

**Discussion of the Feasibility Study Report for the Potter Valley Project  
Licensing filed with the Federal Energy Regulatory  
Commission, May 13, 2020**

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The Planning Partners, made up of the Mendocino County Inland Water and Power Commission, Sonoma Water, Humboldt County, the Round Valley Indian Tribes and California Trout, filed a Feasibility Study Report with the Federal Energy Regulatory Commission (FERC), May 13, 2020, for licensing the Potter Valley Project.

If we had not met this deadline, FERC would have directed Pacific Gas and Electric (the current licensee who has-effectively-abandoned the project as part of its bankruptcy process) to begin the license surrender process (decommissioning). Decommissioning the Potter Valley Project would mean that all further negotiations about the future of the Potter Valley Project would be completely out of our local control and instead vested in discussions between PG&E and FERC. We would be allowed to comment, but the option of relicensing the Project would be lost. Decommissioning would initiate an uncertain path for the future of all the infrastructure of the existing Project...no hydro power license, no power plant or hydro power generation, no part of the project as we know it that would require ongoing maintenance, would remain.

Scott Dam is nearly a century old and there are millions of cubic yards of sediment that have been deposited behind the dam. Decommissioning would need to address issues of sediment management and the potential liability associated with aging infrastructure. Because of these concerns, and the cost, it is likely that FERC and PG&E would negotiate a plan to reduce the height of Scott Dam that would improve public safety and limit the need for sediment management. If that were to be the case what remained of Scott Dam would no longer impound a significant water supply, and it would continue to block fish passage.

**The Proposed Project Plan filed with FERC on May 13th is not a commitment to any outcome.** The Final License Application, which is currently due to FERC in April 2022 will outline the final Project Plan. Once filed with and accepted by FERC the Final Project Plan **will** become a commitment.

Between today and the April 2022 deadline, there are many tasks to be completed including a series of studies that are necessary for us to understand whether the Proposed Plan will result in our Partnership's co-equal goals of water supply reliability and fishery restoration.

Let me go back and describe how we have come to this place, what the Feasibility Study Report says and what happens next.

After PG&E withdrew their NOI to relicense the Potter Valley Project in January 2019 (four days before filing for bankruptcy), FERC formally asked if any entity wished to license the Project and set a July 2019 deadline for receipt of a new Notice Of Intent to license.

The Planning Partners (referred to in the FSR as the NOI Parties) who came together last spring to prepare an NOI were the MCIWPC, Sonoma Water, California Trout and Humboldt County (the Round Valley Indian Tribes joined us after the NOI was filed). Prior to completing the NOI the Partners prepared a Planning Agreement that included eight shared objectives for attaining a Two-Basin Solution (based on a concept introduced by Congressman Huffman in 2017).

The shared Objectives form the basis of our Partnership and they include:

- (1) minimizing or avoiding adverse impacts to water supply reliability, fisheries, water quality, and recreation in both basins;
- (2) improving fish passage and habitat on the Eel River sufficient to support recovery of native anadromous fish populations, including passage at existing dam locations;
- (3) reliance on best available science and engineering analyses to evaluate options for restoration, water delivery, and hydroelectric generation under a new license;
- (4) collaboration on funding;
- (5) active participation of tribes and other stakeholders supportive of the Shared Objectives;
- (6) economic welfare of both basins;
- (7) continued hydroelectric generation; and

(8) protecting tribal cultural, economic, and other interests in both basins.

The Planning Partners submitted an NOI to FERC by the deadline...it was accepted by FERC who then set the deadline of April 14, 2020 (extended to May 14, 2020) as the date we had to file a Feasibility Study Report with the following elements:

**Proposed Regional Entity formation**---This would be a new entity comprised of stakeholders that would be formed to hold the FERC license for the Potter Valley Project.. The current Planning Partners include three local agencies, a non-profit organization, and one sovereign tribal nation and could not legally hold the FERC license. The new Regional Entity's board will likely include representatives of most, or all, of the Planning Partners, as well as other stakeholders. This may take the form of a Special District Authority. Additionally, the Regional Entity will be structured with the authority to levy charges or taxes and the authority to issue revenue bonds and engage in other financing arrangements.

**Proposed Project Plan**---described below.

**Fisheries Restoration Plan**---described below.

**Application Study Plan**---A series of studies required to clarify elements of the Proposed Study Plan

**Financial Plan**---Consists of many possible funding sources for capital costs and ongoing O&M expenses

Stillwater Sciences was hired as a consultant by the Partners to prepare a series of draft technical memoranda to be used by the Planning Partners as a preliminary analysis of several identified project plan alternatives. We were hampered by a very compressed time frame for the FERC deadline as well as limited funding contributed by the Planning Partners. The effort resulted in a preliminary project plan that will require completion of a series of studies to clarify the costs associated with the proposed plan, biological and hydrological elements of the proposed alternatives and whether or not water supply reliability can be attained.

Five alternatives were proposed for review in the technical memoranda.

Alt 1---- Eel River dams remain in place, preliminary analysis of fish passage projects, power generation remains.

Alt 2--- Scott Dam removed, Cape Horn Dam remains, power generation remains.

Alt 3--- Scott Dam and Cape Horn Dams both removed, power generation remains.

Alt 4--- Scott Dam and Cape Horn Dam remain, power generation removed.

Alt 5--- Scott Dam removed, Cape Horn remains, power generation removed.

The Planning Partners had their first workshop to review the alternatives described by the consultant team in early March. At that workshop Alt 4 and 5 were removed from consideration because they did not meet the shared object of continuing hydro power generation.

After preliminary analyses, much of which was based on the Ad Hoc Fish Passage and Water Supply Working Groups, it was recommended that Alternative 2 (called the "run of the river" scenario) be proposed as the Project Plan because it best met the goal of volitional fish passage at Scott Dam. Preliminary modeling of the water supply impacts of Alternative 2 have shown that, while certain elements need to be further studied and vetted, it appears a run of the river diversion could provide water supply reliability. There were several fish passage alternatives that were assessed with Scott Dam in place, including trap and haul, fish ladders, natural fish ways, floating surface collectors and tributary collectors. Preliminary engineering designs, cost estimates and analyses of the efficacy of these potential passage solutions were discussed as well as partial or total dam removal.

The Proposed Project Plan consists of several elements including:

- ! Removal of Scott Dam
- ! Lake Pillsbury Sediment Management
- ! Lake Pillsbury Vegetation Management
- ! Van Arsdale Diversion Modifications
- ! Cape Horn Dam Fish Passage Modifications
- ! Revised Operational Plan

As part of attaining the co-equal goal of water supply reliability, but not as part of the Feasibility Study Report because it is not within the FERC license boundaries, is a plan for providing PVID's water supply...described below.

Also outside of the FERC license boundaries is a report describing fishery restoration projects that might be undertaken in other parts of the Eel River watershed.

A large section of the analyses that will be undertaken include discussions of the costs of some of the project plan elements. An outline of these preliminary cost estimates is described here.

Scott Dam removal: \$30-\$120 million.

Sediment management: \$25-\$100 million.

Vegetation management: \$25-\$100 million.

Total Scott Dam removal estimated cost: **\$80-\$320 million**

Preliminary cost estimates for modifications to Cape Horn Dam and Van Arsdale include:

---Van Arsdale--- increasing the capacity of the diversion to 300 cfs, reduce fish entrainment and improve the bypass system: \$5 - \$20 million

---Cape Horn Dam--- Upstream and downstream passage improvements \$5-\$20 million

Total Van Arsdale and Cape Horn Dam modification costs: **\$10-\$40 million**

Operational changes, Powerhouse upgrades and licensing costs: **\$10--\$30 million**

**Total FERC Proposed Project Plan Costs \$100-\$400 million. Cost range indicates that there are a number of uncertainties.**

Potter Valley Water Supply---Non-FERC element

Under a "run of the river" diversion plan no water would be diverted through the Project tunnel in the summertime. This necessitates another water supply for the Potter Valley Irrigation District. Two preliminary projects have been discussed and

other alternatives have been identified but are yet to be reviewed. One plan would be to pump water back from Lake Mendocino to the north end of Potter Valley and into the PVID delivery system. The other would consist of a tributary dam somewhere in Potter Valley that would be filled during the winter from water diverted from the Eel River at high flows. The water stored in this lake would gravity feed into the PVID system. Other potential ideas that need to be considered would be a combination of plans, perhaps ground water extraction, multiple small tributary storage sites and perhaps an in-valley storage area.

Very preliminary capital costs for these project options range from **\$30-\$120 million**. Most important here will be having an estimate of ongoing O&M costs. Whatever project is realized it must be affordable for the agricultural community of Potter Valley.

For all of the Proposed Project Plans there are many questions yet to be answered. The study plans are listed in the Feasibility Study Report that was filed with FERC.

#### Notes for discussion

---Summary of Estimated Cost of Studies for the Project Plan

--- FERC Approved Proposed Modifications Existing Studies

AQ 1 - Hydrology and Project Operations Modeling \$272,000 \$770,000

AQ 2 -Water Temperature \$502,000 \$40,000

AQ 3 -Water Quality \$389,000 \$40,000

AQ 4 - Fluvial Processes and Geomorphology \$581,000 \$0

AQ 5 - Instream Flow \$445,000 \$0

AQ 6 - Lake Pillsbury Fish Habitat \$ 0 \$0 PVP Feasibility Study Report May 13, 2020 18

AQ 7 - Fish Passage \$1,431,000 \$42,000

AQ 8 - Fish Entrainment \$48,000 \$25,000

AQ 9 - Fish Populations \$142,000 \$185,000

AQ 10 - Special Status Amphibians and Aquatic Reptiles \$425,000 \$0

AQ 11 - Special Status and Invasive Aquatic Mollusks \$77,000 \$0

CUL 1 – Cultural Resources \$350,000 \$60,000

CUL 2 – Tribal Resources \$107,000 \$25,000

LAND 1 – Roads and Trails Assessment \$112,000 \$29,000

LAND 2 – Visual Resource Assessment \$113,000 \$24,000

LAND 3 – Hazardous Fuels Assessment \$148,000 \$0

REC 1 – Recreation Facility Assessment \$207,000 \$0

REC 2 – Reservoir Recreation Opportunities \$96,000 \$0

REC 3 –Whitewater Boating \$96,000 \$0  
TERR 1 – Botanical Resources \$192,000 \$0  
TERR 2 –Wildlife Resources \$231,000 \$0  
New Studies  
AQ 12 – Dam Removal \$ 1,073,000  
SE 1 - Socio-Economic Effects of Dam Removal \$ 180,000  
Totals \$5,964,000 \$2,493,000  
**Grand Totals: \$8,457,000**

**Next Steps.** Now that the Feasibility Study Report has been filed with FERC, they will open a 45 day public comment period where anyone who wishes to file comments on the proposed modifications to PG&E's study plan as well as requests to intervene in this process can do so. As an intervener you will receive all FERC correspondence regarding the Potter Valley Project and the licensing process moving forward. We will be happy to provide information regarding the comment process.

After the comment period FERC will revise the Study Plan to be implemented by the Planning Partners. A summary of the results of the studies done by PG&E through 2018 will be filed with FERC this September.

The studies will be conducted through 2021 (and likely beyond).

The deadline for filing a Draft License Application with FERC is currently set for November 2021.

The Final License Application deadline for filing with FERC is April 2022. The current FERC license for the Potter Valley Project expires April 14, 2022.

### **Final Thoughts:**

The Proposed Study Plan outlined here is based on preliminary technical and economic reports. There are many issues that will require further analysis. The results of the many studies that will be done, along with stakeholder input, will shape the Project moving forward. As mentioned earlier, the Project Plan will

become a commitment only when the Final License Application is submitted to and approved by FERC

The Planning Partners are open to working with other interested parties, such as Lake County, and potentially the Wiyot Tribe, to become equal partners in the process.

**You will very soon have an opportunity to comment to FERC. It is important for the Planning Partners to have support for moving into the FERC licensing process. You may disagree with the Proposed Project Plan...I am not sure if anyone is completely happy with this proposal. We have a long way to go to understand the costs and impacts of what has been proposed and to address the uncertainties. However, we now have an opportunity to be an integral part of the decision making. The alternative would be for us to watch as PG&E and FERC alone negotiate and control the future of the Potter Valley Project. Decommissioning is not an acceptable alternative.**

