Eel-Russian Project Authority

New Eel Russian Facility Update

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Executive Director, Eel-Russian Project Authority

August 2025

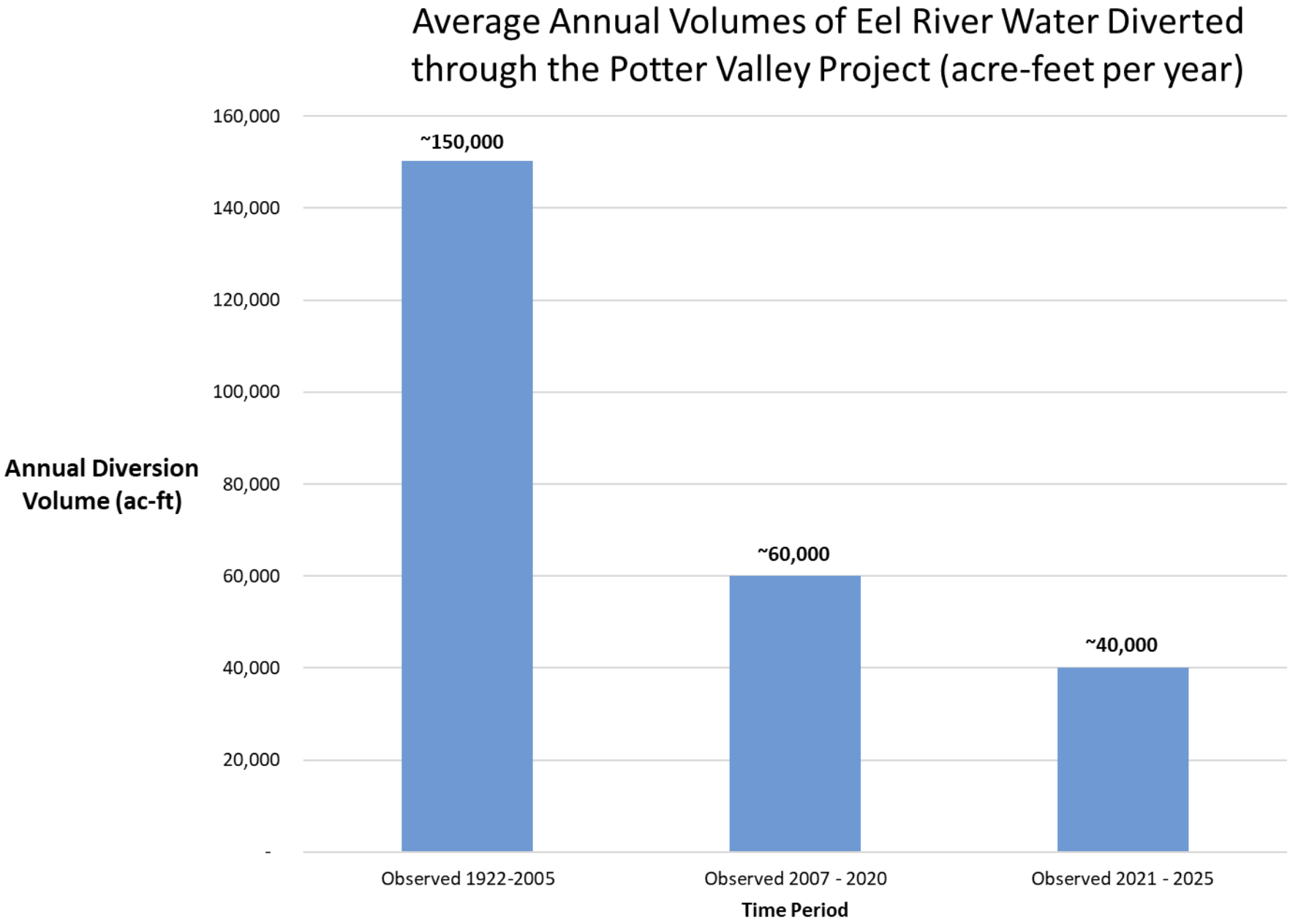
Introduction to the Potter Valley Project

- Currently owned by PG&E, has diverted water from the Eel River to the Russian River since 1908.
- Historic diversions have been year-round for hydropower.
- The Project has adversely affected anadromous fisheries, environmental quality, and related beneficial uses of water in the Eel River Basin.
- Water diverted from the Eel to Russian River has supported agriculture, communities, and the environment for more than 100 years.
- In 2019, PG&E announced intent to stop operating the project as no longer economically feasible.
- By July 29, 2025 PG&E will file License Surrender Application.
- Russian River & Eel River interests implementing a plan of action.

Scott Dam & Lake Pillsbury

Cape Horn Dam & Van Arsdale Reservoir

Coyote Valley Dam & Lake Mendocino


Average Annual Volumes of Eel River Water Diverted through the Potter Valley Project (acre-feet per year)
Annual Diversion Volume (ac-ft)
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-
~150,000
~60,000
~40,000
Observed 1922-2005
Observed 2007 - 2020
Observed 2021 - 2025
Time Period

Two-Basin Partnership

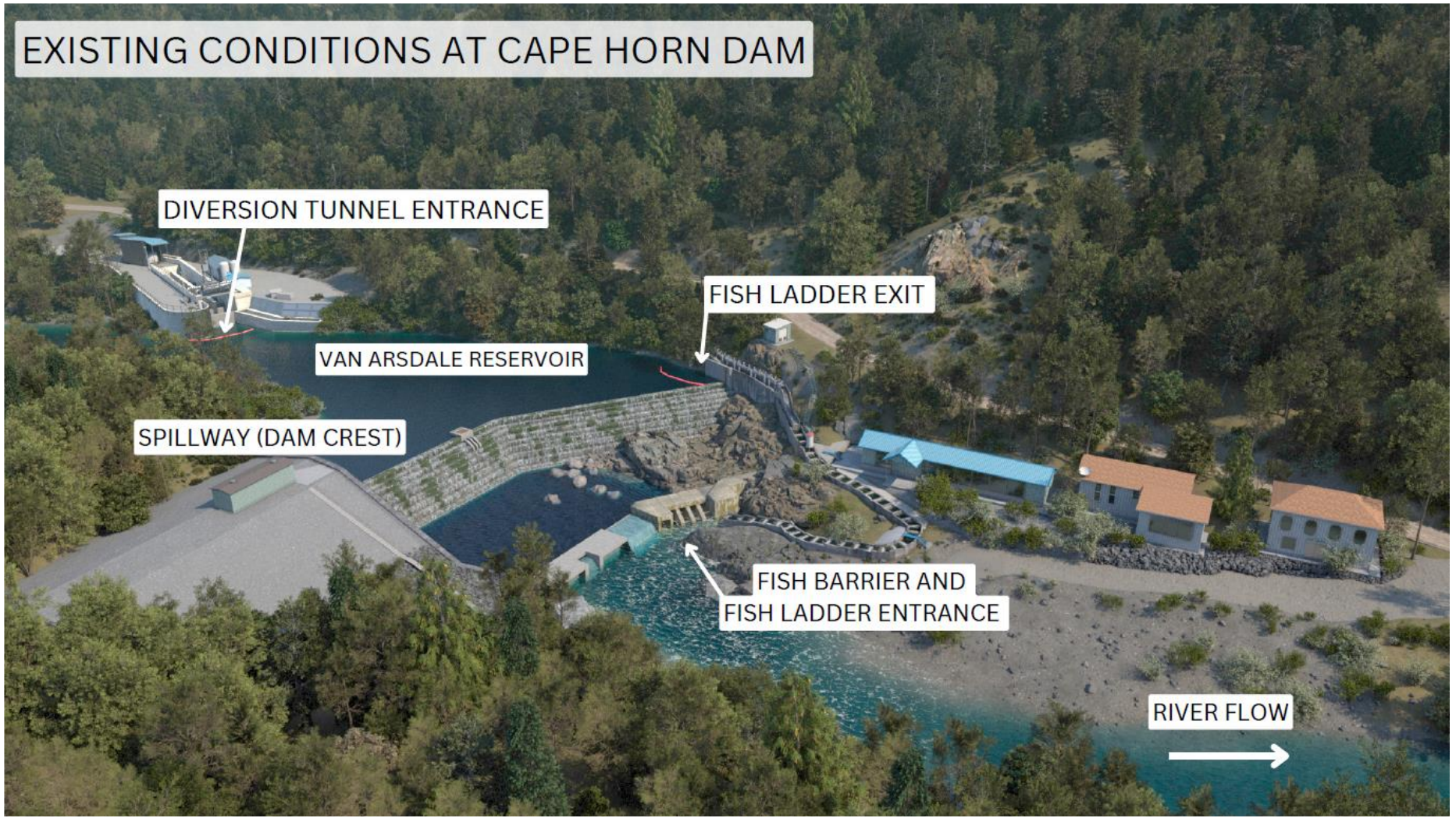
- Improve fish migration and habitat on the Eel River with the objective of achieving naturally reproducing, self-sustaining, and harvestable native anadromous fish populations; and
- Maintain continued water diversion from the Eel River through the existing tunnel to the Russian River to support water supply reliability, fisheries, and water quality in the Russian River Basin.

Eel-Russian Project Authority

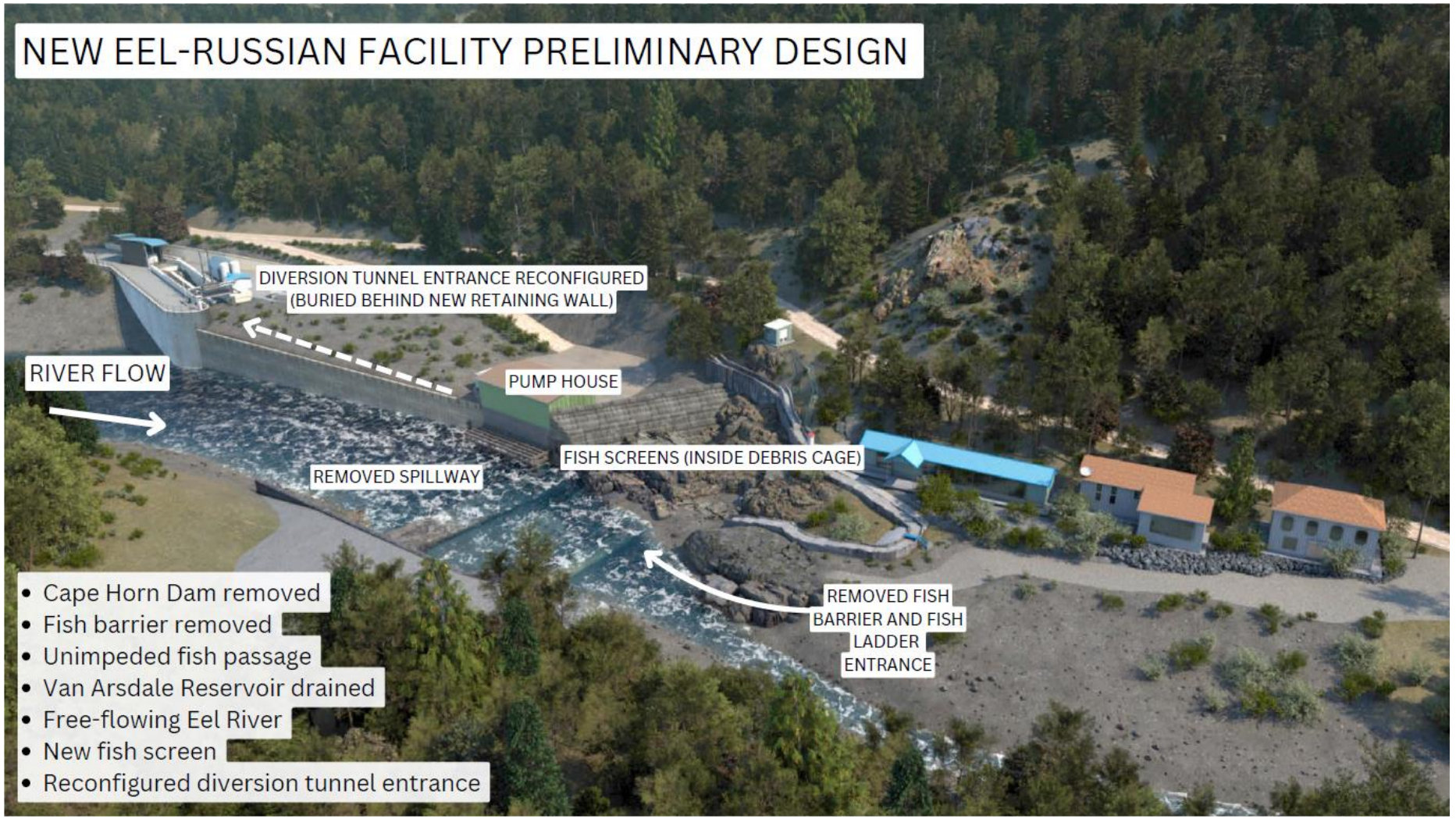
- In December 2023, Sonoma Water, Sonoma County, and Mendocino County IWPC formed ERPA as a joint powers authority. RVIT has a seat on ERPA's Board of Directors.

- ERPA proposes to construct, operate, and maintain a New Eel-Russian Facility to divert water from the Eel River, at the site of and following the decommissioning and removal of Cape Horn Dam, on terms consistent with restoration of the anadromous fisheries of the Eel.

Cape Horn Dam Background



New Eel Russian Facility (NERF)



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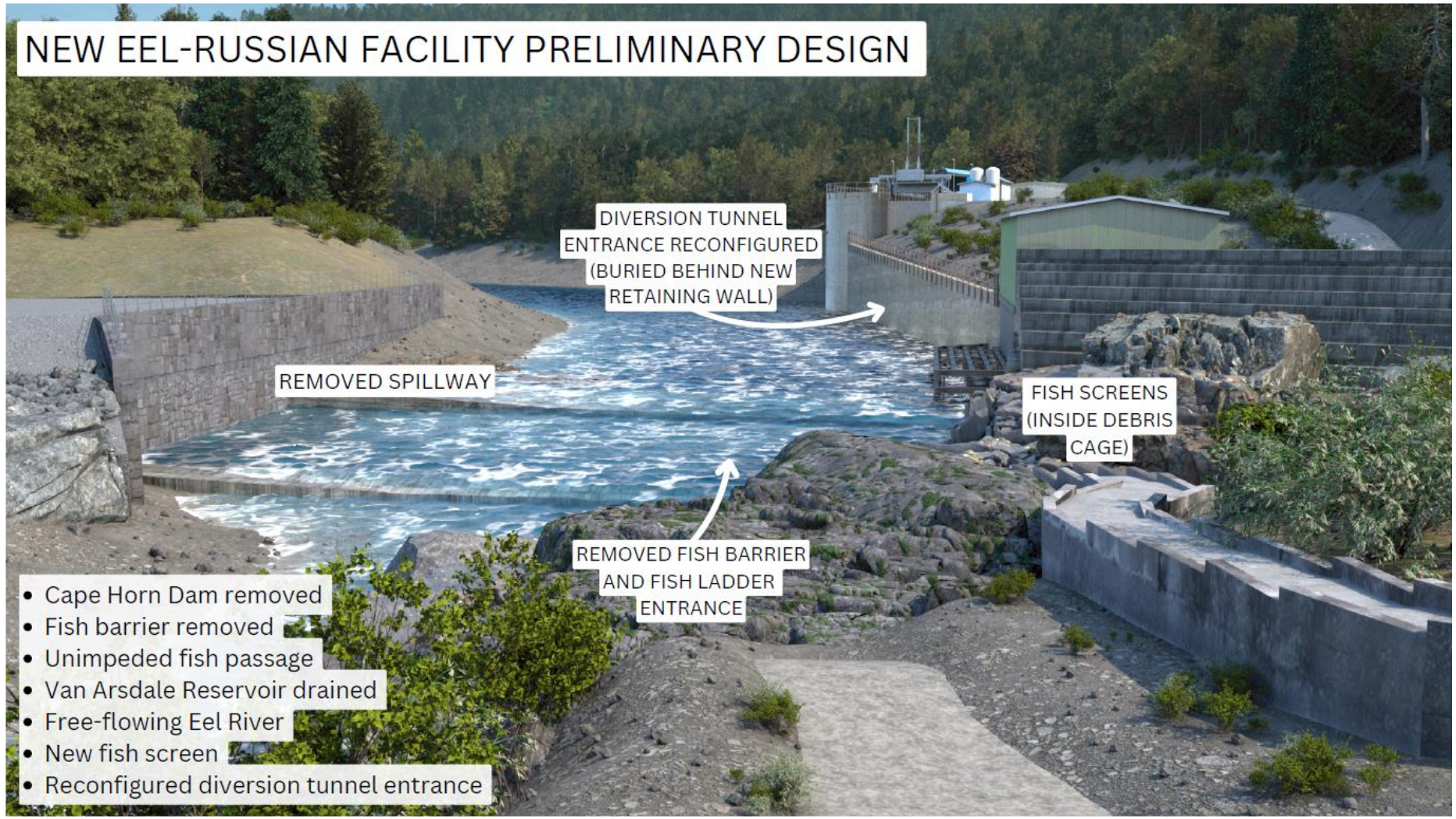
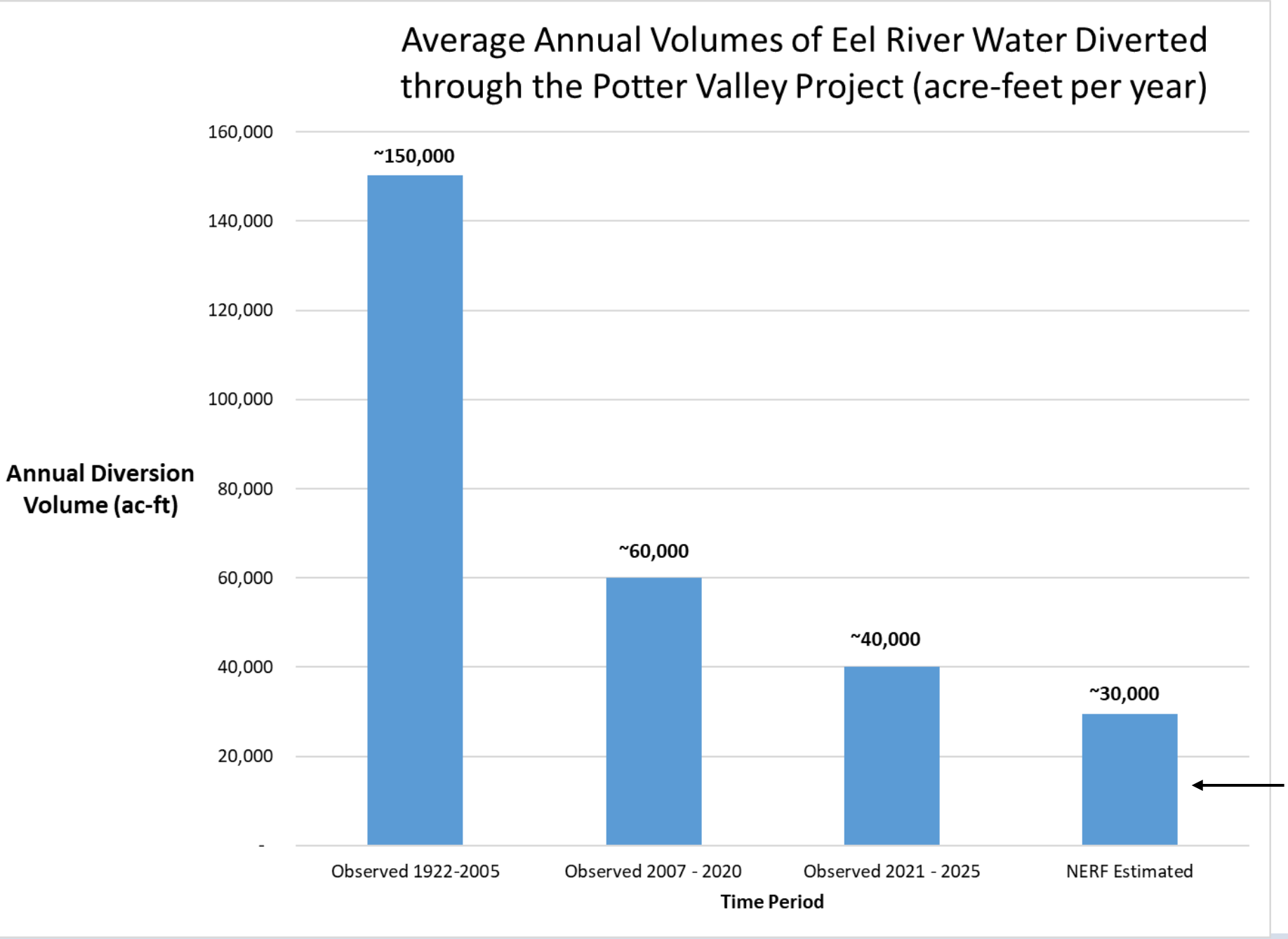


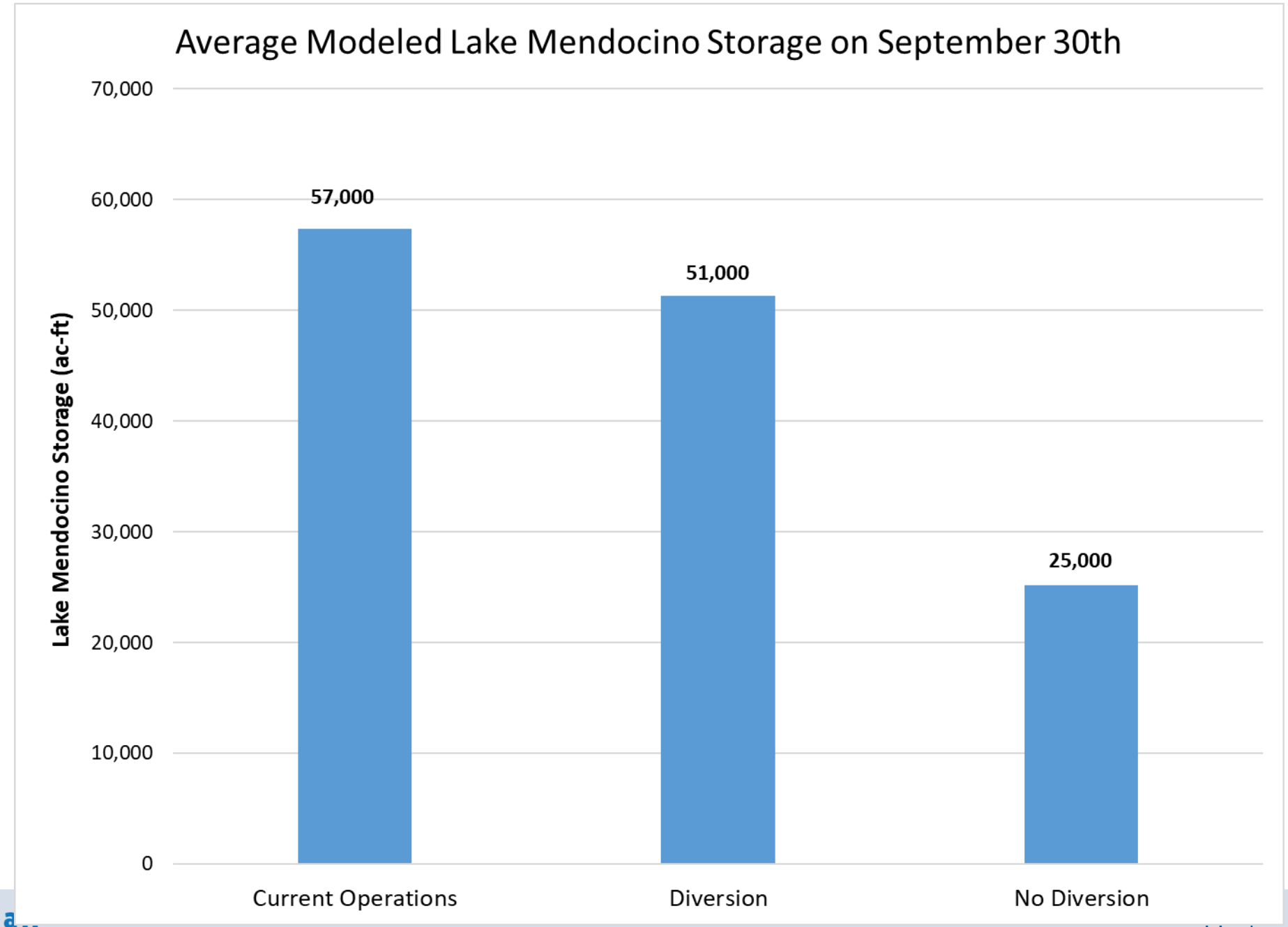
New Eel Russian Facility Diversion Rules

Developed by RVIT (Applied River Sciences)

	Fall Flows*	Winter Flows	Spring Flows	Summer Flows
Date Range:	Oct 1 – Dec 31	Jan 1 – Feb 29	Mar 1 – May 31	Jun 1 – Sep 30
Floor:	300 cfs	250 cfs	125 cfs	35 cfs
Maximum Diversion Rate:	20%	30%	20%	20%
Ramping Rates	To protect floor, NERF hits Maximum Diversion Rate (20%) When Eel River flow is 375 cfs	To protect floor, NERF hits Maximum Diversion Rate (30%) When Eel River flow is 357 cfs	To protect floor, NERF hits Maximum Diversion Rate (20%) when Eel River flow is 156 cfs	To protect floor, NERF hits Maximum Diversion Rate (20%) when Eel River flow is 43.75 cfs
Maximum Diversion Capacity	300 cfs	300 cfs	300 cfs	300 cfs



Approx. NERF estimate constrained by available Lake Mendocino storage

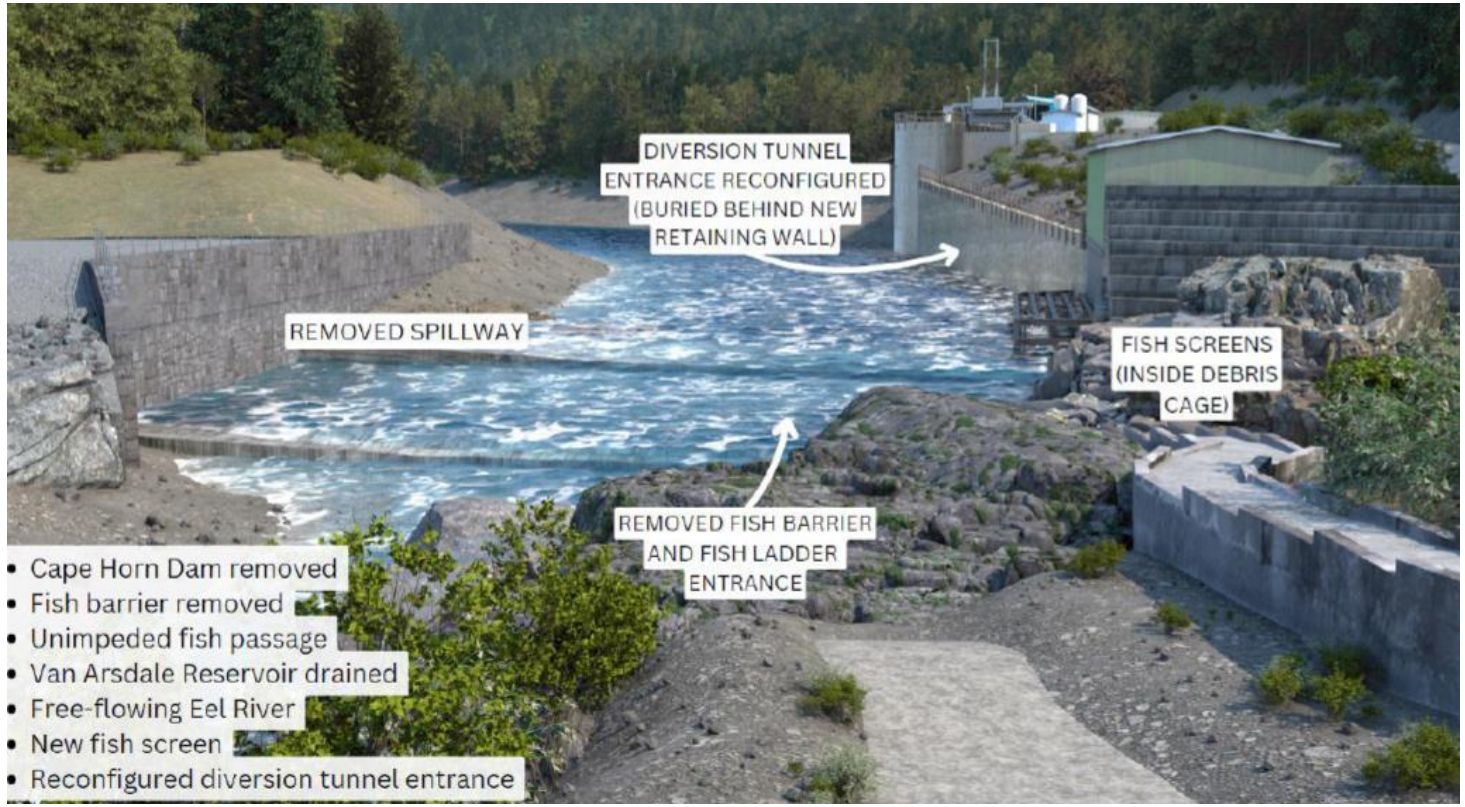

Average Modeled Lake Mendocino Storage on September 30th
Lake Mendocino Storage (ac-ft)
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
57,000
51,000
25,000
Current Operations
Diversion
No Diversion

New Eel-Russian Facility CEQA Process

- Scope of Work in development anticipating Environmental Impact Report (EIR) preparation covering project construction, operations, and maintenance
  - Will include multiple opportunities for public and agency input during process
  - Initial work to:
    - Clarify New Eel-Russian Facility Project Description and Objectives
    - Distinguish from PG&E project
    - Identify future diversion scenarios
  - Organize, synthesize existing information and identify studies needed for environmental compliance
  - Technical analyses for hydrology, biological resources, cultural resources, recreation, agriculture, others
  - Project-specific and cumulative effects

New Eel-Russian Facility CEQA Process

- Close coordination with ERPA member agencies, State Water Board and other agencies to complete studies on schedule, keeping pace with PG&E license surrender environmental review
- Timeline approximately 24 months once initiated



ERPA/NERF Next Steps and Potential Schedule

- PG&E License Surrender Application filed with FERC by July 29, 2025
- All Parties Sign Water Diversion Agreement by July 29, 2025
- 2025-2028
  - ERPA Business Plan
  - NERF 60%-90% design
  - ERPA CA Environmental Quality Act (CEQA) for NERF
  - U.S. Army Corps Of Engineers NEPA for ERPA Clean Water Act Compliance
  - National Marine Fisheries Service (NMFS) Biological Opinions for NERF construction and operations
- 2028-2030
  - ERPA Final Engineering, Permits, Bidding, Contracting
- 2030-2035
  - NERF Construction

ERPA Communications Coordinated with Partner Agencies

Providing information to the public:

- Project related background information
- Past timelines and estimated schedules
- Topical informational Fact Sheets
  - NERF / ERPA overview
  - Explaining how new diversion would affect Russian River water supply
  - Explaining how Water Diversion Agreement rules work and how they protect Eel River ecosystem
- Robust information on ERPA website
- Respond to media inquires

Website provides in-depth information on how we got here

Eel-Russian Project Authority

Home Meetings News Files FAQs Contact

Eel-Russian Project Authority Reports

New Eel-Russian Facility Preliminary Engineering Report describing fish passage and water supply infrastructure design alternatives at the site of Cape Horn Dam on the Eel River
(PDF 40.3 MB)

Eel-Russian Project Authority Documents

Feb. 7, 2025 - Memorandum of Understanding to Advance a Water Diversion Agreement for a New Eel-Russian Facility

Russian River Water Forum Documents

August, 2023 - Potter Valley Project Proposal

Proposal for Pacific Gas & Electric Company. Draft license surrender application, Potter Valley Project

Two Basin Solution Documents

Sept. 2, 2021 - Request for an Abeyance Letter (Project No. 77-285)

Sept. 13, 2021 - Request for an Abeyance Letter (Project No. 77)

Attachments

July 2021 - Analyses of Fine Sediment Erosion

July 2021 - Analyses of Fine Sediment Erosion Effects on Aquatic Species

January 2021 - Lake Pillsbury Vegetation Management Discussion

January 2021 - Lake Pillsbury Sediment Management Discussion

Initial Study

March 16, 2021 - Determination on Requests for Study Modifications and New Studies

Sept. 16, 2020 - Initial Study Report Announcement Letter

ERPA Fact-Sheets

Eel-Russian Project Authority

Spring 2025

PROJECT OVERVIEW

POTTER VALLEY PROJECT BACKGROUND

The Potter Valley Project is located on the Eel River and the East Branch Russian River, in Mendocino and Lake Counties. Owned and operated by Pacific Gas and Electric Co. (PG&E), it includes Scott Dam, Cape Horn Dam and a hydroelectric powerhouse (no longer generating). The Potter Valley Project includes facilities to divert water from the Eel River to the East Branch Russian River, and eventually to Lake Mendocino and the mainstem Russian River. This provides water for farmers, businesses, and residents in Mendocino, Sonoma and Marin counties.

THE EEL-RUSSIAN PROJECT AUTHORITY

A joint powers authority created in 2023, the Eel-Russian Project Authority is governed by a five-member Board of Directors made up of representatives from the County of Sonoma, Sonoma County Water Agency (Sonoma Water), the Mendocino County Inland Water and Power Commission, and the Round Valley Indian Tribes.

PURPOSE OF THE EEL-RUSSIAN PROJECT AUTHORITY

PG&E will decommission the Potter Valley Project on the Eel River and remove Scott and Cape Horn dams. This will bring to an end more than 100 years of diverting water from the Eel River to the Russian River watershed. Originally used to generate electricity for the Ukiah Valley, the diverted water also provided for municipal, irrigation and ecosystem benefits to the Russian River watershed.

In 2019, when PG&E announced it was withdrawing its preliminary license application and would no longer seek relicensing, it invited interested parties to consider taking over the hydroelectric license. No group came forward and as a result, PG&E began the formal license surrender process. Local agencies, recognizing the urgent need to protect the regional water supply, formed the Eel-Russian Project Authority to lead the transition and develop a viable solution for maintaining the crucial water diversion.

Given the diversion of Eel River water will end with PG&E's license surrender and decommissioning of the project, the primary focus of the Eel-Russian Project Authority's work is to develop a reconfigured wa diversion facility upon PG&E's remc of Cape Horn Dam (via Federal Ene Regulatory Commission order). This continue to support water supply re the Russian River watershed by dive from the Eel River during fall, winte spring for storage and use in the Ru during the dry season. Diversions wc undertaken so as not to affect the E ecosystem.

Maintaining seasonal diversions of E River water to the Russian River anc Mendocino would preserve the wate for hundreds-of-thousands of peopl Mendocino, Sonoma, and Marin cou support wildlife, riparian habitat and ecosystems along the Russian River.

WHAT ARE THE IMPACTS WITI WATER DIVERSION?

Without the seasonal Eel River diver Mendocino would frequently have sl reducing water availability to downst users. Further, there would be a seri of Lake Mendocino draining in drou without substantial intervention suc curtailment of downstream water rig as has already occurred in 2021 and

If a replacement project is not imple termination of this water diversion w a serious threat to the businesses, ci water suppliers, residents, tribes, far wildlife, riverine habitats, and fisheri which depend on the Russian River water supply for over 600,000 peo Mendocino, Sonoma and Marin cou the cessation of the water diversion,

contir

What is the Federal Energy Regulatory Commission?

The Federal Energy Regulatory Commission (sometimes referred to as FERC) is an independent agency regulating natural gas and hydropower projects, as well as the interstate transmission of natural gas, oil and electricity. Federal Energy Regulatory Commission authorization is required for PG&E to surrender its license and decommission the Potter Valley Project, remove the dams, and provide the opportunity for the New Eel-Russian Facility project to be implemented. Various environmental reviews and studies, such as required by the National Environmental Policy Act, will need to be conducted prior to a final Federal Energy Regulatory Commission decision.

the tens of millions of dollars per year would be expected in the affected local economies.

In February 2025, several entities expressed their support for the concept of a project to provide for a seasonal diversion of water, by signing a Memorandum of Understanding. These included California Department of Fish & Wildlife, Round Valley Indian Tribes, Sonoma Water, Mendocino County Inland Water and Power Commission, Cal-Trout, Humboldt County and Trout Unlimited.

THE EEL-RUSSIAN PROJECT AUTHORITY'S WATER DIVERSION FACILITY REPLACEMENT PROJECT

In 2024, the Eel-Russian Project Authority submitted a proposal to PG&E to allow for the construction of a new diversion facility, called the New Eel-Russian Facility. After Cape Horn Dam and a fish barrier are removed, and Van Arsdale Reservoir is drained, the Eel River will be free-flowing. The preliminary concept of the New Eel-Russian Facility is that a mechanical pump station would be constructed, utilizing the existing water diversion tunnel (buried behind a new retaining wall), with a reconfigured diversion tunnel entrance. Water would only be transferred during seasonal wet periods. To take full advantage of the seasonal diversions, studies are underway investigating expanding storage in Lake Mendocino and finding other locations for storing water from the Eel River. A new fish screen would be installed so that fish would remain in the Eel River.

PROJECT COST AND FUNDING

The total construction cost of the new diversion facility is preliminarily estimated at $50 million (as of March 2025). Russian River water users will pay for the cost of annual operations and maintenance, and support restoration efforts on the Eel River.

In late 2023, the U.S. Bureau of Reclamation awarded a $2 million grant to Sonoma Water to advance the engineering design of the diversion facility. Additional federal and state funds are being pursued to reduce design, permitting, and construction cost for Russian River water users.

STATUS OF THE EEL-RUSSIAN PROJECT AUTHORITY'S EFFORTS

- It's anticipated that PG&E will file its Final Surrender Application with the Federal Energy Regulatory Commission on July 29, 2025. The application includes the concept of the New Eel-Russian Facility project.
- While the Federal Energy Regulatory Commission considers PG&E's surrender and decommissioning application, the Eel-Russian Project Authority will complete engineering designs for the new facility and work with other state and federal regulatory agencies to secure the permissions necessary to construct the facility.
- The design and permitting phase of the new facility project is expected to last several years.

PROJECT TIMELINE

EEL-RUSSIAN PROJECT AUTHORITY

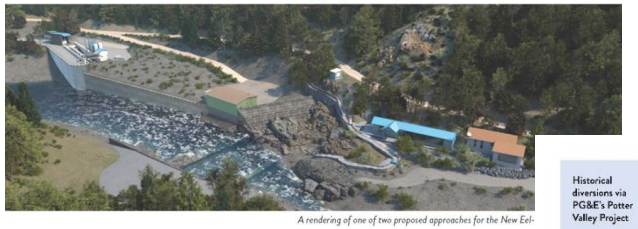
404 Aviation Boulevard Santa Rosa, CA 95403

www.eelrussianauthority.org

Summer 2025

How future Eel River diversions might affect Russian River water supply

Eel-Russian Project Authority



A rendering of one of two proposed approaches for the New Eel-

Once PG&E removes Cape Horn Dam, the New Eel-Russian Facility will continue to support wate resiliency in the Russian River watershed by maintaining diversion of water from the Eel River duri seasons for storage and use during the dry season. Diversions would be undertaken so as not to affe River's ecosystem.

Maintaining seasonal diversions of Eel River water to the Russian River and Lake Mendocino would the water supply for hundreds of thousands of people in Mendocino, Sonoma and Marin counties, supporting agricultural uses, wildlife, riparian habitat and sensitive ecosystems along the Russian Ri

New Eel-Russian Facility: Operational overview and diversion capacity

Location
The new diversion facility will be built at the former Cape Horn Dam site, which will be removed as part of PG&E's Potter Valley Project decommissioning process.

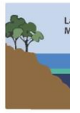
Diversion infrastructure
The facility will include a pump station which will operate seasonally during high flow in the Eel River (during wet seasons — fall, winter and spring). The pump station will convey water into the existing diversion tunnel, which has a capacity of approximately 300 cubic feet per second (2,244 gallons per second, equivalent to about 595 acre-feet per day).

Estimated annual diversion volumes
Computer modeling indicates that under typical wet-season conditions, the facility can reliably divert up to 50,000 acre-feet/year. Depending on rainfall levels and Lake Mendocino storage capacity, diversion volumes up to 30,000 acre-feet/year are anticipated.

Storage capacity and operational constraints

Lake Mendocino storage
Lake Mendocino's maximum water supply storage capacity between Nov. 1 and March 1 is 68,400 acre-feet. Based on Forecast-Informed Reservoir Operations (a water supply management strategy using advanced watershed monitoring and weather and water forecasting), the U.S. Army Corps of Engineers may, at its discretion, retain an additional 11,650 acre-feet of water, increasing total seasonal storage to 80,050 acre-feet between Nov. 1 and March 1, with a further increase to 111,000 acre-feet on May 10.

Under typical wet-season conditions, and dependent on Lake Mendocino storage capacity, diversion volumes up to 30,000 acre-feet/year are anticipated.



Storage C

- Water Supp
- Forecast Inf Reservoir O = additiona
- Winter Floo = additiona

Historical diversions via PG&E's Potter Valley Project

Between 1922 and 2005, PG&E diverted an average of approximately 150,000 acre-feet/year from the Eel River to the Russian River basin. An acre-foot is 325,851 gallons of water — enough to cover one acre of land with one foot of water.

From 2007 to 2020, annual diversions decreased to approximately 60,000 acre-feet/year due to changes in PG&E's operating license issued by the Federal Energy Regulatory Commission.

Since 2021, diversions have further declined to a range of 30,000–40,000 acre-feet/year due to failing infrastructure and seismic risks associated with Scott Dam.

Potential for future additional storage

The U.S. Army Corps of Engineers, with local sponsors Mendocino County Inland Water and Power Commission and the Lytton Tribe, is evaluating the potential of increasing storage in Lake Mendocino by raising the Coyote Valley Dam. Additional feasibility studies are examining off-channel storage alternatives and groundwater recharge opportunities within the Potter Valley area and along the East Fork of the Russian River.

Impacts of no diversion

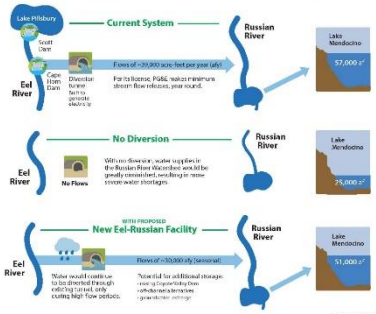
With no diversion, water supplies in the Russian River Watershed would be greatly diminished, affecting agriculture, fire suppression, ecosystems, recreation and drinking water supply, and pose a serious risk of Lake Mendocino draining in drought years.

Project schedule

Decommissioning and construction timeline
The timing of PG&E's removal of Cape Horn Dam is contingent upon the Federal Energy Regulatory Commission's issuance of a Surrender Order and completion of associated environmental studies. The Eel-Russian Project Authority, a Joint Powers Authority, is responsible for the design, permitting, construction, operation and maintenance of the new diversion facility — the New Eel-Russian Facility.

Construction of the facility will take place simultaneously with the dam removal, minimizing disruption to water diversions and ecological impacts to the Eel River. The design and permitting phases of the New Eel-Russian Facility are expected to span several years, with concurrent regulatory and technical reviews guiding final implementation.

Comparison of Current System, No Diversion and proposed New Eel-Russian Facility



Eel-Russian Project Authority

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