



July 24, 2026

Honorable Debbie-Anne A. Reese, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Via e-filing, FERC Docket No. P77-332

**Re: Scoping Document 1 for (PG&E's) Potter Valley Hydroelectric Project
Surrender and Decommissioning, Project No. P-77-332**

Dear Secretary Reese,

This letter is submitted as the comments of Friends of the River and FV Corregidor regarding Scoping Document 1 for the proposed Potter Valley Hydroelectric Project surrender and decommissioning. We appreciate the opportunity to provide these comments in support of the ultimate goal of producing a legally and technically adequate Final EIS.

Friends of the River is a 501c3 non-profit organization dedicated to preserving and restoring California's rivers, streams, and their watersheds as well as advocating for sustainable water management by influencing public policy and inspiring citizen action.

Fishing Vessel FV Corregidor is an ocean commercial fishing family business that has brought fresh, healthy seafood to California markets for over 50 years. The owners, signatory to this letter, are also Pacific Gas and Electric (PG&E) ratepayers and enjoy the many beneficial uses of water in both the Eel and Russian Rivers.

Summary of Comments

We agree with the assessment that keeping Scott and Cape Horn Dams is infeasible due to seismic risk, lack of a new operator in a reasonable timeframe, and a conservative business decision to consider the interests of ratepayers and shareholders.

- We support the surrender and decommissioning of Scott Dam and Cape Horn Dam as soon as possible and without delay.
- The analysis of doing so must recognize that there are viable water supply alternatives to continued operation of these dams. Notably, a Water Diversion Agreement (WDA)¹ was signed by Eel and Russian River water users, counties, and agencies on July 16, 2025. The WDA proposes a New Eel-Russian Facility (NERF) to supply water from the Eel to be stored in the Russian River, as well as a commitment to provide money for restoring fisheries to a harvestable surplus in the Eel River.
- We request that you analyze:
 - (1) The economic cost of lost fishery jobs and an impaired North coast fishing economy as a result of construction and operation of the Potter Valley Hydroelectric Project,
 - (2) The regional economic benefits of a restored commercial, recreational, and cultural fishery, and
 - (3) a condition that PG&E mitigate for historic damage to the fisheries economies of Humboldt and Mendocino Counties during the period the dams have been operated, as documented below.
- Since funding for the NERF pumping station is uncertain and may be delayed, the Draft EIS should include a No-NERF Alternative in the Dam Decommissioning plan, to make sure dam removal will not be delayed in that case. As currently outlined, the Eel Russian Project Authority (ERPA) won't actually acquire the property until after the NERF is built, which could make it hard to get funding for the NERF.
- We also urge FERC to hold PG&E responsible to implement suppression of predatory pike minnow that have spread throughout the Eel River Watershed from introduction as bait in Lake Pillsbury and are a major impediment to recovery of ESA-listed salmonids that support local sport, commercial, and subsistence fishing-dependent jobs and economies on the Eel River and in the ocean.
- We recommend that FERC evaluate the feasibility of additional methods to augment the proposed "Rapid Removal" alternative described in PG&E's Decommissioning Plan, as discussed below.
- We respectfully request that FERC hold public hearings near Eureka, as also requested by Humboldt County, to better serve residents of the Eel River who live far from Ukiah who are impacted the Project.

¹ <https://www.sonomawater.org/media/PDF/Water%20Resources/Potter%20Valley%20-%20ERPA/2025-07-28%20NERF%20WDA.pdf>

The following sections provide more detailed discussion regarding FERC's main reasons for not retaining Scott Dam and regarding additional scoping concerns.

Seismic risk

Currently PG&E owns the seismic risk associated with Scott Dam and Lake Pillsbury resulting from the Bartlett Springs earthquake fault that underlies them. It is unclear who ultimately bears the cost of insurance to cover the risk, whether it is ratepayers or shareholders.

A seismically sensitive area, Bartlett Springs Fault is adjacent to the larger San Andreas Fault, which joins the Mendocino Fracture Zone and the Cascadia Subduction Megathrust Trench at the "Triple Junction," just south of the mouth of the Eel River where it enters the ocean.^{2,3} A recent study shows that timing of historic Cascadia and San Andreas earthquakes is interlinked, meaning that a quake in one fault one often triggers the other.⁴

Underscoring these concerns, the participants in the meeting in Ukiah, California to receive public scoping comments on PG&E's Surrender and Decommissioning application experienced shock waves from the June 24, 2026, Magnitude 5.6 earthquake in Redwood Valley, centered 12 miles from Scott Dam and north of Ukiah. The M5.6 with multiple aftershocks was on the Mayacamas fault, parallel to the Bartlett Springs Fault.²

Moreover, people who live in Humboldt County and Mendocino County near the Mainstem Eel River and the Lower Eel River are at direct risk of catastrophic flooding as the result of seismic failure. The Inundation Maps⁵, withheld from public view by PG&E as CEII/CUI (Critical Energy/Electric Infrastructure/ Controlled Unclassified Information) were published by California's Division of Safety of Dams (DSOD) as being in the public interest for emergency plans with the following note:

"DSOD Note: Dam owner stamped the entire map as CEII/CUI. However, DSOD does not consider information submitted to it, whether it be the entire map or information on the map, to meet the definition of CEII/CUI. DSOD recognizes that

² USGS Interactive

map__<https://earthquake.usgs.gov/earthquakes/eventpage/nc75382936/map?historic-seismicity=true&shakemap-mmi-contours=false&tectonic-plates=true&tectonic-motion=true>

³ "Expert: Recent quakes are 'Very Different.'" Daniel Mintz, Mad River Union, October 26, 2023
<https://www.madriverunion.com/articles/expert-recent-quakes-are-very-different/>

⁴ Geosphere research article, September 29, 2025

<https://pubs.geoscienceworld.org/gsa/geosphere/article/21/6/1132/661517/Unravelling-the-dance-of-earthquakes-Evidence-of>

⁵ Inundation maps: Scott Dam CA00398_MD_Scenario 1

https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2#

<https://fmds.water.ca.gov/maps/damim/service/document/download/3727/>

the map contains specific security-sensitive information, which is similar in nature to CEII/CUI, and so DSOD has carefully reviewed the map and redacted specific security-sensitive information before making the map available to the public.”

The inundation maps show that on a “sunny day” scenario dam failure, the water would rise 57 feet at Cape Horn Dam. Chris Schutes of California Sportfishing Protection Alliance (CSPA) described how many bridges and roads would be taken out by dam failure in his June 16, 2023, testimony to the PUC⁶:

“Based on my review, DSOD’s inundation maps show that failure of Scott Dam would inundate five bridges on U.S. Highway 101, the main north-south transportation artery between Santa Rosa and Eureka, California. Dam failure would inundate at least 12 additional bridges, including bridges on state highway 162, the main route to Covelo and the Round Valley Indian Reservation. Dam failure would inundate numerous sections of local roads, several campgrounds and parts of several small hamlets along the mainstem Eel River, much of the Eel River Delta west of Loleta, California, and the project diversion and other facilities at Cape Horn Dam and Van Arsdale Reservoir.”

Additionally, DSOD’s “High Hazard” rating indicates there will be loss of human life in the case of a dam failure. DSOD not only agreed with PG&E’s decision to lower the reservoir level but stated that PG&E shall not raise it until they get written permission from DSOD.

From PG&E’s January, 2025, Draft Application for License Surrender and Application for Non-Project Use of Project Lands, Vol I:

“To reduce the potential seismic risk, by letter dated May 22, 2023,¹⁶ PG&E notified FERC that they are indefinitely imposing a reservoir restriction by keeping the spillway gates at Scott Dam open so that water cannot be impounded above the spillway elevation, thereby reducing water storage capacity in Lake Pillsbury by approximately 20,000 acre-feet (PG&E 2023). In an April 12, 2023, letter, Division of Safety of Dams (DSOD) concurred with PG&E’s proposed reservoir restriction (DSOD 2023). During a routine inspection in July 2021, PG&E discovered a transformer at the Potter Valley Powerhouse that did not meet current operating standards. The powerhouse has been offline since that time. **Based on the new reservoir restriction**, PG&E has no plans to replace the transformer and return the Potter Valley Powerhouse to service.” (emphasis added)

¹⁶ FERC Accession No. 20230523-5020.”

⁶ Chris Shutes, CSPA, testimony to the PUC. A-22-09-018 CHRC-02 June 16, 2023 https://site-media.americanwhitewater.org/Document_5913.pdf

When PG&E filed their request with FERC on May 23, 2023 for a “variance” to keep more cold water in the reservoir to release to protect endangered Eel River salmon and steelhead, FERC responded in granting the variance that “PG&E determined, and FERC’s D2SI (Division of Dam Safety and Inspections) and DSOD (California Department of Safety of Dams) concur, that the seismic instability of Scott Dam may be greater than previously understood.” (cite?) The Lake County website assertion and posted DSOD inspection that the dams are safe to operate is dated October 18, 2023, with the lake level lowered by 10 or approximately 20,000 acre-feet.⁷

Landslide Risk and Unreliable Water Supply

There are numerous possible scenarios where Lake Pillsbury becomes an unreliable water supply for Potter Valley, as well as a safety hazard for Mendocino and Humboldt County residents downstream from Scott Dam. The only low-level outlet from Scott Dam is at risk of being plugged either by an active landslide on the south abutment or from sloughing of sediment built up behind the dam at low water. PG&E’s engineers have cautioned not to lower the lake level too low for that reason.

There is a large boulder (that PG&E calls “the pinnacle”) that the original Scott Dam builders were going to anchor the dam on until they found it was sliding down the hill. Instead, the engineers of the time made a corner or dogleg in the dam structure on the south abutment that is inherently less strong.⁸ According to the California Department of Water Resources:

“The North Coast area of California is one of the most geologically unstable areas in the country. It also supports a major timber industry. Soil erosion and landsliding are major land-forming processes. One characteristic in making land use decisions is once a landslide has occurred the slope is permanently weaker. Such activities as logging, road building, and grazing may be enough to reactivate landslides and cause significant losses in timber production, fishery, and water quality.”⁹

Private Ownership

PG&E, owner of the Scott Dam and Cape Horn Dam, has found it uneconomical to continue to operate and maintain them, even in the absence of liability for dam failure and ongoing damage to threatened and endangered fisheries. Neither PG&E nor FERC were able to find a buyer for this aged-out, money losing hydropower project during the

⁷ Scott Dam—Inspection of dam and reservoir in certified status_)10.18.23.

<https://www.lakecountycalifornia.gov/1859/Lake-Pillsbury#docaccess-a2ff148f819260875405bf3e310d89a9e2b1cac375cc923608d9c9f1a051cda0>

⁸ Friends of the Eel River to FERC June 30, 2023__<https://www.rrfc.net/files/544af3b8a/2023%2C+6-30+FOER+Response+to+4-3-23+Lake+County+Comments+on+Scott+Dam+ops.pdf>

⁹ “Watershed Management for Unstable and Erodible of North Coast California” by State of California, Resources Agency, Department of Water Resources, Northern District; Prepared for the U.S. Environmental Protection Agency and the State Water Resource Control Board, October 1982.

relicensing and subsequent surrender process. PG&E has decided that keeping the project is not worth it to their ratepayers and shareholders. PG&E offered the following statement published in Lake County News Sept. 3, 2025:¹⁰

“PG&E made the challenging and irreversible decision not to relicense the Potter Valley Project as it was uneconomic for our customers. Over time, **PVP became non-economic for PG&E’s customers as the cost of generating has exceeded the cost of alternative sources of renewable power on the open market.**” [emphasis added]

“Realizing that agriculture and communities had come to rely upon the water, nearly 10 years ago, PG&E reached out to stakeholders and suggested they take over the project. When no one did, PG&E issued a request for proposals from interested parties such as other hydropower producers. No one sought ownership then.

“In 2019, PG&E withdrew its application for a new FERC license. The decision to cease relicensing of the project is not one PG&E took lightly, as we recognize the important regional and state significance, particularly around water supply, recreation, and the project’s effects on the Eel and Russian Rivers.

“We have always said the dams are safe, otherwise we would not be operating them. In 2023 PG&E completed a study showing the seismic concerns at Scott Dam were greater than previously understood and required mitigation to meet PG&E’s safety standards and those of our dam safety regulators. As mitigation, PG&E kept the maximum reservoir elevation at least 10 feet below the full elevation. Well before the updated analyses, PG&E made the decision to decommission the Potter Valley Project as it is uneconomical. The updated analysis is not the driver of decommissioning, despite what some claim.”

Costs to Fishing Jobs and Benefits of Restoring fisheries

It is necessary to analyze both the costs of lost fishing jobs as well as the benefits of restored fisheries. PG&E’s operation of the Potter Valley Project has continued to harm the fishing economies of Mendocino and Humboldt Counties, while dam removal and restoration would benefit the Eel River fisheries that are economically important to coastal ocean sport and commercial fishery-dependent communities, and a once-thriving world-class sport fishery on the Eel River itself.

The Potter Valley Project has exceeded the timeline of its Incidental Take Permit under its hydropower license that has expired, according to the National Marine Fisheries Service,

¹⁰ <https://lakeconews.com/news/82701-lake-county-officials-challenge-pg-es-claims-about-potter-valley-projects-seismic-safety>

which issued the permit. The Project's operation during the last ten years continues to be harmful to Eel River salmon and steelhead that are listed under the Endangered Species Act due to their very low numbers.

The PG&E diversion, allowed by a water right dated 1905 for up to 340 cfs (cubic feet/second) in flows (= 246,148 acre-feet/year), from 1922 to 2006 took an average of about 150,000 acre-feet/year of water out of the Eel River during those years. This has had devastating impacts on Eel River-based salmon fisheries, including ocean commercial and sport fishing. Fishing is food production, like agriculture, and requires water to support that crop. In fact, the Eel River salmon fisheries and those who rely on them have paid – and continue to pay – a very steep price in lost coastal salmon fisheries economics benefits and the loss of more than 1,500 fishing-supported jobs.¹¹ Also see Appendix A.¹²

With Lake Pillsbury's level lowered due to seismic risk, sediment filling in the lake, and not being able to use all the water to avoid having sediment plug the only low-level outlet (the needle valve) there is not enough cold water available to release for the maintenance of these endangered fish stocks. Predatory, warm water pike minnow have spread throughout the Eel River system and thrive in the warm waters of Lake Pillsbury, along with bigmouth bass that have been seen downstream from Cape Horn Dam.

A condition should be added for PG&E to suppress the release of pike minnow and bass into the river during drawdown and decommissioning, and to implement pike minnow suppression throughout the Eel River that escaped from the Project.

The ocean salmon fishery offshore from the mouth of the Eel River has been closed for over 30 years from the Horse Mountain (latitude 40-05, now 40-10) to the South Jetty of Humboldt Bay and out 200 miles. Although the Eel River was once the fourth-largest salmon producing river on the West Coast,¹³ after the Columbia, the Sacramento/San Joaquin System and the Klamath/Trinity River System, salmon and steelhead populations

¹¹ *A River in the Balance: The Benefits and Costs of Restoring Natural Water Flows to the Eel River*, Center for Environmental Economic Development (CEED), Summer 2002, citations on page 12 under "Market Value of the Entire Eel River Fishery," which was \$50 million in 2002 dollars. In today's 2026 dollars, estimated Eel River salmon-related fisheries economic losses are now over \$93 million/year, and the median household income in Humboldt County as of today is \$61,160 as a definition of a "family-wage job." Dividing that figure into \$80 million in losses = 1,524 lost jobs.

¹² Comments by Pacific Coast Federation of Fishermen's Associations and the Institute of Fisheries Resources on PG&E Surrender of License and Application for Non-Project Use of Project Lands (Filed 7/25/25) ("LSA") (P-77-332) and Application for Non-Capacity Amendments of License (P-77-318)

¹³ California State Coastal Conservancy 2016. <https://scc.ca.gov/2016/05/13/exciting-projects-on-the-eel-river-north-coast-coastalact40/>

are currently 1-3% of historic numbers,¹⁴ leading to their listing under the Endangered Species Act and fishing closures.

Because the ocean fisheries are managed by the Pacific Fisheries Management Council with “weak stock management,” to protect depleted stocks, and because the Eel River fish mix in the ocean with healthier stocks (from the Rogue and Umpqua Rivers, for example), fishing on these healthier stocks is curtailed. In the case of Southern Oregon/Northern California Coho, fishing is prohibited entirely. This has been, and continues to be, a hardship for coastal economies from Fort Bragg in Mendocino County, and the ports of Eureka, Trinidad and Crescent City.

In past years, boats came from all up and down the West coast to fish the California North Coast on conservatively managed salmon from many rivers, including the Eel River, during the ocean salmon season. They delivered into local ports, where they bought fuel, ice, bait, groceries and visited local hotels and restaurants.

Restoring seafood competitiveness has been identified as a priority by the current federal administration.¹⁵ Secretary of Agriculture Rollins in April announced the opening of a federal Office of Seafood, lauding the importance of domestic seafood production for national food security.¹⁶ Re-establishing thriving fisheries on the North Coast is one of the most powerful ways to restore seafood competitiveness.¹⁷ Currently on the Eel, a world-class in-river sport fishery is on hold, and domestic fishing is curtailed for coastal communities. A healthy fishery would produce enough fish to bring local, healthy seafood to dinner tables, restaurants and markets, and provide food security, jobs, and tax revenue. River and ocean fisheries attract boats from along the California coast, bolster a tourism industry, and a support lively salmon culture in coastal communities. As Secretary of Interior Burgum observed, “Fishing is the backbone of the coastal economy.”

Fish passage obstacles

Studies have found that fish passage through predator-filled Lake Pillsbury was not feasible, especially for juvenile fish traveling downstream.¹⁸ Friends of the Eel River and

¹⁴ Center for Watershed Sciences, Yoshima and Moyle 2010

<https://watershed.ucdavis.edu/sites/g/files/dgvnsk8531/files/inline-files/Eel%20River%20Final%20Report%202010%20Feb%201%281%29.pdf>

¹⁵ E.O. Restoring Seafood Competitiveness: <https://www.whitehouse.gov/presidential-actions/2025/04/restoring-american-seafood-competitiveness/>

¹⁶ New USDA Seafood Office__<https://www.usda.gov/about-usda/news/press-releases/2026/04/15/secretary-rollins-announces-creation-usda-office-seafood>

¹⁷ Executive Order #14276__<https://www.federalregister.gov/documents/2025/04/22/2025-07062/restoring-american-seafood-competitiveness>

¹⁸ <https://pottervalleyproject.org/wp-content/uploads/2018/11/PVP-10-17-2018-Ad-Hoc-Briefing.pdf>

other groups' December 1, 2025, comments on the LSA,¹⁹ incorporated here by reference, explain in great detail how Scott Dam and the Potter Valley Project affect survival. The fish ladder at Cape Horn Dam is often not functional during high flows due to debris blockages, though this is when salmon need to travel upstream to spawn. There is no fish passage past Scott Dam, and pike minnow and large-mouth bass in Lake Pillsbury would deplete any juvenile fish trying to find their way downstream through the lake. The lowered lake levels and sediment accumulation in Lake Pillsbury cause the water to heat up and limit the cold pool available for release in the late summer, causing ongoing harm to ESA listed salmon and steelhead that make it up into the reach between the dams.

Water supply alternatives

There are viable alternatives to maintaining the two dams for water supply purposes. Indeed, a Water Diversion Agreement¹ ("WDA," sometimes called the "Two Basin Solution") was negotiated over many years among water users in both the Eel and Russian River Watersheds: the Round Valley Indian Tribes, Humboldt County, Sonoma County Water Agency, Cal Trout, Trout Unlimited, California Department of Fish and Wildlife, and Mendocino County Inland Water and Power Commission (IWCP) made up of Potter Valley Irrigation District, Redwood Valley County Water Agency, the City of Ukiah, Mendocino County, and Mendocino County Russian River Flood Control and Water Conservation Improvement District.

The WDA signatories have agreed to help each other find funding for restoration of fisheries toward a harvestable surplus and for new infrastructure and storage for a reliable source of water for Russian River water users (the NERF). The WDA would keep Eel River water and the Russian River diversion in local control. As reported in the Times-Standard,

"Sonoma Water Agency Environmental Resources Manager and ERPA [Eel Russian Project Authority] Executive Director David Manning ...warned of misinformation being spread that the loss of some diversionary flows would result in catastrophic water loss for 750,000 water users in the Russian River watershed...." (-- As a note, the entire population of Mendocino and Sonoma Counties combined is only 575,284, including towns far from the Russian River.²⁰)

"Sonoma Water and its partners throughout the watershed, including the Mendocino County Inland Water and Power Commission, are currently undertaking to increase water storage to offset flows lost during parts of the year that the Eel River will not be

¹⁹ LSA comments 12012025 from Friends of the Eel River, Save California Salmon, Native Fish Society, Sierra Club Redwood Chapter, Fly Fishing International, and California Sportfishing Protection Alliance__<https://eelriver.org/wp-content/uploads/2026/03/P-77-332-FOER-SC-SCS-NFS-CSPA-FFINCC-LSA-comments-Letter.pdf>

²⁰ Population of Mendocino and Sonoma Counties
https://www.california demographics.com/search?search_terms=Sonoma+County

diverting water.” And, “...We’re committed to make the diversion continue to meet the needs of both the Eel and Russian River for decades to come.”²¹

Dam Removal and Stored Sediment Disposal

In general, we believe that following dam removal the impacts of dam operation can be reversed and rivers can restore themselves over time following a course of natural succession and high flow periods. We note that Mendocino and Humboldt County Residents who are downstream from the PVP dams have expressed concern about the predictable deposits of stored anaerobic sediment (AKA “sludge”) from behind Scott Dam and its potential impacts on the Eel River System resulting from PG&E’s “Quick Release” method described in their draft. Recent fieldtrips down the Klamath River two years after dam removal, after that method was used to release sediment stored behind the dams, reported some remaining decomposing, foul-smelling sediment in the dam footprint that still needs to clear out. These sediments will likely be completely mobilized and removed by natural processes over the course of time, but it may be useful to evaluate augmenting the “Quick Release” method with additional actions such as those detailed in two technical reports: “BC Placer Mining Best Management Practices Technical Guide” and “Best Management Practices for Placer Mining Reference Manual.”²² This method involves dredging sediment and flex-piping it by gravity downstream to settling ponds away from the river. Both floating and submersible industrial dredges are commercially available.

²¹ [Times Standard, May 2, 2026](#): Potential Potter Valley Project buyer suggests PG&E failed to tell ‘actual truth’
Utility company has refuted those statements, pointing to a long and well-publicized process

²² BC Placer Mining Best Management Practices Technical Guide, November 2019, Ministry of Energy, Mines, and Petroleum Resources, found at: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/exploration/bmps_technical_guide_2019.pdf and Best Management Practices for Placer Mining Technical Report. Alaska Department of Fish and Game in response to 1980 amendments to the Clean Water Act regarding Non-Point Source Pollution. January, 1986 https://www.adfg.alaska.gov/static/home/library/pdfs/habitat/placer_mining_best_practices.pdf

Comments of Friends of the River et al. re Scoping Document for PVP Surrender and Decommissioning
July 24, 2026

Thank you for considering our comments. If you have any questions or need further clarification, please contact Vivian Helliwell at vhelliwell@firendsoftheriver.org.

Sincerely,

A handwritten signature in cursive script, appearing to read "Vivian Helliwell".

Vivian Helliwell
North Coast Salmon Rivers Project
3336 Bradshaw Road, Suite 335
Sacramento CA 95827

Vivian and David Helliwell
F/V Corregidor
Woodley Island Marina
601 Startare Dr. Eureka, CA 95501

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

In the Matter of	)	
	)	
Pacific Gas and Electric Company	)	
	)	FERC Project No. 77-332
Application for surrender of license	)	
and non-project use of project lands	)	

Certificate of Service

I hereby certify that the foregoing Comments on Scoping Document 1 for the Potter Valley Hydroelectric Project Surrender and Decommissioning of Friends of the River et al. in the above-captioned proceeding has this day been filed online with the Federal Energy Regulatory Commission and served, via electronic mail or surface mail, upon each person designated on the Service List compiled by the Commission Secretary for this Project.

Dated at Sacramento, California, this 24th July 2026.

Keiko Mertz
Policy Director
Friends of the River
3336 Bradshaw Rd., Ste. 335
Sacramento, CA 95827
(916) 442-3155 ext. 201
keiko@friendsoftheriver.org



**Appendices to July 24, 2026 Comments of Friends of the River and FV
Corregidor re Scoping Document 1 for (PG&E's) Potter Valley Hydroelectric
Project Surrender and Decommissioning, Project No. P-77-332**

APPENDIX A

FOER to FERC re Lake County June 30, 2026

707.798.6345 • foer@eelriver.org
PO Box 4945, Arcata, CA 95518

Attached in email.

PG&E's March 17 report, filed with the Commission's Division of Dam Safety and Inspections, includes a memorandum which the public cannot view because PG&E has classified it as Critical Energy Infrastructure Information (CEII). As we have previously noted, the overclassification of dam safety information as CEII presents a serious and unnecessary barrier to public understanding of the risks associated with America's aging hydroelectric dams. Many dams across the American West were, like Scott Dam, situated on faults, because places where rivers cross faults often present, like the upper Eel, a narrow canyon downstream of a reach with substantial floodplain.

From PG&E's description, we understand that the memorandum presents the results of a simplified, two-dimensional seismic stability analysis of Scott Dam prepared by engineering consultant Gannett Fleming, Inc. (Gannett).² Lake County argues that "PG&E is attempting to leverage a 'simplified seismic analysis' to justify what was announced as a permanent lowering of the gates, even though the more rigorous seismic analysis has not yet been completed."

Lake County's skepticism of the Gannett memorandum was not shared by the California Division of Safety of Dams (DSOD). An April 12, 2023 letter from DSOD to PG&E's Chief Dam Safety Engineer, David Ritzman, clarifies that the Gannett "study is part of Pacific Gas and Electric Company's (PG&E) ongoing reevaluation of the dam that was initiated in response to DSOD's letter dated January 22, 2021, to address potential dam safety concerns."

DSOD further notes that it has barred PG&E from operating Scott Dam with the gates raised: Based on dam safety, DSOD concurs with PG&E's proposed 10-foot reservoir restriction as an interim risk reduction measure. Therefore, DSOD is restricting the year-round operation of the reservoir of Scott Dam to Elevation 1900.00, the spillway crest, which is 24.58 feet below the dam crest. This reservoir restriction may be revisited as conditions warrant and will remain in effect until PG&E receives DSOD's written approval authorizing a different level of reservoir storage. (emphasis added) As PGE noted in its March 17 letter, the purpose of the two-dimensional analysis is "... to provide an initial understanding of the expected performance of the dam under updated seismic loading conditions ..." PG&E further explained that the "(s)eismic loads

used in the analysis are developed from PG&E's recently completed deterministic seismic hazard study (dated December 2021)."

The Bartlett Springs Fault Will Produce Very Large Earthquakes, to which Scott Dam

Appears Especially Vulnerable.

It has been clear for some years that the Bartlett Springs Fault, which passes directly underneath what is now the Lake Pillsbury reservoir, is capable of producing earthquakes significantly larger and more damaging than those recorded to date in Scott Dam's vicinity.

As Lozos et al. noted in their 2015 publication, Dynamic rupture models of earthquakes on the Bartlett Springs Fault, Northern California, "... ground motions generated by a (Bartlett Springs Fault) earthquake may be sizeable... Our models produce a wide magnitude range: from M6.32 to M7.24..."³(emphasis added).

Considerably more detail regarding seismic risk assessment can be found in an August 31, 2020 filing, *Potter Valley River Hydroelectric Project, Scott Dam, Plan and Schedule to Address Recommendations in FERC Independent Consultant 2019 Safety Inspection Report*, in which PG&E responds to FERC's recommendation R-6 as follows:

R-6. It is recommended that stability analyses of the dam for earthquake loading up to the MCE be performed using up-to-date methods of analysis. The loading should be consistent with the 2017 seismic hazard update for the dam site (PG&E, 2017b), once this study is accepted by FERC. The stability analyses should include analysis of the principal tangent and the dogleg tangent of the dam (left abutment area, including the pinnacle). The stability analysis should include predictions of stability and displacement for the dam and consider: a) the seismic response of the structure and representative base uplift conditions, b) stress nonuniformity and potential cracking at the dam base, and c) the stability of the left abutment area and downslope rockfill buttress and upslope left abutment landslide (see PFM No. 3 in Section 3.2.3 and Section 7.8.4). Additional recommended stability analysis of the downstream left abutment area is described in more detail under Recommendation R-29 below.

Response: Loading conditions for the recommended stability analyses are dependent on the results of PG&E's 2017 seismic hazard studies, which PG&E is currently updating to address FERC review comments. After FERC has accepted the seismic hazard parameters for the site, PG&E plans to update its seismic stability analyses for Scott Dam in accordance with the following general steps:

- Develop an updated structural model of the dam and perform stability analyses for normal loading conditions.
- Using results of the accepted seismic hazard studies, model the seismic response of the structure and evaluate representative base uplift conditions.

- Perform seismic stability analyses of the dam for earthquake loading up to the maximum credible earthquake (MCE) using up-to-date analytical methods and tools. Analyze both the principal tangent and dogleg sections of the dam.
- Evaluate the seismic stability of the dam's left abutment area, including the downslope rockfill buttress (see R-29) and upslope left abutment landslide for earthquake loading up to the MCE. Based on the results of these studies, evaluate the potential effects of seismically induced ground movement on the stability of the dam during or immediately after the earthquake. PG&E believes that the recommended stability analyses may take several years to complete, depending on the time and effort required to conduct prerequisite studies and develop the necessary structural models. PG&E plans to perform the stability analyses in conjunction with updated analyses for flood loading conditions (see R-4).

Assuming FERC accepts the results of PG&E's seismic hazard analysis by early 2021, PG&E plans to complete preliminary stability analyses of the dam structure and left abutment slopes (upstream and downstream) by the end of 2021. Upon completion of the preliminary analyses, PG&E will provide the results to the Part 12D IC for review. In consultation with the IC, PG&E will identify appropriate next steps to finalize the seismic stability evaluation. By February 28, 2022, PG&E plans to submit to FERC a plan and schedule to finalize the recommended stability analyses.

Alternatively, if FERC acceptance of the seismic hazard study is delayed, PG&E will submit by October 31, 2021, an updated schedule for addressing R-6. Similar language appears with respect to other portions of Scott Dam in the document. In short, while seismic hazards may have been underestimated in the past, they are hardly a novel question for Scott Dam. As the above excerpt shows, PG&E outlined its process for reassessing the safety of Scott Dam three years ago. Factors relevant to Scott Dam's vulnerability to seismic events have long been apparent and indeed are clearly evident in the enclosed illustration. These factors include the 'dogleg' southern abutment of the dam referenced in FERC's recommendation R-6 above.

Scott Dam had been planned to go straight across the river, a stronger configuration. But the helpful extrusion of bedrock to which builders had planned to anchor their dam proved to be a giant boulder, referenced above as 'the pinnacle.' The boulder slid down the southern side of the canyon during dam construction. Builders chose to construct the southern portion of the dam in front of the boulder, at an angle to the rest of the dam. That southern abutment of Scott Dam rests against a slope below the dam that has been showing signs of instability for years.

As a study by Miller Pacific Engineering Group commissioned by Friends of the Eel River demonstrated in 2018, the slope above Scott Dam that shifted when the pinnacle moved during dam construction is an ancient landslide, which has been moving

continuously for decades, and appears vulnerable to catastrophic collapse in a big storm or a significant earthquake.

As well, the Miller Pacific report notes that the buildup of sediment against Scott Dam's upstream face appears to present an additional factor of potential seismic risk, as is common in aging dams.

In recent years, it has become clear that the amount and the configuration of sediment that has accumulated in the Lake Pillsbury reservoir threaten Scott Dam's ability to supply water to the rest of the Potter Valley Project. Sediment buildup around the upstream inlet to the needle valve that is Scott Dam's only low-level outlet presents an ever-increasing risk of clogging the valve, rendering the dam and the entire Potter Valley Project nonfunctional and uneconomic to repair. Meanwhile, the reservoir cannot be drained too quickly, or fully emptied, lest the piled sediments collapse, with the same effect: a clogged needle valve and an end to releases from Scott Dam.

To summarize, there are a number of compelling publicly known reasons to be concerned about seismic safety at Scott Dam, particularly given that it is a poorly constructed, aging dam never engineered to handle the stresses we now know it would be subject to when a significant quake occurs on the Bartlett Springs Fault.

References:

1 Comments of County Counsel for the County of Lake regarding PG&E's March 17, 2023, Dam Safety Compliance Report under P-77, FERC accession number 0230403-5105.

2 Scott Dam Simplified 2-D Stability Evaluation (CWA 2700755491 FCA No. 2), Gannett Fleming Project No. 070867, prepared by Gannett Fleming and dated March 14, 2023.

4FERC accession no. 20160908-5213, document title PGE2016-0908_PV 30Day FU Rpt Earthquake Incident.

5 FERC accession no. 20161121-523, document title PGE2016-11-21_PV_AnnualOpsInspection_FollowUpResponse.

6 FERC accession no. 20200831-5429, document title PGE2020-0831_77_Scott_P12_PS_2019SafetyInspection. (Remarkably, this previously public document is now inaccessible on FERC's website.)

Appendix B



**Pacific Coast Federation of Fishermen's Associations (PCFFA)
and the Institute for Fisheries Resources (IFR)**

C/o PO Box 29196, San Francisco, CA 94129-0196

PCFFA Phone Contact: (650)209-0801

Response Emails: fish1ifr@aol.com ; info@pcffa.org & sarah@ifrfish.org

Federal Energy Regulatory Commission

1 December 2025

Attn: Debbie-Anne A. Reese

Commission Secretary

Filed Via: www.ferc.gov

888 First Street NE, Room 1A

12225 Wilkins Avenue

Project No. P-77-332

Rockville, MD 20852

Project No. P-77-318

RE: Comments of PCFFA and IFR on PG&E *Application for Surrender of License and Application for Non-Project Use of Project Lands (Filed 7/25/25) ("LSA")*(P-77-332);
& *Notice of Application for Non-Capacity Amendment of License (P-77-318)*

To the FERC Staff:

The Pacific Coast Federation of Fishermen's Associations (PCFFA) is a west coast trade organization of commercial fishing groups and is led by active working fishermen from ports throughout California. These mostly family fishing businesses have historically relied on once-abundant wild Pacific salmon stocks to harvest for all or part of their livelihoods. Our members depend on robust salmon populations in the ocean, which can only exist when supported by healthy river habitats.

Institute for Fisheries Resources (IFR), PCFFA's sister organization, is a fishing industry-based non-profit California Public Benefit corporation that advocates for policies to protect, restore and maintain viable salmon stocks at levels beyond the standards required for delisting under the Endangered Species Act (ESA). Successful salmon restoration must include sustainable ocean abundance to support commercial fishing and coastal communities that depend on it.

Together, our two organizations have supported the removal of the Potter Valley Project (PVP) dams. We are focused on ensuring that restoration and reintroduction planning is sufficient to support the long-term recovery of Eel River salmon at levels that will result in meaningful ocean harvest. This restoration effort must include a fully developed reintroduction plan that uses all appropriate science-based methods to speed rebuilding of Eel River salmon to harvestable abundance.

Our members clearly have an economic stake in the outcome of this FERC process. This is why our two organizations are not only Intervenor-Parties in the ongoing FERC proceeding regarding the adverse impacts on ESA-listed salmonids caused by this FERC Project No. 77 license but are also Plaintiffs on these same issues in three parallel, ongoing U.S. Federal Court litigation actions, i.e., two lawsuits against FERC,¹ and another one against PG&E itself.² Many of our individual members are also PG&E ratepayers and customers.

¹ *Friends of the Eel River, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, California Trout and Trout Unlimited vs. FERC*, in the 9th Circuit Court of Appeals Cases No. 22-1589 & Case No. 22-70182.

² *Friends of the Eel River, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, California Trout and Trout Unlimited vs. Pacific Gas & Electric Company*, and in the U.S. District Court, Northern District of California (Eureka-McKinleyville Division) as Case No. 23-cv-02379.

We also have considerable experience with dam removal projects generally, including the successful removal in 2024 of the four lower Klamath hydropower dams, which blocked the once abundant salmon runs of the Klamath River for more than 100 years. We **support PG&E's Proposed Potter Valley Project Dam Removal Action**, including clearly separating dam decommissioning from the proposed New Eel-Russian Facility (NERF) water diversion proposal. We also support the "Rapid Dam Removal" option as outlined in the License Surrender Application (LSA).

In this proceeding, we ask the Commission to take four actions essential to a lawful and effective license surrender. First, the Commission should remove PG&E's proposed condition linking dam removal to the construction of the separate and uncertain NERF, so that license surrender is not dependent on a project outside PG&E's control. Second, the Commission should require salmon protection, reintroduction, and restoration measures that support water quality, sediment management, and long-term recovery of Eel River salmon to levels that can sustain harvest, including consultation with the Pacific Fishery Management Council (PFMC) on fishery impacts, and also including the requirement that PG&E develop and implement a comprehensive salmon reintroduction plan that uses science-based tools to speed rebuilding toward a harvestable surplus. Third, the Commission should require mitigation for the long-term socio-economic harm the Potter Valley Project has imposed on ocean salmon fisheries and ensure that PG&E's restoration actions support rebuilding harvestable salmon populations. Fourth, the Commission should require updated and enforceable plans to suppress invasive predatory species released during drawdown and dam removal.

In these comments we will focus primarily on the impacts of the Potter Valley Project dam removal action on: (1) Eel River water quality and water use; (2) Eel River fish (particularly salmonids) and aquatic resources, and; (3) mitigating or reversing the adverse socio-economic impacts the Potter Valley Project has had on our commercial fishing industry and the benefits to our industry that would likely accrue from the decommissioning and removal of the Potter Valley Project dams.

Since there are two distinct projects outlined in the LSA, we will also discuss the decommissioning and removal of the Potter Valley Project dams first, and separately provide our comments regarding the very different, non-PG&E project known as the New Eel-Russian Facility (NERF), which is proposed to be owned and operated not by PG&E, but rather by a newly formed entity known as the Eel-Russian Project Authority (ERPA).

FERC has very broad discretion to include a range of protective and mitigation measures in a license surrender and termination approval. FERC's regulations pertaining to the license surrender and termination of a licensed hydropower project are found in the Federal Power Act (FPA) regulations at 18 CFR Chapter 1, Subchapter B, Part 6 – *Surrender or Termination of License*. Section 6.2 of the FPA Regulations states the following:

Licenses may be surrendered only upon the fulfillment by the licensee of such obligations under the license as the Commission may prescribe, and, if the project works authorized under the license have been constructed in whole or in part, upon such conditions with respect to the disposition of such works as may be determined by the Commission. Where project works have been constructed on lands of the United States the licensee will be required to restore the lands to a condition satisfactory to the Department having supervision over such lands and annual charges will continue until such restoration has been satisfactorily completed.

However, PG&E has noted in its Application [(LSA pg. 3-2)] that its draft *Decommissioning Plan*, and associated *Restoration Plan*, included in this Surrender Application “will be more fully developed in coordination with the resource agencies, Tribes, and other interested parties, as appropriate, as the surrender process proceeds.” These plans remain incomplete and will require further development.

Those two key Plans in particular need to prioritize salmonid habitat restoration, including appropriate water quality mitigation measures to protect salmonids from dam removal impacts such as heightened sediment loads and increased predation from invasive species. FERC should require PG&E to consult with the National Marine Fisheries Service (NMFS) and the PFMC on how best to protect Eel River-limited salmon fisheries through the dam removal process. The PFMC was Congressionally created under the *Magnuson-Stevens Fishery Conservation and Management Act* (16 U.S.C. § 1801, *et seq.*) specifically to advise the U.S. Secretary of Commerce on how best to manage the mixed-stock ocean salmon fisheries to which Eel River-origin Chinook and Coho have historically been important contributors.

In addition to these requirements, any license surrender must include a comprehensive salmon reintroduction plan that restores Eel River salmon to levels that can sustain commercial harvest. Habitat restoration alone is not enough to rebuild these depleted runs within a timeframe meaningful to fishing communities. A full suite of science-based reintroduction tools must be

considered, including trap-and-haul of adults, juvenile hatch boxes, egg injection, and other early life-stage enhancement methods, with clear performance benchmarks tied to harvestable abundance. Without a dedicated and enforceable reintroduction framework, the benefits of dam removal for ocean fisheries will fall short of what is needed to rebuild a viable salmon fishery.

Today it is now clearer than ever that all the PVP dams' removals are necessary for recovery of the Eel River's now ESA-listed salmonids. Both the Scott Dam and Cape Horn Dam are clearly at the end of their engineered lifespan.

Scott Dam lacks any provision for fish passage and is now partially shut down because PG&E has recognized the ongoing risk of serious seismic failure hazards (see **Attachments A, B, D & E**). Additional measures may still be necessary to offset, mitigate and reduce ongoing dam safety risks borne by PG&E and Eel River residents, as described by PG&E to which FERC and DOSD concurred. (See **Attachment A** – April 12, 2023, from CA Dept. of Water Resources re: Scott Dam; See also **Attachment B** – FERC Dam Safety Inspection Report (Sept 1, 2022)). See also **Attachments D & E** for more information on seismic and other safety hazards at Scott Dam that still may need to be addressed.

Adverse effects of the PVP dams are not limited to the footprint of the dam sites. Decades of sediment trapping and temperature stratification behind Scott Dam have contributed to deteriorated water quality – temperature, turbidity, and dissolved oxygen levels that killed adults and juvenile salmon – far downstream of the dam sites. Massive water diversions from the Eel River for many decades also exacerbated these impacts, killing off the salmonids (Chinook, Coho and steelhead) that were once incredibly abundant in that once highly productive watershed.

PG&E's decision to surrender its operating license with FERC presents an unprecedented opportunity to restore the Eel River ecosystem and to rebuild the salmon fisheries, fleets, and communities that depend on it. The outcome of this FERC process will determine whether the Eel River can function again as a healthy salmon system that supports river and coastal communities or if it will remain in the degraded condition caused by this project.

SPECIFIC PROJECT MANAGEMENT PROBLEMS

As a preliminary matter, there is an issue of grave project management concern to address first and foremost, and that is that PG&E in its current LSA is proposing the wrong sequencing of events. It is poor policy and raises serious legal concerns for FERC to tie PG&E's current FERC License with the newly proposed and highly uncertain NERF project over which PG&E has no ownership or control, and which is not only expensive but may take many years to achieve, if it is ever achieved at all.

The issue is that under the LSA PG&E is proposing, that the completed NERF construction would be made a prerequisite for License Surrender: The LSA at page 1-1 in the *Introduction* states as follows:

“With the filing of this Surrender Application, PG&E requests the Commission include a condition in the License Surrender Order to remove all lands and Project works necessary for the NERF from the Project boundary and FERC jurisdiction immediately after the following actions are completed: (1) PG&E has completed decommissioning work at Cape Horn Dam and other Project works necessary for the NERF, **(2) the NERF has been constructed**, and (3) PG&E has filed a completion report with FERC on these actions, as described in Volume II, Section 2.1.2.1, Surrender of License.” [LSA pg. 1-1 – objectionable section highlighted]

Since NERF is a separately proposed project, is entirely outside of PG&E's ownership or control and is not within the scope of the existing FERC hydropower license, lacks confirmed funding and defined timelines, requires multiple state and federal permits that have not yet been obtained, and faces significant uncertainty regarding implementation, it is poor policy and raises legal concerns for PG&E to link surrender of its FERC license to the problematical future construction of this facility. Under this proposed precondition, if NERF is never constructed, the affected lands and the FERC license itself *are effectively stuck in limbo*.

This sort of pre-requisite conditioning of license surrender to uncertain third-party actions is not only bad policy but bad economics, given that PG&E's ratepayers would continue to pay indefinitely for the costs of PG&E keeping any remnants of a Potter Valley Project that generates no power and currently costs its ratepayers several millions of dollars every year in maintenance costs but with no economic return. Indeed, the California Public Utility Commission ratepayer watchdog agency would also likely oppose such a pre-condition, for the same reason, as unfair to the Company's ratepayers.

Additionally, it is problematic that the land on which NERF is to be built will not actually transfer under this pre-condition to NERF's owner (the ERPA entity) until “NERF has been constructed.” But it would likely be impossible to finance the construction of NERF without clear

prior title to the land on which it is to be constructed. This is a sequencing issue that leads to a circular reasoning dilemma.

At a minimum, this Condition (2) above should be stricken by FERC as a precondition to removing these lands from the current FERC license once actual dam removal Conditions (1) and (3) have in fact been performed. Removing Condition (2) from the equation means that PG&E can complete its responsibilities and exit the Eel River Basin once the PVP dams are removed. But retaining Condition (2) ties PG&E indefinitely to the Eel Basin and the FERC license while awaiting the “full construction” of a NERF project that may never happen.

The Final LSA significantly departs from the PG&E *Initial Draft Surrender Application and Conceptual Decommissioning Plan* (issued Nov. 2023) which did NOT contain any linkages or preconditions related to the NERF project. Indeed, PG&E leadership at that time asserted repeatedly and publicly that they considered that the NERF proposal was a separate project and would require its own permits and was not in any way to be a pre-condition to dam removal. In our letter to PG&E (not filed with FERC) dated December 22, 2023, commenting on that PG&E Initial Draft, PCFFA/IFR noted:

“Keep Dam Removal and Direction Processes Separate: Moreover, we strongly support PG&E’s stated intention to separate dam removal from the process of developing any later diversion to the Russian River, in order to avoid potentially years of delay. The current proposal for continuing any Eel River water diversions after Project removal is controversial, poorly defined, may be very costly, and is uncertain in multiple ways. It is inherently a process fraught with likely delays, and likely to be hotly debated not only in the public arena but in the Courts. Entangling PG&E’s business affairs with such a dubious and complex process will not serve the interests of PG&E’s ratepayer and will not resolve the company’s need to eliminate its liability for a failed facility that amounts to a drain on company resources.”

This concern is as true today as it was then, if not more so, as the difficulties and projected expenses of the NERF proposal continue to mount.

WATER QUALITY IMPACTS

Minimizing Adverse Sediment Impacts on Lower River Salmonids

Dam removal on the Eel River will, in the short-term, affect key water quality parameters such as temperature, dissolved oxygen, turbidity, and flow timing, all of which are critical to

salmonids and most of which are interrelated. These short-term effects may include elevated sediment and turbidity levels that could harm fish and other organisms if not managed carefully. It is estimated by PG&E that Scott Dam has impounded at least 12 million cubic yards of sediment.³ Reservoir drawdown and dam removal must be planned and executed to minimize damage to salmonid populations from sudden sediment spikes that may be fatal to salmonids at some life stages.

These water quality risks can be managed effectively. Recent dam removals on the Klamath River demonstrated that a strong, well-designed sediment management process can greatly limit sediment impacts on fish. See the *Erosion and Sediment Control Plan* developed in the Klamath Project.⁴ In that dam removal case, sediment outflows were simply timed to have the least impact on migrating salmon. There is an adequate period in the summer months, between spring juvenile Chinook out-migration and fall adult Chinook return, which constitutes the ideal timing for any potentially negative sediment effects. Coho salmon, which spawn and rear mostly in tributaries and not the mainstem river as do Chinook, are generally going to be less affected by sediment surges confined to the mainstream beds for very short periods of time.

However, rivers like the Eel naturally move large amounts of sediment; it is the artificial trapping of sediment behind Scott Dam that disrupts that balance. Once the dams are removed, the Eel River's sediment system can return to its natural state, which supported healthy salmonid populations for millennia. And in the Klamath example, otherwise detrimental sediment surges (and accompanying low dissolved oxygen levels) lasted only for a handful of days or hours because they were specifically timed to either not disturb in-river juveniles (which were not actually present during those windows), or to flush out the sediment as fast as possible by taking advantage of storm surges.

But all these dam removal water quality impacts will be short-term. Short-term disturbances are an acceptable tradeoff for long-term habitat recovery. This is true of state water quality laws as well as FERC policy. The California North Coast Regional Water Quality Control Board's Restoration Policy (2015) states this principle explicitly:

³ See LSA pg. 5-6, Sec. 5.2.1.1.1.

⁴ Available as Exhibit C to the Klamath River Renewal Corporation 2021 *Amended Application for License Surrender*; at: <https://klamathrenewal.org/wp-content/uploads/2021/02/EX-C-Erosion-and-Sediment-Control-Plan-Feb2021.pdf>.

“Boards may permit or certify restoration projects that result in significant and sometimes unavoidable impacts (including temporary exceedances of water quality objectives) if it is shown that the project will result in long-term protection of beneficial uses and water quality.”

The California State Water Quality Control Board is considering a Potter Valley Project 401 Certification permit at the present time, including appropriate water quality protection provisions, with this long-term benefits policy in mind.

PG&E in its LSA also notes (Sec. 6.2.2 Water Quality; pgs. 6-1 to 6-3) that:

“While the resulting condition and restoration of the Eel River compared to unimpaired conditions would have an unavoidable adverse effect on water temperature [and other water quality parameters], the change to natural conditions, overall, is considered to be a positive effect on the Eel River. In addition, the removal of the dams would improve access for anadromous fish and resident fish to 50+ mi. of spawning, thermal refugia, and rearing habitat above Scott Dam.”

We note that, as clearly demonstrated with the recent Klamath Dam removals, it is far less impactful on downriver ESA-listed salmonids to have one, short-time period of very high sediment loads that can be timed to avoid key migration windows, than to produce several (even though individually smaller) sediment spikes spread over a long period of time, thus doing more lasting damage to in-river fish during several life stages or even over several years.

Fortunately, anticipated sediment releases are largely under human control and can be timed to maximize sediment flushing through the system at times when fish impacts would be minimal. Salmon biologists can identify the best timing to avoid or mitigate sediment surge impacts on any particular life-stage of these migratory species. PG&E should be required to consult with the PFMC and its scientific advisory teams, and with both the California Department of Fish & Wildlife (CDFW), and NMFS on how best to protect salmon in the Eel River through timing of sediment flushing and recovery periods.

We therefore support the Rapid Dam Removal process (see LSA pg. 5-6) for the removal of Scott Dam as described in the Draft LSA *over no more than two years* in order to minimize sediment impacts on salmonids during various life-stages, with several provisos: (a) a *Sediment Control Plan* must be developed to minimize the impacts of released sediment loads from Scott Dam such as through timing of sediment releases so as to minimize the time and degree of impact of excessive sediment loads on salmonids within the river system at those times; (b) timing of

maximum sediment releases to correspond with wet-season conditions during which times the Eel River naturally carries as much sediment as possible harmlessly out to the estuary; (c) PG&E must implement sediment control measures (such as speedy reseeding and replanting of emerged mudflats) designed to quickly stabilize the new river boundaries and thus to minimize the later release of more sediment downstream; and (d) PG&E must also contribute to the restoration of downstream salmonid-supporting riverine ecosystems in ways that will improve salmonid habitat carrying capacity and production as compared to the current *status quo*.

Attached with these comments, for reference, is the July, 2021, Technical Memorandum titled *Analyses of Fine Sediment Erosion Effects on Aquatic Species Following the Proposed Dam Removal, Eel River, California*, prepared by Stillwater Sciences. (See **Attachment C**). That Report contains numerous good suggestions for how to minimize dam removal-caused sediment impacts on salmonids.

We also support PG&E's elimination and rejection of the "Phased Scott Dam Removal Alternative" as noted by the Applicant as a potential alternative. That alternative, i.e., removing Scott Dam over three years or more in phased deconstruction would tend to spread out unavoidable sediments impacts over a three-year+ period, which would be unacceptable for salmonids with a three-year life cycle. The reasons PG&E listed for eliminating this alternative (see LSA pg. 5-11) were as follows:

"Under this alternative, sediment would be released from the dam during more than one year, as would occur under the Proposed Action. This would result in increased turbidity and suspended sediment and adversely impact water quality parameters that would affect environmental and cultural resources below Scott Dam over a longer duration compared to the Proposed Action. As this alternative would not eliminate the potential for unavoidable adverse effects to environmental resources compared to the Proposed Action and would not meet PG&E's interest to remove the dams as quickly as possible, it has been eliminated from further consideration."

Rivers typically move great volumes of sediment through natural erosion, and the Eel River was originally the transport corridor for very high natural sediment loads. The natural and total amounts of sediment loading of a pre-dam Eel River should be the baseline for considering impacts of additional sediment loads from dam removals. At least one 10-year detailed sediment transportation study concluded that the Eel River basin is naturally very sediment rich, with an estimated 16 million tons of sediment transported annually by the river. (Brown and Ritter (1971))

“The Eel River draining the Coast Range of northwestern California has the highest recorded average suspended sediment yield per drainage area of any river of its size or larger unaffected by volcanic eruptions or active glaciers in the conterminous United States (1,720 t/km²yr from 9,390 km²; (Brown and Ritter (1971))”

Whether a sediment surge exceeds the range of normal (especially wet year) sediment loads must be determined by comparison to past sediment load history, which varies considerably river-by-river. The Brown and Ritter (1971), *Sediment Transport and Turbidity in the Eel River Basin, California* key sediment transport study discussing the history of sediment transport in the Eel River under various rainfall conditions is enclosed with these comments as **Attachment F**. The magnitude of sediment surge impacts on salmonids should be assessed against this average sediment loading phenomenon specific to the Eel River.

PG&E’s and FERC’s engineering and biologist teams should also reference the Klamath Dam Removal Project’s “Sediment and Erosion Control Plan” which is available online as Exhibit C – *Erosion & Sediment Control Plan* and Exhibit L – *Sediment Deposit Remediation Plan*, all in the Klamath River Renewal Corporation’s (KRRC) Nov. 2020 Definite Plan and Feb. 2021 Supplemental Plans available online at:

<https://klamathrenewal.org/definite-decommissioning-plan-overview/>

The Klamath Project Definite Plan is an excellent model for other, much smaller dam removal projects like this one.

Fire and Water Quality – Fire Risk Suppression Measures

Local fire response capacity and fire suppression are a legitimate public safety issue that should not be ignored and are also a consideration in protecting river water quality.

As noted in Draft LSA Sec. 3.3.8.11, the loss of Lake Pillsbury after dam removal means that Clear Lake will become the primary water source for locally operating helicopters and other fire suppression aircraft. Given the political sensitivity of fire suppression involved in any

discussion of the loss of Lake Pillsbury, FERC should require PG&E to address this issue proactively. Active efforts by PG&E to assist in the process of reducing the risk to local residents of catastrophic wildfires would not only help address the intense local resistance to dam removals because of the fear of wildfires but also confirm PG&E's role as a responsible participant in the local community and among its other customers.

A good example of how local wildfire risks could be reduced after dam removals can be found in the Klamath Dam Removal Management Project's *Fire Management Plan*, which included measures to: (a) augment and upgrade local fire spotting and alert systems, so as to give more accurate warnings to fire suppression crews much earlier, when fires are more controllable; (b) the purchase of firefighting trucks and tankers as gifts to the local volunteer firefighters in communities around the former reservoirs; and (c) establishing new tanker truck access points to the remaining river system, including installing new water storage tanks to service those tanker trucks at key locations.

It is also incorrect to assert that the existence of Lake Pillsbury is actually necessary for local wildland firefighting efforts. In fact, the California Department of Forestry and Fire Protection (CAL FIRE), and the U.S. Forest Service, the two agencies that actually fight wildland fires in northern California, were specifically asked in letters in 2023 from Congressman Mike Thompson these two questions:

- (1) Can [your agency] provide statistics on how Lake Pillsbury has been utilized in the past few fire seasons, including during the Mendocino Complex Fire?
- (2) Does [your agency] have contingency plans currently in place to provide fire protection services should Scott Dam be removed, and if so, what are they?

Rep. Thompson filed those letters and the agency responses to those questions in the FERC file for this case in Docket P-77-001, as noted in a letter from his office dated October 5, 2023. In particular, the CAL FIRE response included the following notable comment:

“CAL FIRE has expanded its aerial firefighting capabilities using the S-70i CAL FIRE Hawk, which allows for larger amounts of water to be drawn from Clear Lake and delivered more quickly to incidents within the region. For these reasons, CAL FIRE believes that the

decommissioning of Scott Dam will not adversely impact CAL FIRE’s ability to provide an adequate and effective firefighting capability throughout the region.”

Similar responses were received from the U.S. Forest Service. See **Attachment G** for a copy of those letters for the FERC record in this docket.

There are many ways to reduce fire risk and decrease firefighting response time that have nothing to do with local dams or reservoirs. We recommend the Klamath Project *Fire Management Plan* as a model for such mitigation measures, although the details of what mitigation and fire risk reduction measures would be most useful in a new location would have to be tailored to this new situation. The full Klamath Project’s *Fire Management Plan* can be found on the Klamath River Renewal Corporation (KRRC) web site at: <https://klamathrenewal.org/fire-management-plan/>.

SOCIO-ECONOMIC IMPACTS ON THE FISHING INDUSTRY

Potter Valley Project operations over the last 100 years have been devastating to the Eel River’s once-abundant salmon runs, and to our fishing industry and coastal communities once dependent on those Eel River salmon runs for all or part of their livelihoods.

The Eel River once supported some of California’s most productive salmon runs, with historic returns estimated at up to 800,000 returning Chinook salmon adults annually.⁵ For more than 100 years, however, PVP **has blocked approximately 288 stream miles** of high-quality salmonid habitat and also allowed the diversion of large volumes of water through a tunnel into the Russian River basin, greatly reducing flows necessary for sustaining Eel River fish populations.

⁵ For historical population estimates, see Ronald M. Yoshiyama & Peter Moyle, *Historical Review of Eel River Anadromous Salmonids, With Emphasis on Chinook Salmon, Coho Salmon and Steelhead*, UC Davis Center for Watershed Sciences Working Paper (Feb. 1, 2010). Available online at: https://eelriver.org/wp-content/uploads/2024/03/Yoshiyama-Moyle_Historical-Review-of-Eel-River-Anadromous-Salmonids-Final-Report-2010.pdf.

The cumulative impacts of over 100 years of these Eel River diversions and blockages have nearly wiped out what were once among the most important salmon runs on the West Coast.⁶ Chinook and Coho salmon, as well as steelhead, were all once abundant in the Eel River, but now all three of these native salmonid species are federally listed under the Endangered Species Act (ESA). These losses continue to contribute to increasingly limited harvest opportunities for California's commercial salmon fleet. Indeed, the economic losses to coastal salmon-dependent communities from near total destruction of Eel River salmon fisheries over the past decades has been a very steep price, including at least \$80 million/year in coastal economics benefits and the loss of the equivalent of some 1,521 family-wage jobs.⁷

A full accounting of these losses also requires a clear path to reversing them. Dam removal alone will not restore harvestable salmon abundance. Repairing the long-term economic harm to ocean fisheries also demands a comprehensive reintroduction program that restores Eel River salmon to levels that can once again sustain commercial harvest. This requires proactive measures, not passive hopes of natural return. FERC should require PG&E to support science-based reintroduction methods capable of rebuilding abundance at a pace that reflects the scale of the harm.

It is critical that any economic analysis of Eel River dam removal or other water quality impacts include impacts to ocean fisheries. Too often, only terrestrial economies are considered when looking at FERC project impacts, at the expense of fish populations and those who depend upon them. Because salmon from different watersheds mix in our ocean fisheries and travel great distances, declines in abundance of Eel River salmon runs ripple through ocean fisheries throughout California and Oregon.

The near-total losses of the once abundant Eel River salmon runs constrain northern California and Oregon ocean salmon fisheries in two ways: (1) the direct loss of fish from the Eel River, which can no longer be harvested because they no longer exist, but also; (2) the indirect loss

⁶ Outside of Alaska, only the great Columbia-Snake River basin, the Central California multi-river system and the Klamath Basin watersheds historically produced more salmon than the Eel River.

⁷ See for instance *A River in the Balance: The Benefits and Costs of Restoring Natural Water Flows to the Eel River*, Center for Environmental Economic Development (CEED), Summer 2002, citations on page 12 under "Market Value of the Entire Eel River Fishery," which was \$50 million in 2002 dollars. In today's 2023 dollars, estimated Eel River salmon-related fisheries economic losses are now about \$80 million/year, and the median household income in Humboldt County as of today is \$52,594 as a definition of a "family-wage job." Dividing that figure into \$80 million in losses = 1,521 lost jobs.

of access to other, more abundant, but intermingling stocks, because our ocean fisheries are managed, restricted, and sometimes closed entirely in order to protect the least abundant stocks.

In northern California this “weakest stock management” limiting factor is usually the ESA-listed California Coastal Chinook (CCC) or the Southern Oregon/Northern California Coho (SONCC) from the Eel River.⁸ Our ability to harvest more abundant stocks (from the Sacramento or Klamath Rivers, for example) is now always limited under “weak stock management” restrictions in order to protect Threatened CCC or SONCC runs. Protecting those damaged Eel River runs from further decline is essential, but rebuilding Eel River salmon populations to harvestable levels is just as critical to restoring ocean fisheries. Greater abundance of Eel River Chinook, for example, could reopen fishery access to many otherwise closed (but still abundant) mixed-stock ocean fisheries.

There is ample precedent to consider the socio-economic impacts to ocean fisheries in the FERC NEPA analysis, and this impact should be included in any legitimate costs vs. benefits analysis for Eel River dam removal. For instance, impacts of prior losses and future benefits of salmon productivity were well within the scope of NEPA analysis for the Klamath Hydropower Project dam removal process. Long-term improvements to water quality, ecosystem recovery, and resulting renewed ocean salmon fishing opportunities must also be considered as major beneficial impacts when compared to the No Action Alternative.

Leaving the PVP dams in place has been and would continue to be very costly to river and coastal salmon-based communities. The economic importance of functioning and productive natural environments is well established. Natural Resource Economists remind us that any legitimate costs-benefits analysis (especially for salmon restoration projects) must include both the costs of the *status quo* to ocean salmon fisheries and communities, as well as the benefits that would accrue to those same communities from successful salmon restoration.⁹

⁸ Indeed, Southern Oregon/Northern California Coho (SONCC) and other once-abundant California Coho salmon runs have been so damaged for so many years, that there is no allowed direct fishing of Coho salmon any more in California waters, and even incidental (i.e., unintended) accidental harvests of Coho in other fisheries is strictly capped and exceeding that cap can result in major restrictions in otherwise unrelated fisheries.

⁹See *A Letter from Economists to Governors of Oregon (Kitzhaber), California (Wilson), Washington (Loche) and Alaska (Knowles) and Premier of British Columbia (Clark)*. (Sept. 9, 1998) (<https://ifrfish.org/wp-content/uploads/2023/01/Economists-Salmon-Letter-Sept-1998-1.pdf>) and *A Letter from Economists to President Bush and the Governors of Eleven Western States Regarding the Economic Importance of the West's Natural Environment*. (December 3, 2003) (<https://ifrfish.org/wp-content/uploads/2023/01/Economists-Letter-Dec-2003-1.pdf>).

Any legitimate socio-economic analysis of dam removal on the Eel River must also include commercial fishing representatives, including the PFMC, in order to understand the economic losses sustained by our coastal fishing communities. The extent of these impacts can also be estimated from PFMC fisheries abundance and landings data by region, which has been collected and maintained since at least 1976.

The geographic scope of any legitimate FERC and NEPA socio-economic impacts analysis should also not be limited to just the physical dam sites but should also include the full Eel River watershed and impacts on the coastal communities influenced by ocean salmon fisheries supported by highly migratory Eel River salmon stocks. NEPA requires FERC to consider both direct and reasonably foreseeable indirect effects of a project. That analysis should thus extend beyond merely construction impacts to include downstream and ocean impacts of improved Eel River salmon runs, since those are predictable and reasonably foreseeable results of better water quality and restored fish passage in the Eel River. Impacts of the PVP must be considered holistically, and restoration measures must correspondingly apply to the entire Eel River watershed through the estuary.

PG&E benefited from power generation at PVP for decades and now that power generation is no longer possible and water levels at Scott Dam are lowered for seismic safety reasons, PG&E has made the very reasonable business decision to decommission the dams. The socio-economic positive economic benefits to our west coast salmon fisheries that will result are real and quantifiable and would provide a net benefit to society as a whole through restored salmon fisheries that deliver high quality seafood to America's tables. Those benefits must be included in FERC's costs vs. benefits and impacts NEPA analysis.

PG&E also consistently underestimates the salmonid habitat currently blocked by the PVP. Throughout its LSA, PG&E refers to "50+ miles" of additional salmonid habitat that would be opened up from the removal of the PVP dams. This is a considerable underestimate, which leads to understated economic benefits from restoring salmonids to their once native habitat. A more comprehensive as well as precise analysis conducted in 2017 by Emily Jeanne Cooper (*An Estimation of Potential Salmonid Habitat Capacity in the Upper Mainstem Eel River, California*,) concluded that, using three independent models, the amount of potential spawning and rearing habitat above the impassable Scott Dam would be between 55-79 miles for Chinook salmon, and potential steelhead habitat was between 198-288 miles. Steelhead are economically important to support valuable in-river recreational and Tribal fisheries, while Chinook primarily support ocean commercial fisheries.¹⁰ Assessing the costs vs. the benefits of PVP dam removal requires the use

¹⁰ Eel River Coho salmon habitat was not specifically assessed in that study.

of the full range of available habitat modeling that is represented by that study. A copy of that study is enclosed as **Attachment H**.

SALMON RECOVERY SHOULD BE THE MAJOR MITIGATION GOAL

We have seen from the recent Klamath dam removals that salmonids return to upper watersheds volitionally, often within days of regaining open passage. There is great hope in the inherent ability of these Eel River native salmon to return to their traditional spawning grounds, once they have renewed access. However, with solely volitional return and no assistance, it may take many years to fully recover these populations which have been reduced to a fraction of their historical abundance. Sustained and more rapid recovery, however, will require many more thousands of adults returning to the spawning grounds each year in order to support fisheries. As mitigation for the damages done to our ocean salmon fisheries over the past 100 years, PG&E should be required to at least fund targeted, active methods of salmon reintroduction to rebuild salmon populations to harvestable numbers as soon as feasible. These methods could include adult trap-and-haul above Scott Dam before dam removal, stream side incubation of juveniles, or egg injection into gravel as examples.

Restoring healthy, sustainable, and harvestable salmonid populations to the Eel River should be the ultimate measure of success for PVP dam removal. It makes little sense to provide just enough water or habitat to prevent salmon extinction but never enough for actual recovery, thus keeping these vital stocks in a chronically depleted condition that cannot sustain fisheries. *Recovery must be the clear goal.* A comprehensive salmon reintroduction plan must therefore be part of this effort, using proven science-based tools to boost early survival and speed rebuilding toward a harvestable surplus. We support scientifically based, measurable water quality goals to support fish populations, but true Eel River salmon recovery will only be achieved when ocean fisheries and coastal communities are thriving and once again supported by abundant Eel River salmon.

Successful dam removal plans must therefore be paired with an Eel River comprehensive salmon reintroduction program designed to achieve harvestable abundances, not simply the minimum levels needed for ESA delisting. Re-establishing salmon abundances at levels that support commercial harvests and food production may require the full range of science-based tools, including early life stage out planting methods such as hatch boxes and egg injection and, if necessary, hatchery or rearing infrastructure. These tools improve survival during the early phases of restoration while still supporting natural production. A complete *Salmonid Reintroduction Plan*

is essential for the long-term success of dam removal and should be included by FERC as a required element of the license surrender.

In summary, salmonid habitat restoration of PVP-impacted sites both behind the dams and downstream of Scott Dam must accompany removal. Revegetation efforts, improved fish passage, and better habitat connectivity should all be actively managed and monitored for results and, while we are not asking the PG&E itself implement such a *Salmonid Restoration Plan*, it is reasonable that such mitigation and restoration efforts should be funded by PG&E for at least ten (10) more years after dam removal. Such an Eel River salmonid habitat restoration effort would be similar to the 2200-acre salmon habitat restoration efforts included in the Klamath Dam Removal project, which also included eight (8) years of continued Company funding for mitigation measures such as the Fall Creek Hatchery after the year of actual dam removals.

Short-term success metrics, immediately following dam removal, should include counts of returning adult salmonids to the Eel River, as well as counts for numbers spawning above former dam sites. Monitoring for long-term success metrics, e.g., within ten (10) years post dam removal, should also include ascertaining the success of sustained production of fish populations sufficient to: (1) support managed harvest of Eel River fish and other stocks of CCC; (2) reduce management pressures on other abundant stocks in mixed-stock ocean fisheries, and; (3) advance recovery and delisting plans for CCC and SONCC populations. *Both SONCC and CCC salmon populations have existing NMFS Recovery Plans, and all PG&E's salmon habitat restoration efforts should be consistent with those existing Recovery Plans.*

In short, water quality in the Eel River after dam removals must be evaluated for its real-world ability to not only sustain salmon but ultimately to recover salmon populations to levels able to support local and ocean fisheries that depend on a healthy Eel River. Achieving robust, harvestable salmon populations must be the ultimate downstream measure of success in this dam decommissioning effort. If initial restoration efforts do not meet minimal production goals for Chinook and Coho salmon, then additional FERC mitigation obligations, such as salmon egg out planting and gravel injection, a conservation hatchery or trucking of smolts to the estuary to offset predation and poor water conditions created by dams or exacerbated by dam removals must then be required.

FERC should also specifically require PG&E to consult with the PFMC regarding: (a) dam decommissioning and removal effects on salmon Essential Fish Habitat (EFH), which the Council

has designated (as noted on pg. 3-3) for the Eel River, estuary, and nearshore area; (b) minimizing adverse impacts on Eel River salmon stocks whose lack of abundance affects ocean mixed-stock salmon fisheries, and; (c) maximizing the restoration of access to, and ecological carrying capacity of, salmonid spawning and rearing areas that would be affected by dam removals, both upstream and downstream of the current dam locations.

OTHER RESTORATION ISSUES AND GOAL STATEMENTS

Meeting Both Upstream and Downstream Restoration Obligations: In the Application's *Introduction* [LSA pg. 1-1] there is a list of "Proposed Actions under the Application for Surrender of License" that includes the following:

"Restoration of the remnant inundation zone of Lake Pillsbury reservoir and Van Arsdale Reservoir, including adjacent riparian, wetlands, and upland areas affected by the decommissioning."

This restoration goal is incomplete as it omits all downriver impacts in areas below the Scott Dam that are nonetheless affected by the decommissioning. Those proposed actions should therefore read as follows:

"Restoration of the remnant inundation zone of Lake Pillsbury reservoir and Van Arsdale Reservoir, including adjacent riparian, wetlands, and upland **and downriver** areas affected by the decommissioning." [inserted language in bold]

Because sediments will be moving downriver (not upriver) these downriver impacts of decommissioning are also vitally important to identify, mitigate, or avoid.

Scientific Peer Review Process (See LSA pg. 5-7): PG&E should also develop its Restoration Plans specifically with the goal of re-establishing ecologically effective salmonid spawning and rearing habitat through a scientific peer-reviewed process similar to that used in the Klamath Dam Removal Project (see FERC Project Dockets Nos. P-2082 and P-14803). This recent Klamath experience was an excellent model for peer-review of the science behind restoration planning. Such a scientific peer-review inevitably provides better science to guide river restoration efforts and to make those efforts far more effective.

Additions to Table 5-2 (LSA pg. 5-8): To Scott Dam and Cape Horn Dam "restoration goals" should also add (as it is for Lake Pillsbury reservoir and Van Arsdale Reservoir), the specific goal of:

“Removal of fish passage barriers created by dam removal in the Eel River, including upstream of the former dam and at downstream tributary confluences, and reestablishment of known critical riffles.”

This goal was conspicuously but without explanation not included in the statement for the Scott Dam and Cape Horn Dams “goals by location,” but should be explicitly listed as part of all those restoration efforts in all locations. Ensuring complete, functional passage at all former barrier sites is also a foundational requirement for any comprehensive salmon reintroduction program.

Pikeminnow Suppression: In LSA section 6.2.3 *Fish and Aquatic Resources*, it was noted that a short-term unavoidable adverse effect to fish and aquatic resources from the release of non-native species, including Sacramento pikeminnow (*Ptychocheilus grandis*) and largemouth bass (*Micropterus salmoides*), from Lake Pillsbury reservoir into the Eel River during winter spill events following the lowering of Scott Dam and during the release of storage and sediment from Scott Dam (Phases 1 and 2a). [LSA pg. 6-2]

There are a number of potential mitigation measures that have been or could be taken to reduce the population of predatory pikeminnow entering the Eel River from Lake Pillsbury, some of which have been developed by the Wiyot Tribe and are described in the LSA on PDF page 465 [LSA pg.2.2.3.3-78], including reference to a PG&E pikeminnow monitoring and suppression program according to its *Pikeminnow Adaptive Management and Suppression Operation Plan* in 2019.

Sacramento pikeminnow are a warm-water fish that thrive in warm-water lakes like Lake Pillsbury but apparently do not do well against competition from salmonids in the salmonids’ normal cold-water habitat. *The pikeminnow invasive species problem in Lake Pillsbury was created by, and is a direct result of, the artificially warm-water conditions of Lake Pillsbury in which this warm-water fish survives and has multiplied.* Part of PG&E’s responsibility to mitigate the harms its Lake Pillsbury reservoir has inflicted on local people, fish populations and fisheries is to take active steps to eradicate pikeminnow in Lake Pillsbury, or at the least to minimize and mitigate for their presence in the Eel River after dam removals. But meaningful pikeminnow suppression measures are almost completely missing in the LSA. FERC should at the minimum require PG&E to redraft, revise, update, and fund its *Pikeminnow Adaptive Management and Suppression Operation Plan* to FERC’s current conditions and timelines as part of its Project decommissioning and Scott Dam removal and mitigation operations, and to fund implementation of that Plan for a period of at least ten (10) years after physical dam removals.

A similar invasive species predation prevention *Suppression Plan* should also be developed for largemouth bass, with similar funding conditions.

COMMENTS ON THE NEW EEL-RUSSIAN FACILITY (NERF)

For more than 110 years, large volumes of Eel River water have been taken (to the great detriment of the Eel River's once abundant salmon fisheries) from the hydrological top of the Eel River watershed, where it was then forced through a tunnel at Cape Horn Dam to be used for hydropower production at the FERC-licensed Potter Valley Hydropower Project, now owned and operated by PG&E. None of this was planned decades ago with any thought or analysis of likely impacts on Eel River fish populations in mind.

This diversion, allowed by a water right dated 1905 for up to 340 cfs in flows (= 246,148 acre-feet/year), **from 1922 to 2006 took an average of about 150,000 acre-feet/year of water out of the Eel River during those years.**¹¹ This has had devastating impacts on Eel River-based salmon fisheries. However, once this Eel River water was through the turbines, and had been delivered to the Russian River, it had in the past always been classed as “abandoned water,” and was then used to gravity feed Lake Mendocino Reservoir, which in turn provides multiple water diversions to downriver (mostly agricultural) water users in the Russian River watershed. This is how Russian River water users have become dependent on water they were never originally entitled to, taken for 110 years from a hydrologically separate river basin.

The result has been the near extinction and the ESA-listing of both Chinook and Coho stocks from the Eel River that were once the backbone of our northern California ocean commercial fisheries. Similar ESA-listings were also needed to protect the Eel River's steelhead runs, which once helped support abundant local in-river fisheries and various Tribal subsistence fisheries.

As noted above, our ocean fisheries are strictly and conservatively managed to protect the “weakest stocks,” which are now usually ESA-listed SONCC Coho and California Coastal Chinook (CCC) in northern California fisheries. The urgency of improving the abundance of these now ESA-listed fish, and the severe economic and social impacts on our coastal communities their engineered decline has caused, cannot be overstated.

¹¹ Though this original amount has been greatly reduced today in accordance with ESA requirements, see Attachment I.

The intended outcome of this dam removal process should be the restoration of viable, self-sustaining, and harvestable populations of Eel River salmon, i.e., recovery goals to levels well above abundance numbers merely needed for de-listing under the ESA, since a sizable harvestable surplus is required before targeted fishing can once again be permitted on these stocks. Restoring these salmon runs not only requires a free-flowing river with access to and from the headwaters but *also restoring water long-diverted to the Russian River back to the Eel River wherever these now ESA-listed fish need it for recovery*. This salmon recovery effort is not a “cost,” but rather is an investment in a harvestable species that produces jobs in local and coastal communities and provides a major local food source.

The Cape Horn Dam fish ladder, installed much more recently, is the longest and tallest fish ladder in the state, is poorly designed, frequently fails, routinely harms fish and prevents the recovery of salmon and steelhead listed under the federal Endangered Species Act (ESA). Both FERC and PG&E face federal lawsuits from PCFFA/IFR under the ESA for allowing the dams’ continued harm to ESA-protected fish, as noted earlier in these comments. The powerplant of the Cape Horn Dam, can no longer produce hydropower, and is entirely shut down. From an infrastructure and economics perspective there is no rational basis for retaining these failing dams.

The primary reason for any remaining disputes over the removal of the dams is continuing efforts by some Russian River water users to retain the dams so as to continue to access Eel River water at the expense of Eel River fisheries. Russian River farms never paid for that water, but it was never without a cost. Indeed, the Eel River salmon fisheries and those who rely on them have paid – and continue to pay – a very steep price in lost coastal salmon fisheries economics benefits and the loss of more than 1,500 fishing-supported jobs (see footnote 8).

The water flows now in debate are relatively small in volume as compared to past history. As shown in **Attachment I**, diversions from the Eel River have been restricted by NMFS since 2006. The PG&E FERC license has been amended with these updated diversion restrictions in order to meet the most basic water survival requirements of the several ESA-protected salmonid species in the Eel River.

Changes in PVP Diversions of Eel River Water over Time

Time Spans	Annual PVP Diversions (acre-ft.)
1922 – 2006 Average	150,000
2007 – 2020 Average	64,000
2021 – 2022 Average	40,000

In other words, the Eel River diversions have already been reduced by about 74% from their historic baseline of 1922 through 2006 in order to meet the minimum and most basic water needs of the three ESA-listed salmonid species in the Eel River NMFS deemed necessary just to prevent their extinction. From this well documented fact we believe two conclusions can be justified:

- (1) The Russian River water users have already largely adapted to living with much less Eel River water than in the past, and thus claims that the loss of future Eel River water diversion will be devastating to their water systems, their businesses and their communities are completely false, and;
- (2) There is unlikely to be any “surplus” water in the Eel River system above fish recovery needs. Given that all but about 40,000 acre-feet has been deemed by NMFS as *ESA-required water flows sufficient to prevent extinction*, then the greater “optimum flows” that these fish need to recover to abundance will likely account for all remaining water in the Eel River system, especially as environmental changes toward hotter and drier conditions will likely mean less annual average rainfall in the basin.

These ESA-required water diversion restrictions will not be satisfied if the NERF project is built to replace the dams. Indeed, any NERF project facilities will have to go through their own ESA Biological Opinion and Incidental Take Permit (ITP) process, and its increasingly unlikely that these current ESA-minimum flows will suddenly no longer be needed, so long as these fish remain in the terrible shape they are in today. Continued diversions of water those Eel River fish need for their recovery will only continue the extremely depressed state the river ecosystem is in and has long been suffering from.

There has been some attempt to demonstrate on the basis of hydrological science that there may be some “surplus water” in some (i.e., wet) years above and beyond the optimum (not minimum) flows that salmonids need to be returned to the Eel River in order to eventually recover a significant portion of their original abundance. *That science however is still not publicly available, nor has it been peer-reviewed.* Nor is it clear that, given likely reductions in regional rainfall and increases in evapotranspiration projected under multiple climate change scenarios, that any such surplus water today (if it exists at all) would still be available over the projected 50-year life expectancy of the NERF project. Additionally, NERF has not been shown to be a cost-effective way of delivering that likely minimal volume of water as compared to multiple (and likely cheaper) alternatives such as aggressive water conservation, aquifer groundwater recharge and storage,

and/or the raising of Coyote Dam so that Lake Mendocino can actually increase its limited storage capacity to what it was originally designed for.¹²

All these unknowns make any realistic NEPA analysis of the NERF project highly uncertain to impossible. This uncertainty also makes financing what could be a very expensive infrastructure construction project in order to obtain what is likely to be a small and decreasing amount of water problematic at best. Given the controversy over NERF, it will likely be challenged in Court. All these uncertainties associated with NERF are other good reasons for not requiring NERF construction as a pre-requisite for any other actions by PG&E under the current FERC license.

To conclude, we ask the Commission to approve license surrender without tying dam removal to the uncertain and non-PG&E NERF proposal, and to require restoration, mitigation, and reintroduction measures that directly support the recovery of Eel River salmon to levels that can sustain harvest. FERC has both the authority and responsibility to ensure that this license surrender and dam decommissioning project results in real restoration of the Eel River system, including water quality protections, sediment management, reintroduction planning, and mitigation for the long-term harm this project has imposed on ocean fisheries. Removing the dams, restoring access to habitat, suppressing invasive predators, and implementing a robust salmon recovery and reintroduction program are essential outcomes of this process. With the right FERC conditions in place, this license surrender can finally put the Eel River and the coastal communities that depend on it back on a path to recovery.

Sincerely,



Glen H. Spain, J.D.

General Legal Counsel

PCFFA-IFR NW Regional Director

¹² It is likely that Coyote Dam will have to be raised in any event, as otherwise any “surplus water” from the NERF project may be unstorable in wet years, again limiting its usefulness.

ATTACHMENTS

Attachment A — Letter April 12, 2023, from CA Dept. of Water Resources re: Scott Dam.

Attachment B – FERC Dam Seismic Safety Inspection Report (Sept 1, 2022).

Attachment C – July, 2021, Technical Memorandum titled *Analyses of Fine Sediment Erosion Effects on Aquatic Species Following the Proposed Dam Removal, Eel River, California*, prepared by Stillwater Sciences.

Attachment D – Feb. 21, 2019, *Significant Dam Safety (and Water System Reliability) Issues at Potter Valley Project's Scott Dam Have Yet to be Addressed*, By Scott Greacen, Friends of the Eel River Conservation Director.

Attachment E– Letter to FERC from Friends of the Eel River (June 30, 2023) related to seismic safety and other concerns about Scott Dam and Lake Pillsbury.

Attachment F – Brown and Ritter (1971), *Sediment Transport and Turbidity in the Eel River Basin, California*.

Attachment G – *Copies of letters from Rep. Mike Thompson to California Dept. of Forestry and Fire Protection and U.S. Forest Service re: Fire Risk Management Plans (2023)*.

Appendices to Comments of Friends of the River et al. re Scoping Document for PVP Surrender and Decommissioning
July 24, 2026

Attachment H – An Estimation of Potential Salmonid Habitat Capacity in the Upper Mainstem Eel River, California, a Master’s Thesis by Emily Jeanne Cooper (May, 2017).

Attachment I – Chart: Reduced Potter Valley Water Diversions (1922-2022).

PCFFA-IFR Comments on PVP LSA (12-01-25)

