COUNTY OF HUMBOLDT

For the meeting of: 7/22/2025

File #: 25-896

To: Board of Supervisors

From: Public Works

Agenda Section: Time Certain Matter

Vote Requirement: Majority

SUBJECT:
10:00 AM - Approval of Water Diversion Agreement Associated with PG&E's Decommissioning of the Potter Valley Project on the Eel River and a New Eel-Russian Diversion Facility

RECOMMENDATION(S):
That the Board of Supervisors:

1. Receive a staff report regarding the proposed Water Diversion Agreement for the New Eel-Russian Facility;
2. Receive comments from representatives of California Trout, Trout Unlimited, and Friends of the Eel River;
3. Receive comments from the public;
4. Approve, and authorize the chair of the Board to sign, the attached Water Diversion Agreement (along with revised versions, if needed, containing non-substantive changes after consultation with the Board's Eel-Russian ad hoc committee and approval from County Counsel);
5. Authorize the Public Works Deputy-Director for Environmental Services to approve Humboldt County's public statements regarding the Water Diversion Agreement and joint statements or letters by the parties of the Agreement; and
6. Direct staff to continue working with the signatory parties of the Water Diversion Agreement, PG&E, and other stakeholders to advance the Two Basin Solution and decommissioning of PG&E's Potter Valley Project.

STRATEGIC PLAN:
This action supports the following areas of your Board's Strategic Plan.

Area of Focus: Sustainable Natural Resources & Infrastructure Stewardship
Strategic Plan Category: 5001 - Enhance climate adaptation landscapes and communities

DISCUSSION:
Overview
Pacific Gas & Electric Company ("PG&E") is preparing to decommission the Potter Valley Hydroelectric Project on the upper Eel River which includes removing Scott Dam and Cape Horn Dam to restore a free-flowing Eel River and re-establish fish passage to upstream habitat. By July 29, 2025, PG&E will file its license surrender application and decommissioning plan to the Federal Energy Regulatory Commission ("FERC"). This plan is expected to include a proposal to use a portion of PG&E's lands and facilities for construction of a new water diversion facility (the New Eel-Russian Facility). Attachment 1 contains maps of the Eel and Russian River watersheds and identifies the location of the Potter Valley Project.

Since mid-2023, Humboldt County has engaged in negotiations with a variety of parties in the Eel and Russian River Basins to develop consensus on a Water Diversion Agreement ("Agreement") to allow continued diversions with appropriate protections and

benefits for the Eel River and its fisheries. The parties include Sonoma Water, Mendocino Inland Water and Power Commission, Round Valley Indian Tribes, California Trout, Trout Unlimited, and the California Department of Fish & Wildlife. Humboldt County's position in these negotiations has been that our strong preference would be for Eel River water to stay in the Eel River watershed, but we would consider an Agreement if it contains necessary protections for the Eel River and its fisheries and provides a strategic opportunity to accelerate restoration of the watershed and recovery of fish populations. The Agreement represents a negotiated settlement in lieu of a contested proceeding before FERC.

On February 11, 2025, the Humboldt County Board of Supervisors approved a Memorandum of Understanding ("MOU") developed by the parties to describe the essential terms of a proposed Agreement. Today's action involves consideration of the full Agreement (Attachment 2) which is being considered contemporaneously by the decision-making bodies of the other parties. The Agreement has been developed in consultation with PG&E but PG&E is not a party to the Agreement and, to date, has not made commitments to any of the terms in the Agreement.

The key protections and benefits for the Eel River identified in the MOU have been incorporated into the Agreement. In summary, the key protections include: water rights owned by an entity in the Eel River watershed; limited water diversions based on the needs of Eel River fisheries; a facility design that allows a free-flowing river; performance metrics and adaptive management; limited initial term with a limited conditional renewal term; and the principle of a phase-out of diversions over time and a future when the Russian River basin becomes self-reliant for water and not dependent on Eel River diversions. Key benefits for the Eel River include: committing the major Russian River water users to support PG&E's dam removal without delay; securing an annual restoration payment providing unrestricted funds to support locally-guided, high-priority restoration work; providing a catalyst for attracting new federal, state, and philanthropic funding to support habitat restoration; maintaining influence on facility operations through the meet-and-confer and conditional renewal processes; and demonstrating the ability of regional interests to work together to solve a large, long-standing natural resource problem on the North Coast.

The Agreement includes new provisions to provide protections for the contingency that PG&E does not transfer all its water rights associated with the Potter Valley Project to a party of the Agreement. The Agreement also defines dispute resolution procedures which were not developed in the MOU.

Background

The Potter Valley Hydroelectric Project includes Scott Dam, which forms a storage reservoir (Lake Pillsbury) in Lake County and Cape Horn Dam, which forms Van Arsdale reservoir in Mendocino County, where water is diverted through a mile-long tunnel to an electricity-generating powerhouse in Potter Valley. Releases from the powerhouse are a source of water for irrigation in Potter Valley and also discharge into the East Branch Russian River, which flows into Lake Mendocino near Ukiah. (Although the powerhouse has not generated power since 2021 due to an equipment failure, PG&E continues to divert water in order to meet minimum instream flow requirements in the East Branch Russian River and to meet water delivery contracts in Potter Valley.)

Within the Potter Valley Irrigation District, approximately 4,728 acres of agricultural land are irrigated and the district has a population of approximately 1,700 people. Water from Lake Mendocino is used in Mendocino, Sonoma, and Marin counties for irrigation, municipal and domestic water supply, and meeting instream flow requirements in the Russian River. The Mendocino Inland Water and Power Commission is a joint powers authority formed by Mendocino County, City of Ukiah, Redwood Valley County Water District, Potter Valley Irrigation District, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District. Lake Mendocino is operated by the U.S. Army Corps of Engineers in coordination with Sonoma Water and the Mendocino County Russian River Flood Control and Water Conservation Improvement District. The Corps of Engineers and Sonoma Water also coordinate releases into the Russian River from Lake Sonoma, which is formed by Warm Springs Dam on Dry Creek. Sonoma Water provides wholesale drinking water to nine water contractors (five cities, three water districts, one town) which collectively serve over 600,000 people in Sonoma and Marin counties.

The Eel River is a major river on the North Coast of California with a biologically rich watershed that spans five counties. The Eel River watershed comprises 33% of Humboldt County, more than any other watershed. The Eel River is highly valued for providing fish and wildlife habitat, water supply, recreation, scenic beauty, and other ecosystem services. Eel River fish populations are currently substantially reduced from historical levels, causing significant cultural, social, and economic impacts. Interest is extremely high in working to restore habitat and recover fish populations, especially for salmon, steelhead, and lamprey, because the watershed has a relatively low level of development and the historical population levels indicate the strong potential for vibrant fisheries. For example, information on the Eel River Watershed Restoration and Conservation Program, which outlines a science-

based approach for prioritizing restoration and conservation actions across the basin, is available here: <https://caltrout.org/eel-river-watershed-program>

The lower Eel River flows through Humboldt County for 81 miles before entering the Pacific Ocean through the Eel River Delta near Ferndale and Fortuna (Attachment 1). The Eel River watershed also encompasses portions of Trinity, Mendocino, Lake, and Glenn counties. Major tributaries include the Van Duzen River, South Fork Eel River, North Fork Eel River, and Middle Fork Eel River. The Round Valley Reservation of the Round Valley Indian Tribes, based in Covelo (Mendocino County), is situated adjacent to portions of the mainstem Eel River, North Fork Eel River, and Middle Fork Eel River. The Round Valley Indian Tribes have unadjudicated federal reserved water and fishing rights in the Eel River resulting from the creation of their Reservation in 1858 and modifications in 1873. Cape Horn Dam is located 157 river miles from the Pacific Ocean; the total length of the mainstem Eel River is approximately 197 river miles.

Cape Horn Dam, the diversion tunnel, and the initial powerhouse were constructed from 1905 to 1908. Scott Dam was constructed to form Lake Pillsbury from 1920 to 1922. In 1922, the project received a 50-year federal operating license. In October and December 1922, the Humboldt County Board of Supervisors issued resolutions opposing applications for state water diversion permits, which were ultimately issued. The Potter Valley Irrigation District ("PVID") was formed in 1924 and PG&E acquired the facility with transfer of the federal license in 1930. PVID entered into a contract with PG&E to receive water deliveries from the powerhouse. Lake Pillsbury, surrounded by Mendocino National Forest in Lake County, became a recreational destination.

The Potter Valley Project was one of the major causes and/or contributing factors to the degradation of the Eel River watershed and reductions in fish populations in the 20th century. Impacts from the Potter Valley Project include: blocking important headwaters habitat above Scott Dam; reducing flows downstream of the point of diversion; disrupting sediment transport processes; altering water temperatures which disrupts the environmental cues for fish migration; and creating conditions that supported the invasion of the Sacramento pikeminnow, an invasive species that preys on juvenile salmon.

In 1970, PG&E applied to FERC for re-licensing of the Potter Valley Project. In 1972, Humboldt County filed a motion to intervene in the re-licensing proceeding and passed Resolution 72-60 calling for consideration of fisheries and ecological standards. Humboldt County continued to be active advocating for the County's interests in the re-licensing proceedings which continued until a contested settlement agreement was signed in 1983. The new license required PG&E to conduct multi-year studies and make modifications to both facilities and operations.

Discussions in the early and mid-1970s regarding the relicensing of the project led to an awareness of the need for regional coordination and cooperation. In 1978, the counties of Humboldt, Lake, Mendocino, and Sonoma formed the Eel-Russian River Commission as a joint-powers authority through execution of a joint-powers agreement. This commission served as a regional forum to share information and discuss the operations and impacts of the Potter Valley Project until 2019, when it became inactive.

In the late 1990s, the volume and timing of water diversions from the Potter Valley Project became a renewed point of focus with studies and regulatory actions, driven largely by a Biological Opinion issued by National Marine Fisheries Service ("NMFS"). Starting in 2007, water diversions to the Russian River were significantly reduced due to requirements from NMFS and FERC to protect Eel River salmon from extinction. Prior to 2007, the average volume of diverted water was approximately 150,000 acre-feet per year. Following implementation of the Biological Opinion from NMFS, the average diversions from 2007 through 2020 were approximately 60,000 acre-feet per year. For the last few years, the annual volume of diverted water has been reduced further to around 40,000 acre-feet per year due to safety and operational constraints.

In 2017, Congressman Jared Huffman convened an ad hoc committee of agencies and organizations to discuss the impending re-licensing of the Project based on goals and principles for a "Two Basin Solution" that would address the needs of both the Russian and Eel River basins. On June 5, 2018, the Humboldt County Board of Supervisors adopted Resolution 18-56 which presented Humboldt County's position regarding re-licensing.

In January 2019, PG&E announced that it did not intend to apply for re-licensing the Project. From 2019 through 2022, five parties (Sonoma Water, Mendocino Inland Water and Power Commission, Humboldt County, Round Valley Indian Tribes, and California Trout) explored the feasibility of forming a partnership for regional ownership and operation of the Project. The Humboldt County Board of Supervisors adopted Resolution 19-47 and Resolution 19-53 to support this initiative. Ongoing funding could not be secured and the collaborative effort became inactive in 2022.

In August 2023, Sonoma Water, Mendocino Inland Water and Power Commission, and Round Valley Indian Tribes submitted a concept proposal to PG&E requesting that PG&E include elements of a proposed new water diversion facility (called the New Eel-Russian Facility, or "NERF") in PG&E's license surrender application and decommissioning plan. In September 2023, the director of the California Department of Fish & Wildlife and the president of Round Valley Indian Tribes invited Humboldt County, California Trout, and Trout Unlimited to join the negotiations for a proposed Water Diversion Agreement. In November 2023, the group submitted a revised concept proposal to PG&E and the Humboldt County Board of Supervisors issued a statement of conditional support for the revised proposal. In December 2023, Sonoma Water, Sonoma County, and Mendocino Inland Water and Power Commission formed the Eel-Russian Project Authority ("ERPA") as a joint powers authority. Round Valley Indian Tribes subsequently joined ERPA's board of directors.

In January 2024, ERPA, with input from a technical advisory group comprised of agency staff and non-governmental organization representatives, selected a pumping system configuration as the alternative to move forward with engineering design to a 65% level of completion. This alternative was selected because it was the lower-risk alternative for water supply reliability and the superior alternative for fish passage. Also in January 2024, the Humboldt County Board of Supervisors formed an Eel-Russian ad hoc committee, comprised of Supervisor Bushnell and Supervisor Wilson. Negotiations on the proposed Agreement continued through July 2025.

Water Diversion Agreement

A summary of each section of the Agreement is provided below:
Section 1 contains recitals with background information. Section 2 states the co-equal goals for implementing a "Two Basin Solution" for the Eel and Russian River Basins. Section 2 also states the intentions of the Agreement, which include the following:

- Advance the timely removal of Scott Dam and Cape Horn Dam through a cooperative approach with PG&E and interested parties from Eel and Russian River watersheds;

- Implement criteria for water diversions based on the best available scientific information to ensure that water diversions will be consistent with the recovery of Eel River fisheries including, but not limited to, Chinook salmon, coho salmon, steelhead, and lamprey, and a functioning ecosystem;

- Secure equitable state and federal funding for substantial investments in water infrastructure within the Russian River Basin and ecosystem restoration within the Eel River Basin;

- Take a significant step toward restorative justice for Round Valley Indian Tribes and reconciliation with the history of adverse impacts on Eel River communities associated with out-of-basin diversions; and

- Establish a durable and mutually supportive relationship between the Eel River and Russian River Basins and provide a strong foundation for continued regional collaboration based on incentives and mutual benefit.

Section 3 expresses the purpose of the Agreement, which is to state mutually agreeable terms for the permitting, construction, operation, and maintenance of the NERF, as well as related activities to implement the Two Basin Solution. Section 3 acknowledges that PG&E is not a signatory party to the Agreement and is not bound by any of its terms, nor has PG&E agreed to any of the proposed actions related to PG&E's lands and facilities. Section 4 defines specified words and phrases used in the Agreement.

Sections 5 through 8 commit the parties of the Agreement to support (1) PG&E's implementation of dam removal and the associated regulatory approvals; and (2) ERPA's implementation of construction, operation and maintenance of NERF on lands and facilities associated with the Potter Valley Project in the vicinity of Cape Horn Dam, and the associated regulatory approvals.

Section 9 contains commitments related to PG&E's license surrender application. The parties support PG&E undertaking dam removal as expeditiously as possible, targeting 2028 for commencement of such work. The parties support ERPA utilizing certain of PG&E's lands and facilities for construction of NERF while they remain within FERC's jurisdiction, and support the subsequent removal of those lands from PG&E's FERC license once PG&E has completed removal of Cape Horn Dam and ERPA has completed construction of NERF.

Section 10 states the parties' intent that ownership of all PG&E's water rights associated with the Potter Valley Project be transferred to the Round Valley Indian Tribes. If ERPA receives water rights from PG&E as part of an asset transfer agreement, ERPA agrees to transfer those water rights to the Round Valley Indian Tribes. Round Valley Indian Tribes would enter into a lease with ERPA (described in Section 15) to allow ERPA to divert water for the NERF. Section 10 specifies protective measures that would be taken by ERPA if PG&E does not transfer all its water rights associated with the Potter Valley Project. In addition, for that partial transfer scenario, Humboldt County and Round Valley Indian Tribes would propose that portions of the upper Eel River be designated as wild and scenic under federal and state law. The Agreement states that under no circumstances will water diversions through NERF exceed the agreed-upon diversion rules.

Section 11 supports the transfer from PG&E to ERPA of PG&E's lands and facilities that are necessary for construction and operation of NERF. Section 11 contains a provision for recording a restrictive covenant on the transferred lands if PG&E does not transfer all its water rights associated with the Potter Valley Project.

Section 12 supports a design for NERF, described in Appendix 2 of the Agreement, that would involve a pumping system for water diversion along the left bank of the Eel River near the existing Cape Horn Dam site. A portion of the existing dam would be incorporated into a grade control structure to maintain a minimum bed elevation near the pump station intake screens.

Sections 13 and 14 specify ERPA's responsibilities for permitting and construction of NERF.

Section 15 contains provisions for Round Valley Indian Tribes and ERPA to enter into a lease agreement allowing ERPA to use the water rights transferred from PG&E to divert flow through NERF into the Russian River. The lease will commit ERPA to provide two annual payments, a use charge and a restoration payment. ERPA will pay Round Valley Indian Tribes a use charge of $1,000,000 per year for the use of Round Valley Indian Tribes' water rights for the operation of NERF. In addition, ERPA will pay Round Valley Indian Tribes a separate restoration payment of $750,000 per year in recognition of the Round Valley Indian Tribes forbearing to assert their federally reserved water and fishing rights against ERPA during the term of the lease. Round Valley Indian Tribes will transfer the restoration payment to an Eel River Restoration Fund that would be administered by the parties to the Agreement and potentially other parties. $750,000 represents approximately 21% of the estimated operating costs of NERF. The amounts indicated are in 2025 dollars and will be adjusted over time based on the California consumer price index. Payments would begin within three months of the commencement of NERF operations.

The $750,000 payment could increase (on a sliding scale up to $1,000,000) if public funding covers more than 75% of the construction cost of NERF. In addition, both lease payments will increase, either by 15% or by 50% of the savings from bond retirement, after the initial 30-year term of the Agreement. The manner of splitting the increases in funds between the use charge and restoration payment would be determined by Round Valley Indian Tribes, Humboldt County, California Trout, and Trout Unlimited after the Agreement is approved.

Establishment of a payment mechanism through this Agreement to benefit the Eel River watershed would be a major change from the past, when water users downstream of Potter Valley in Mendocino, Sonoma, and Marin Counties did not pay for Eel River water diverted through the Potter Valley Project. One of the uses of the committed annual funds would likely be to leverage other state, federal, and philanthropic funding sources to implement large-scale restoration and conservation projects in the Eel River watershed.

Section 16 specifies the diversion schedule, described in Appendix 3 of the Agreement, that ERPA would follow to divert flow into the Russian River. The diversion schedule provides the rules and criteria for allowing water diversions. The lead developer of the diversion schedule was Applied River Sciences, a consultant for the Round Valley Indian Tribes. The framework for the diversion schedule is based on determining what flows are needed for key river processes to recover fisheries in the Eel River, rather than the amount of water desired by out-of-basin interests. The criteria are based on maintaining the key elements of the natural flow regime that native species are adapted to. The primary components of the criteria are establishing protective minimum flows for diversions ("floors") and limits on the percent-of-flow modifications to maintain the natural variability in flows that support ecological processes. The criteria vary by season based on the life history needs of the target fish species and ecological function. The diversion schedule may continue to be refined and will not be final until ERPA completes the permitting and compliance process for NERF. Scott McBain with Applied River Sciences provided a presentation describing the diversion criteria at the February 11, 2025 Board meeting.

Section 16 includes provisions for ERPA to prepare an Operations and Maintenance Plan in consultation with the parties to the Agreement and a technical advisory committee. ERPA would conduct monitoring for performance metrics as described in Appendix 4 of the Agreement. The parties would meet and confer every five years, at a minimum, to review the monitoring results. Section 16 contains a provision for adaptive management, whereby the diversion schedule will be changed on recommendations of the technical advisory committee if monitoring results demonstrate that NERF operations have caused environmental impacts on the Eel River that are materially different than expected in the performance metrics.

Section 17 specifies the term, or duration, of the Agreement. The Agreement will have an initial term of 30 years, beginning on the date ERPA provides notice that it is able and ready to commence operations. The Agreement has a conditional renewal term for an additional 20 years, if five specified conditions are met. These conditions include: (1) the Eel River Restoration Fund has received at least $25 million in funds, not including the annual restoration payment; (2) ERPA substantially complies with the payment and water diversion provisions of the Agreement; (3) ERPA demonstrates that continued diversion is not expected to adversely affect recovery of Eel River fisheries during the renewal term; (4) ERPA demonstrates continued need for diversion from the Eel River for water supply reliability, fisheries, and water quality in the Russian River basin; and (5) ERPA demonstrates that its members and other water users in the Russian River basin have made substantial efforts during the initial term to achieve self-reliance at the conclusion of the renewal term, anticipating that the diversion from the Eel River basin will terminate if subsequent renewal does not occur. After the initial term (30 years) and renewal term (20 years), either operations of NERF will terminate and NERF will be removed by ERPA, or the parties of the Agreement may decide to amend the Agreement or negotiate a successor agreement regarding continued operation. ERPA, Round Valley Indian Tribes, California Department of Fish & Wildlife, and Humboldt County would all need to approve any amendment or new agreement to extend operations beyond the 20-year renewal term.

Section 18 specifies that ERPA will shut-down or remove NERF at the end of its useful life or the termination of the Agreement, whichever comes first.

Section 19 sets goals for raising federal, state, and private funds to support restoration of Eel River fisheries and construction of NERF. The parties of the Agreement are expected to work together, to the maximum extent possible, for funding awards that are split equally between the basins. Section 20 sets fundraising goals for continued implementation of the Two Basin Solution during the 20-year renewal term, focused on equitable funding for Eel River restoration and projects to enhance water supply reliability in the Russian River Basin.

Sections 21 through 23 contain provisions for dispute resolution and enforceability, which include a progressive sequence of informal meetings, mediation, arbitration, and injunctive relief.

Sections 24 through 33 contain general terms including, but not limited to, causes for termination, reservations, assignment, severability, and counterpart execution.

Public Works believes that the proposed Water Diversion Agreement would protect the health and resilience of the Eel River and provide substantial benefits for the people and communities connected to the Eel River. The Agreement represents a strategic opportunity for regional collaboration that helps mitigate the risk of delays in dam removal and the risk of alternative scenarios for water diversions that could be much less favorable and less protective for the Eel River. Based on these considerations, Public Works recommends that the Board approve, and authorize the chair to sign, the attached Agreement, along with revised versions, if needed, containing non-substantive changes after consultation with the Board's Eel-Russian ad hoc committee and approval from County Counsel. Public Works also recommends that the Board authorize the Public Works Deputy-Director for Environmental Services to approve Humboldt County's public statements regarding the Agreement and joint statements and letters by the parties.

A future MOU between PG&E and the parties of the Agreement, and a future MOU regarding formation of an Eel River Restoration Corporation, will be brought to the Board for consideration at a later date.

SOURCE OF FUNDING:
1100251 (Water Management)

FINANCIAL IMPACT:
Narrative Explanation of Financial Impact:
The proposed action, if approved by the Board, will require ongoing effort by Public Works, County Counsel, and the Board members

of the Eel-Russian ad hoc committee to participate in meetings, travel when needed, and prepare or contribute to work products. These costs will be paid for by the Humboldt County General Fund. Costs for Public Works will be paid under the existing approved fiscal year 2025-26 Water Management budget, 1100251.

STAFFING IMPACT:

Narrative Explanation of Staffing Impact:
Continued involvement in this matter will require a significant commitment of staff time from Public Works and County Counsel, at least through the end of fiscal year 2025-26. Approval of the proposed actions will not require creation of new staff positions but will encumber a significant portion of the affected staff's workload.

OTHER AGENCY INVOLVEMENT:

California Department of Fish & Wildlife, Sonoma Water, Mendocino Inland Water and Power Commission, Round Valley Indian Tribes, Wiyot Tribe, Federal Energy Regulatory Commission, National Marine Fisheries Service.

ALTERNATIVES TO STAFF RECOMMENDATIONS:

The Board of Supervisors could choose not to approve the proposed Water Diversion Agreement for the New Eel-Russian Facility associated with PG&E's decommissioning of the Potter Valley Project on the Eel River. This alternative is not recommended because Humboldt County has worked successfully with its partners to negotiate important protections and benefits for the Eel River. It is unlikely the County will realize these benefits without these strong partnerships. In the absence of a Water Diversion Agreement, the timeframe for dam removal could be at risk for delays due to the acts of entities who prefer the status quo, efforts could be made to pursue substantially more water diversions with less protections for the Eel River, and prospective funding for future Eel River restoration would be diminished. For these reasons, staff recommend that the Board approve the Water Diversion Agreement and continue to stay actively engaged to advance the Two Basin Solution and decommissioning of PG&E's Potter Valley Project.

ATTACHMENTS:

1 - Maps of the Eel and Russian River Watersheds
2 - Water Diversion Agreement for New Eel-Russian Facility (July 16, 2025)

PREVIOUS ACTION/REFERRAL:

Meeting of: 2/11/2025
File No.: 25-255