lead entity for MFP projects.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

French Meadows Powerhouse Reliability Upgrades

Project Number: 14007P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

Powerhouse reliability upgrades encompass projects that will sustain or increase generator availability (the percentage of time a generator is available to be synchronized to the grid and produce electricity) and projects that will improve employee safety.

1. Generator Protection Upgrade
2. Turbine PRV Replacement



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	Ongoing	\$ 450,000	750,000	2,670,000	450,000	400,000	4,720,000

This project is a Major Project, or project category, with a total estimated project cost at more than \$1 million, as defined by MFPFA policy as Potential, Planned or Authorized. Major Projects may be comprised of a variety of sub-projects that will be allocated, administered and accounted for as separate "Projects" through PCWA's accounting system, as PCWA is the lead entity for MFP projects.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

Hell Hole Powerhouse Reliability Upgrades

Project Number: 14003P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

Powerhouse reliability upgrades encompass projects that will sustain or increase generator availability (the percentage of time a generator is available to be synchronized to the grid and produce electricity) and projects that will improve employee safety.

1. Hell Hole Governor Upgrade
2. Hell Hole Cottage Garage Rebuild
3. Hell Hole Substation Rebuild



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	Ongoing	\$ 1,100,000	650,000	-	-	-	1,750,000

This project is a Major Project, or project category, with a total estimated project cost at more than \$1 million, as defined by MFPFA policy as Potential, Planned or Authorized. Major Projects may be comprised of a variety of sub-projects that will be allocated, administered and accounted for as separate "Projects" through PCWA's accounting system, as PCWA is the lead entity for MFP projects.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

Middle Fork Powerhouse Reliability Upgrades

Project Number: 14009P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

Powerhouse reliability upgrades encompass projects that will sustain or increase generator availability (the percentage of time a generator is available to be synchronized to the grid and produce electricity) and projects that will improve employee safety.

1. High Voltage Switchyard Upgrades
2. Main Transformer and Bus Protection Replacement
3. Powerhouse HVAC Upgrade
4. Interbay Dam Radial Gate Hoist Improvement



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	Ongoing	\$ 1,450,000	1,250,000	-	100,000.00	250,000	3,050,000

This project is a Major Project, or project category, with a total estimated project cost at more than \$1 million, as defined by MFPFA policy as Potential, Planned or Authorized. Major Projects may be comprised of a variety of sub-projects that will be allocated, administered and accounted for as separate "Projects" through PCWA's accounting system, as PCWA is the lead entity for MFP projects.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

Oxbow Powerhouse Reliability Upgrades

Project Number: 14010P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

Powerhouse reliability upgrades encompass projects that will sustain or increase generator availability (the percentage of time a generator is available to be synchronized to the grid and produce electricity) and projects that will improve employee safety.

1. Generator Excitation System Replacement



Oxbow Powerhouse

Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	Ongoing	\$ 950,000	100,000	700,000	650,000	75,000	2,475,000

This project is a Major Project, or project category, with a total estimated project cost at more than \$1 million, as defined by MFPFA policy as Potential, Planned or Authorized. Major Projects may be comprised of a variety of sub-projects that will be allocated, administered and accounted for as separate "Projects" through PCWA's accounting system, as PCWA is the lead entity for MFP projects.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

Ralston Powerhouse Reliability Upgrades

Project Number: 14012P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

Powerhouse reliability upgrades encompass projects that will sustain or increase generator availability (the percentage of time a generator is available to be synchronized to the grid and produce electricity) and projects that will improve employee safety.

1. Penstock Coupling Investigation
2. Upper Penstock Access Improvements
3. Afterbay Dam Radial Gate Hoist Improvement



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	Ongoing	\$ 800,000	300,000	320,000	250,000	1,000,000	2,670,000

This project is a Major Project, or project category, with a total estimated project cost at more than \$1 million, as defined by MFPFA policy as Potential, Planned or Authorized. Major Projects may be comprised of a variety of sub-projects that will be allocated, administered and accounted for as separate "Projects" through PCWA's accounting system, as PCWA is the lead entity for MFP projects.

PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

FERC License Implementation - Project Infrastructure

Project Number: 14013P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

These capital projects consist of infrastructure work required under the new FERC license. The work includes:

1. Hell Hole Dam Low Level Outlet Upgrades
2. Hell Hole Dam Seasonal Storage
3. LL Anderson Dam Low Level Outlet Upgrades
4. Interbay Dam Low Level Outlet Upgrades & Stream Gage Installation
5. Duncan Creek Diversion Dam Upgrade & Trail
6. North & South Fork Long Canyon Diversion Upgrades
7. Middle Fork Project Cooperative Road Management



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	\$ 28,464,000	2,507,840	7,533,060	6,717,200	2,406,600	51,600	19,216,300

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PLACER COUNTY WATER AGENCY
MFP Capital Plan
As Funded by the Middle Fork Project Finance Authority
2020 - 2024

FERC License Implementation - Project Recreation Facilities

Project Number: 14014P
Project Category: Major-Authorized
Project Lead: Engineering
Project Type: Environmental

This project consists of work to rehabilitate recreational facilities that will be required by the new FERC license. The work includes:

1. Afterbay Picnic Area, Afterbay Boat Ramp, MF Stream Gage Trail Improvements, and Indian Bar Access Area
2. French Meadows RV Dump Station and Campground
3. French Meadows South Shore Water Supply
4. Hell Hole Boat Ramp Extension and Parking, General Parking, and Potable Water
5. Middlefork Powerhouse Pedestrian Bypass
6. Hell Hole Recreation Work Station and Storage Facility



Funding Source	Total Estimated Project Cost	2020 Adopted	2021 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	\$ 16,686,000	673,526	1,157,156	9,322,258	7,915,650	1,180,000	20,248,590

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PLACER COUNTY WATER AGENCY
MFP Capital Plan
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2020 - 2024

Sediment Removal

Project Number: 17013P
Project Category: Major-Authorized
Project Lead: Power
Project Type: Plant

The project includes removing accumulated sediment from Middle Fork Interbay regulating reservoir within the Middle Fork American River Hydroelectric Project. Work in Interbay will be limited to a five-week-long system outage in October 2020 when reservoir levels can be lowered. Included in the work will be sediment excavation, hauling, processing, and placement at select sacrificial sediment augmentation locations, permanent fill embankment, and temporary fill embankment locations.



Funding Source	Total Estimated Project Cost	2020 Adopted	20201 Projected	2022 Projected	2023 Projected	2024 Projected	Total
Middle Fork Project Finance Authority	Ongoing	\$ 1,500,000	-	-	5,000,000	1,000,000	7,500,000

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