June 3, 2018

Savannah Downey,
State Water Resources Control Board
Division of Water Rights Water Quality Certification Program,
P.O. Box 2000 Sacramento, CA 95812-2000

Send via email: wr401program@waterboards.ca.gov

Re: COMMENTS ON NEGATIVE DECLARATION FOR PACIFIC GAS AND ELECTRIC COMPANY'S MCCLOUD-PIT HYDROELECTRIC PROJECT, FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2106

To whom it may concern,

Please accept the following comments on the Negative Declaration for the McCloud/Pit 401 certification. From Save California Salmon. We request an EIR with mitigation measures in the final license to protect water quality.

Save California's Salmon is dedicated to restoring rivers though restoring flows and salmon habitat, removing dams, and improving water quality throughout Northern California. We are also dedicated to fighting new threats to our rivers such as new dams, diversions and pipelines and empowering people to fight for rivers and salmon. Members of the Winnemem Wintu and Pit River Tribes sit on our advisory board and use the watersheds in question for spiritual, cultural, subsistence and recreational purposes.

First, we would like to say that we feel that the CEQA document was severely lacking in content, including a description of water quality conditions, beneficial uses and impairments. We request that an EIR corrects these deficiencies. We also request that the board initiate AB-52 consultation with the Pit and Winnemem Wintu Tribes. The relicensing four dams with significant water quality impacts is a significant action that should require an EIR and consultation. Instead the board has released an Negative Declaration with no mitigations to protect beneficial uses that largely relies on plans that are not described

for mitigations. Some of these plans do not yet exist. PG&E is requesting to build an additional power plant as part of this application, and to continue an interbasin transfer of sediment and turbidity impaired water, yet there is no discussion of either of these issues in this Negative Declaration. These are both significant actions under CEQA. A discussion on how PG&E bankruptcy will impact their ability to finish the outlined plans and studies, and satisfy the conditions of their license are also lacking on this document as it a discussion of cumulative impacts of this project and other past, current and foreseeable projects.

We also found little to no discussion of protection of Tribal beneficial uses or cultural sites, or how AB-52 is being applied in this CEQA document. Both the Winnemem Wintu and the Pit River Tribe are located in the project area and have been negatively impacted by PG&E dams and the dam's impacts on fisheries and water quality. The Pit and McCloud Rivers consist of high quality waters and are subject to a court ordered endangered species reintroduction program under the mandatory Reasonable and Prudent Alternative of a Biological Opinion. The Pit River is also home to hardhead, a California species of concern and a Forest Service sensitive species. It is is doubtful that an listed species, the winter run salmon, will survive reintroduction if habitat is not made available. Protection of endangered species and high quality water is a high priority of state water board.

Even without the reintroduction program the Pit and McCloud Rivers have cold water fisheries listed as a beneficial use. The state should propose mitigations to protect these beneficial uses.

The need for the state board to do a EIR with mitigation measures is apparent from reading the negative declaration. Examples of the state relying on non-existing or draft plans are common in the CEQA document. In some cases is the possibly that these mitigations could actually harm, rather than help, water quality and aquatic life. One example is the Vegetation and Invasive Weed Management Plan. This plan does not exist yet, and may include a large amount of pesticide use, yet there is no analysis of this fact and instead this plan is listed as a mitigation that will help water quality. The impacts of many pesticides on fisheries and water quality are well documented.

"However, if the Proposed Project results in these potential impacts, they will not be significant because measures included in the Vegetation and Invasive Weed Management Plan will minimize effects on sensitive habitats, restore (revegetate) disturbed areas following construction, guide the implementation of BMPs, and protect special-status species, local revegetation sources, and botanical populations essential for wildlife habitat." Negative Declaration, Environmental Checklist 3-83

The Vegetation and Invasive Weed Management Plan is also relied on for the avoidance and protection of sensitive habitats, including wetlands even though it does not exist at this point and is not references. The protection of sensitive habitats is extremely important to the fish reintroduction project and to the cold water fishery beneficials use. Mitigations measures to ensure protection of these habitats need to be included in an EIR and final permit.

Water Quality Impacts

"*The McCloud River is designated in the Central Valley Regional Water Board Water Quality Control Plan for the Sacramento and San Joaquin River Basins (basin plan; Central Valley Regional Water Board, 2007) for municipal and domestic water supply, contact and non-contact recreation (including fishing, canoeing, and kayaking), power production, cold freshwater habitat, coldwater spawning, and wildlife habitat. The Pit River in the project area is designated for all of the beneficial uses designated for the McCloud River, as well as for water supply for irrigation and stock watering, warm freshwater habitat, and warmwater spawning*." FERC EIS, p. 107
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

The impacts of dams on water quality are well documented, however this Negative Declaration has very little discussion on the impacts of these particular dams and relies on the FERC EIS to analyse impacts. This is not sufficient for the purpose of CEQA as the state of California has its own set of water quality laws, basin plans and protections.

The Pit River is listed for nutrients, organic enrichment/low dissolved oxygen (DO), and water temperature, with agriculture and grazing cited as the probable sources of impairment. The water board was supposed to have a TMDL completed in 2013, but if thisTMDL exists we are unaware of it. Instead the Central Valley water board has suggested delisting the Pit River for the cold water fishery beneficial use without scientifically supported evidence and over the objections of the Pit River Tribe.

Algal growth in the reservoirs is also documented in the FERC EIS, yet now discussed in this CEQA documents. Mercury is also not discussed. The alarming increase in harmful algal blooms is a very important issues and therefore mitigations to deal with algal growth need to be included in a license if this is a problem in the reservoirs. The same is true to mercury.

Perhaps the most serious water quality issue not discussed in the negative declaration is the turbidity and sediment issues in the McCloud River. Highly turbid water from the McCloud River is transferred through an non-permitted interbasin transfer into the Pit River, which has well documented water quality problems. A description of this issue, and mitigations that address it, should be addressed through a EIR. Much of the origins of the turbidity issues is natural, however the dams exacerbate the issue, and change the timing of when the sediment is moved and the interbasin transfer brings this turbid water into a 303 (d) listed watershed that is already highly impaired.

The following quotes show that there is a problem, however this board as the Clean Water Act regulatory agency should investigate it further as part of an EIR.

"*As reservoir levels are drawn down, this deltaic material is re-suspended and transported by incoming flows to the next depositional zone, forming a wedge-shaped deposit that gradually moves downstream*." FERC EIS, p. 115. https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

"Project operations can also alter sediment transport characteristics from McCloud reservoir and into the Lower McCloud River as well as the introduction of sediments into the Iron Canyon and Pit River

watersheds through interbasin transfer." FERC EIS page 116
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

"*The increases in suspended sediment concentrations and turbidity in Iron Canyon Creek and the Pit River, resulting from interbasin transfer between the McCloud River basin and the Iron Canyon Creek and Pit River basins during episodic mass-wasting events, caused temporary exceedances of basin plan criteria*. " FERC EIS, page 116 https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.as

"During periods when mass wasting is occurring upstream on Mount Shasta, some signal of Mud Creek turbidity reaching the Iron Canyon Creek sites was apparent, with turbidity increases of up to 4 NTU above pre-event levels in August and September, 2008. However, the large volume of flow coming from the Pit 3, 4, and 5 project, as well as settling that occurs in Pit 6 and Pit 7 reservoirs, attenuates any potential effects of turbidity in the Pit River system." FERC, EIS p. 117
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

Fisheries Impacts

Save California Salmon is very disappointed in the lack of information included in the Negative Declaration related to fisheries and water quality conditions, and water quality impacts to fisheries. This document is lacking in any information on any water quality parameters and does not include a discussion of flows, or of any possible mitigations measures. Instead it claims there is no environmental impacts from four dams, the building of a new power house, and an interbasin transfer of water. This is not true and needs to be remedied. We has several specific concerns related to PGE's plan for flows and habitat actions as part of the dam relicensing that we would like the state board to take a hard look at as part of an EIR.

Winter run salmon reintroduction to habitat above the Shasta Dam is a mandatory action under a current Biological Opinion. It is federal mandated. Both the Winnemem Wintu and Pit River Tribes support salmon reintroduction. There has been discussion that this action may not be included in the upcoming Biological Opinion for the state and federal water projects. Theorizing what the law might require in the future and not taking actions to protect water quality and the cold water beneficial uses in these watersheds based on possible federal actions does not comply with state or federal law and would be irresponsible of this agency. Furthermore, the California Department of Water Resources is now conducting its own analysis of the operations of the state water project and could decide to prioritize reintroduction on the state level as a action to save winter and spring run salmon from extirpation from the Sacramento River and Bay Delta. It is also quite possible that if the reintroduction reasonable and prudent action is cut out of future biological opinions that litigations would reinstate this requirement. .

Fish will need water and habitat to survive reintroduction and to recover and repopulate within the project area. Thanks to scientific process related to the Bay Delta Plan updates the state board now has much much more scientific evidence on the relationship between flows, water quality and habitat now than

eight years ago when FERC made flow and habitat recommendations. Much of this information is included in this board's Final Scientific Basis Report (Science Report) in support of the Update of the Bay-Delta Plan located at: https://www.waterboards.ca.gov/water_issues/programs/peer_review/docs/scientific_basis_phase_ii/201710_bdphaseII_sciencereport.pdf. Therefore we request that mitigations related to flows and sediments that support the recommendations of California Fish and Wildlife and NOAA fisheries to be included in an EIR or final decision. These mitigations would support the cold water fishery beneficial use within the project area and help achieve water quality standards.

It is very important that the state board include these mitigation measures in an EIR. It is not the job of FERC to protect the state's beneficial uses during a relicensing, and this is reflected in the EIS. For instance FERC uses a model that this board has questioned, claimed that rainbow trout in the McCloud River will suffer from flows increase, and has stated that the 25 cfs difference in flows suggested by the state over the recommendations of trout fishing organizations will not be beneficial. None of these assertions are scientifically supported. We disagree with this points and point out that fishing organizations are not regulatory agencies. This is why the state has to step in and use the best available science to protect water quality and fisheries.

Both the FERC EIS and this negative declaration have almost no discussion of water quality conditions or fisheries in the Pit River. This has to be remedied in an EIR and mitigations measures for protection of the Pit River need to be analysed.

FERC has set flat line flows in the Pit River below the dams. We request that the water board asks for a more natural hydrograph in the Pit River below the dams rather than a flatline baseline flow of 150. We are also concerned that it appears that PG&E is looking for ways to get out of their gravel augmentation actions in the McCloud watershed and has not proposed any augmentation below the Pit 7 dam. We request this gravel augmentation be discussed in an EIR along with how flows will be used to move the gravel and provide a more natural hydrograph for fisheries. We also requesting the issue of sediment plums and turbidity in the McCloud RIver be discussed in relation to fisheries impacts. While this impairment comes from natural causes, how the sediment moves through the McCloud River, and the Pit River due to an interbasin transfer, is not addressed and no mitigations measures or operational changes to address the problem have been suggested. This is a problem as reservoir retention can make the timing of the impairment correlate with future salmon run migration, and current rainbow trout run timing.

"*PG&E also proposed that implementation would be contingent on receipt of section 401 water quality certifications, a streambed alteration agreement from California Fish and Game, and a section 404 permit from the U.S. Army Corps of Engineers with terms and conditions that do not substantially alter the cost or specifications of the action proposed. If this is not the case, or if for any reason the sediment currently stored in the Star City Creek delta is considered to be of insufficient quantity or quality, PG&E proposed that it then would be exempt from the Forest Service's original condition. FERC EIS p. 23.* https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

We request that flow criteria to protect beneficial uses be included in an EIR and mitigations regarding ramping rates and drawdowns also be included in this EIR and final permit. We request that these

mitigations be protective of habitat needs and beneficials uses and take into account the controversy surrounding PG&E's model and recommendations. The following quotes support this request.

"McCloud Dam and Reservoir is part of PG&E's McCloud-Pit Project (FERC Project No. 2106), which diverts about 70 percent of the inflow at McCloud Reservoir to the Pit River for hydroelectric generation. The current minimum flow releases from McCloud Dam range from 40 cfs (December-April) to 50 cfs (May through November); the minimum flow requirement at Ah-Di-Na Campground gage (3.5 miles downstream from McCloud Dam) ranges from 160 to 200, depending on season and water year type (PG&E 2006)." Shasta Dam Fish Passage Evaluation 3-3
https://www.usbr.gov/mp/bdo/docs/shasta-pilot-imp-plan.pdf

"*Occasionally, extreme drawdowns of McCloud Reservoir cause sediments to be entrained in discharges to the lower rive*r *(Rode 1 and Dean 2004, STNF 1998*)." Shasta Dam Fish Passage Evaluation 3-3
https://www.usbr.gov/mp/bdo/docs/shasta-pilot-imp-plan.pdf

"*Reduction of seasonal high flow events as a result of project operations may contribute to the accumulation of fine sediment in spawning gravels, which could adversely affect trout spawning and incubation success and contribute to the encroachment of riparian vegetation into the stream channel*." Pg. 79 FERC EIS *https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp*

The NMFS 10(j) recommendation included general measures to affect sediment movement and deposition, substrate quality, and channel characteristics to support listed anadromous salmonids. No specific measures or procedures are recommended. The Keswick and Shasta dams on the Sacramento River downstream of the McCloud dam are existing barriers to upstream passage of anadromous salmonids including Chinook salmon and steelhead. None of the listed anadromous salmonids would be expected to have access to habitat in the Lower McCloud River until upstream migration of listed species is implemented through Shasta Lake. Therefore, the general recommendations by NMFS would provide no benefit for listed species at this time. FERC EIS, p. 82
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

"The Forest Service reviewed the results of the HCM to evaluate its value in determining minimum flows for McCloud dam. The Forest Service determined that in the upper reach of the study area, maximum trout habitat would occur at flows between 190 and 250 cfs. In the lower reach below Squaw Valley Creek, the Forest Service suggested that maximum trout habitat would occur at flows between 250 and 450 cfs; these flows would generally be achieved in this reach by the incremental accretion from tributaries entering the Lower McCloud River below the Ah-Di-Na gage (MC-1). However, the Forest Service and the California Water Board concluded that the HCM analysis was not an accurate tool to determine flows that would provide maximum habitat. FERC EIS, p. 140
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

Although California Fish and Game recommends minimum flows at 200 cfs during May through February 14 measured at one compliance point near the McCloud dam, the Forest Service specifies minimum flows of 175 cfs during the same period as measured at McCloud dam and 200/215 cfs as measured downstream of McCloud dam at USGS gage MC-1 (Ah-Di-Na). California Fish and Game did

not provide quantitative evidence that an increase of 25 cfs at McCloud dam would provide a substantial improvement in fish habitat." FERC EIS, p. 144
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

California Trout, Trout Unlimited, and McCloud River Club indicated that their alternative flows would likely meet the needs of all life stages of rainbow and brown trout and provide optimum fishing conditions in the Lower McCloud River. Under these alternative flows, during the period March 16 to May 21 when the McCloud River runoff factor is 100 to 119 percent, the number of days when flows greater than 300 cfs would occur is about 60 days per year rather than about 95 days per year under the Forest Service condition 19 flows. During periods when runoff is equal to or greater than

120 percent, the number of days that flows would be greater than 300 cfs would be about 94 and the number days flows would be greater than 600 cfs would be 37, compared to 116 and 45 days, respectively, under Forest Service revised condition 19. All other seasonal flows for each runoff scenario would be the about same. The alternative flows proposed by California Trout, Trout Unlimited, and McCloud River Club may provide more days with optimum wading-condition flows (less than 300 cfs) for fishing (see discussion in section 3.3.5, Recreation Resources); however, there is no substantial evidence that these flows would provide additional benefit to resident fish populations. FERC EIS P. 145
https://www.ferc.gov/industries/hydropower/enviro/eis/2011/02-25-11.asp

We look forward to working with this board to make sure that the final permit and EIR include mitigations to protect water quality and beneficials uses in the Pit and McCloud Rivers.

Thank you,

Regina Chichizola

Save California Salmon