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State Water Resources Control Board
Division of Water Rights – Water Quality Certification Program
Attn: Meiling Roddam
P.O. Box 2000
Sacramento, CA 95812

Submitted via electronic mail to: Meiling.Roddam@waterboards.ca.gov

Re: Comments on Draft Environmental Impact Report on the proposed amendment to the 401 Water Quality Certification for the Pit 1 Hydroelectric Project.

Dear Ms. Roddam,

American Whitewater appreciates having the opportunity to provide comment on the California State Water Resources Control Board's ("Water Board") Draft Environmental Impact Report ("DEIR") on the proposal to amend the 401 Water Quality Certification ("401 Certification") for the Pit 1 Hydroelectric Project ("Pit 1 Project") (P-2687). The DEIR contains significant factual errors that impact the analysis of whether the Proposed Project will have significant environmental impacts and how to mitigate those impacts. American Whitewater requests that the Water Board correct these errors, perform a new analysis, reconsider mitigation options, and issue a revised DEIR for public review.

American Whitewater is a 501(c)(3) non-profit organization whose mission is to conserve and protect America's whitewater resources and enhance opportunities to enjoy them safely. Founded in 1954, American Whitewater represents the conservation interests of tens of thousands of whitewater paddlers across the country. As avid whitewater recreationists, we place a high value on protecting naturally functioning river ecosystems and restoring their beneficial uses. We have a strong membership base in Northern California, and our members recreate on the Pit River Bypass Reach when flows are high enough to enjoy the river by raft, kayak or canoe.

American Whitewater intervened in the FERC relicensing process for the Pit 1 Project in 1995, and was a key stakeholder in the relicensing negotiations for the FERC license issued in 2003. Since the license was issued, we have been actively involved in license implementation. Since 2009, when PG&E and the U.S. Fish and Wildlife Service ("USFWS") recommended that the summer flushing/whitewater boating flows be cancelled, we have filed letters and sought to consult with FERC, USFWS and the Water Board. We also filed substantive comments in 2013 in response to the Water Board's Notice of Preparation ("NOP") for the Proposed Project. American Whitewater and our members have a strong interest in the outcome of the proposed amendment to the Pit 1 Project's FERC license and 401 Certification.

I. Introduction

The DEIR incorrectly considers the four days of whitewater flows that take place in October as mitigation for the elimination of six days of summer flushing/whitewater flows (“summer flushing flows”). As we described in our 2013 comments on the NOP, and describe in more detail below, the October releases were set forth in the 2003 FERC license for the Pit 1 Project and implemented by FERC *independently* of the summer flushing flows established in the 401 Certification. The background plans and studies for the fall whitewater flows were initiated, and in some instances completed, well before 2009 when PG&E and the U.S. Fish and Wildlife Service (“USFWS”) first recommended that the 401 Certification be amended to eliminate the summer flushing flows. It is improper for the DEIR to consider these flows as mitigation.

As a result of this error, the DEIR determines that the Proposed Project will have a less than significant impact on recreation. Where the DEIR sets forth that there will be a loss of two days of whitewater recreation, it should instead reflect that there will be a loss of six days of whitewater recreation. This is a significant impact to the REC-3, REC-4 and REC-5 standards considered in the DEIR.

In addition to this error, the DEIR makes numerous unsubstantiated statements about recreation, and then relies on these statements to develop conclusions and support decisions about how to mitigate the impacts of the Proposed Project. As we describe in more detail below, these errors relate to boater user days, preferences for season of use, whitewater releases at other hydropower projects, and the spring flow release alternative. Existing conditions related to access and camping provide opportunities for mitigation, and we provide additional information about these conditions so that the revised DEIR can consider proper mitigation. Additionally, the DEIR makes similar unsubstantiated statements about biological resources that should be addressed in the revised DEIR.

Finally, as outlined in our 2013 comments on the NOP, American Whitewater continues to have serious concerns that the Proposed Project alone will not protect Shasta crayfish. The operation of the Pit 1 Project is increasing baseline water temperatures in the Pit River, and we request that the Water Board reconsider the minimum instream flows in order to address this issue.

II. The DEIR Improperly Considers Baseline Conditions as Mitigation.

A. The 2003 License Set Forth Two Separate Sets of Whitewater Flows a Year

The DEIR incorrectly describes the number of days of whitewater flows that the Pit 1 Project is required to provide each year, and therefore, misrepresents the scope of its Proposed Project. The DEIR states:

“For the purposes of this assessment, the termination of summer flushing flows would be considered equivalent to the loss of summertime whitewater boating opportunities associated with the flow releases (6 days). Similarly, the

implementation of October whitewater boating flows is equivalent to the gain of four days of whitewater boating opportunities in October.”¹

As we described in our 2013 comments on the NOP, two separate license conditions in the 2003 FERC license for the Pit 1 Project require PG&E to provide two different sets of whitewater recreation opportunities each year.

- 1) Condition 13 of the Water Board’s 401 Certification requires PG&E to release six days of flushing flows each year. The 401 Certification was finalized on December 4, 2001 (15 months before the FERC license was issued) and the summer flushing flows were intended to serve the dual purpose of both controlling aquatic vegetation growth and mosquito production in the Fall River Pond and providing whitewater recreation opportunities.² Although Condition 13 does not specify that the summer flushing flows were intended to provide a whitewater opportunity, it did require that PG&E provide as much advanced public notice as possible to the boating community when the flows were going to occur. Between 2003 and 2009, the summer flushing flows provided an opportunity for six days each year of whitewater recreation on the Pit 1 Bypass Reach. PG&E documented the number of boaters on the reach each year in accordance with the intent to provide boating opportunities.
- 2) Independent of the Water Board’s 401 Certification, Article 424 of the 2003 FERC license required PG&E to file, within one year of license issuance, a recreational boating use study plan to examine the effects of whitewater flows between September 15 and October 30. These flows were contemplated independently from the summer flushing flows,³ and were targeted to take place in a different season than the summer flushing flows. While Article 424 did not specify the exact number of days of whitewater flows in the fall, the outcome of the required studies was that PG&E was to provide four days of flows in October, either through two sets of weekend flows or a total of four days of consecutive flows over the Columbus Day weekend.⁴

The DEIR errs in framing PG&E’s implementation of the four fall whitewater flow days as mitigation for the elimination of the summer flushing flows. The plans and studies

¹ Pit 1 Hydroelectric Project 401 Water Quality Certification Amendment Draft Environmental Impact Report (June 2017). Prepared by Cardno for FERC Project No. 2687. Page 3-60.

² Personal communications with Jim Canaday, former Water Board staff present at the relicensing negotiations and development of the 401 Certification. (June 6, 2013 and August 8, 2017.) While the language was left out of the 401 Certification at PG&E’s request, all parties agreed to this fact. Canaday states that “there was an intended co-purpose, and even if the flushing flows were not necessary to control the vegetation and mosquitoes it was still incumbent on the project to provide the summer flushing flows for on-water recreation in the Pit 1 diverted reach.”

³ *Id.* Mr. Canaday states that he was not part of the discussions relating to Article 424.

⁴ *Pacific Gas and Electric Co.*, 135 FERC ¶ 62,215 (June 14, 2011) FERC Project No. P-2687. (Order Approving Final Whitewater Boating Flow Schedule) (FERC eLibrary Accession No. 20110614-3011).

related to Article 424 and the fall whitewater flows were implemented *well before* May and June of 2009 when PG&E and the USFWS recommended that the summer flushing flows be suspended.⁵

The following list provides the timeline of activities conducted in compliance with Article 424:

- March 19, 2003: FERC issued the license, including Article 424 (15 months after the 401 Certification was issued).⁶
- March 19, 2004: PG&E submitted the Whitewater Flow Impact Study Plan to FERC as required by Article 424, calling for the study to take place in two phases.⁷
- July 27, 2004: FERC modified and approved the Whitewater Flow Impact Study Plan.⁸
- May 12, 2006 and May 25, 2006: PG&E filed the Phase 1 Interim Report with FERC (5/12) and followed up with an addendum (5/25).⁹
- June 16, 2006: PG&E filed the Phase 2 Study Plan with FERC. In its communications, PG&E noted that part of the Phase 2 Study Plan involved refining the acceptable whitewater boating flow levels to near 1,250 cfs in light of concern that there was a low probability that there would be sufficient water to provide flows in the optimal range (1,250 cfs to 1,750 cfs) in September and October.¹⁰

⁵ Letter from U.S. Fish and Wildlife Service to Federal Energy Regulatory Commission and the State Water Resources Control Board, re: Request for Change in Article 401, Condition 13 of the License for the Pit 1 Hydroelectric Project, FERC Project No. 2687, in Shasta County California (May 26, 2009); and letter from Pacific Gas and Electric to the State Water Resources Control Board, re: Pit 1 Project, FERC No. 2687, Request for Change in Article 401, Condition 13 of the License for the Pit 1 Hydroelectric Project, FERC Project No. 2687, in Shasta County California (June 24, 2009). Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/pit1_ferc_2687.shtml

⁶ *Pacific Gas and Electric Co.*, 102 FERC ¶ 61,309 (March 19, 2003) FERC Project No. P-2687. (Order Issuing New License) (FERC eLibrary Accession No. 20030319-0735)

⁷ Pacific Gas and Electric Company. *Potential Impacts of Whitewater Boating Flows Study Plan Addressing License Article 424* (March 19, 2004). FERC eLibrary Accession No. 20040322-0287

⁸ *Pacific Gas and Electric Co.* 108 FERC ¶ 62,090 (July 27, 2004) FERC Project No. P-2687. (Order Modifying and Approving Whitewater Flow Impact Study Plan Pursuant to Article 424.) (FERC eLibrary Accession No. 20040727-3003).

⁹ Letter from Pacific Gas and Electric Company to FERC, re: Pit 1 Project, FERC No. 2687, License Article 424 - Whitewater Flow Impact Study Plan (May 12, 2006) (FERC eLibrary Accession No. 20060601-0273); and letter from Pacific Gas and Electric Company to FERC, re: License Article 424 - Whitewater Flows Impact Study Plan: Addendum to: Potential Impacts of Whitewater Boating Flows - Phase 1 Interim Report (May 25, 2006) (FERC eLibrary Accession No. 20060609-0073).

¹⁰ Letter from Pacific Gas and Electric Company to FERC, re: Article 424: Whitewater Flow Impacts - Phase 2 Study Plan (June 16, 2006). At page 2. (FERC eLibrary Accession No. 20060623-0058.)

- August 24, 2006: FERC approved the Phase 2 study plan.¹¹
- March 26, 2008: PG&E filed the Final Phase 2 Study Report with FERC. In this communication, PG&E explains that stakeholders agreed to “defer final recommendations regarding whitewater boating flows during the period September 15 - October 31 until 5-year summary results from Project specific biological resource monitoring studies are developed.”¹²
- July 16, 2009: FERC approved the Phase 2 Study Report, including postponing final recommendations for the fall whitewater flows. FERC’s Order set a deadline for the final schedule for fall whitewater releases to be submitted by December 31, 2010.¹³
- March 1, 2011: PG&E submits its Whitewater Boating Flow Recommendations, recommending that four days of whitewater flows take place in October of each year, either through two sets of weekend flows or a total of four days of consecutive flows over the Columbus Day weekend.¹⁴
- June 14, 2011: FERC accepts PG&E’s recommendations and orders that they be implemented that fall.¹⁵

The logic used in the DEIR appears to support the notion that during relicensing negotiations, stakeholders anticipated that the summer flushing flows would be eliminated at an unknown future date, and they implemented Article 424 as anticipatory mitigation. This does not make sense and is not supported by the record. Instead, the timing of the two events—the elimination of the summer flushing flows and the start of the fall whitewater flows—is coincidental, not intentional. Article 424 was put into the 2003 license, and the related plans and studies were carried out in subsequent years, to ensure that the project provided a whitewater recreation opportunity in the fall. The fall whitewater flows stand alone, and have already been implemented under FERC’s independent authority. It is therefore incorrect when the DEIR notes that October whitewater boating flows would not occur under the No Project Alternative.¹⁶

¹¹ *Pacific Gas and Electric Co.*, 116 FERC ¶ 62,162 (August 24, 2006). FERC Project No. P-2687. (Order Approving Phase 2 Study Plan) (FERC eLibrary Accession No. 20060824-3016)

¹² Letter from Pacific Gas and Electric Company to FERC, re: Pit 1 License Project (FERC No. 2687) License Article 424—Whitewater Flow Impact Study Final Phase 2 Report (March 26, 2008). (FERC eLibrary Accession No. 20080327-5017.)

¹³ *Pacific Gas and Electric Co.*, 128 FERC ¶ 62,041 (July 16, 2009). FERC Project No. P-2687. (Order Approving Phase 2 Study Report) (FERC eLibrary Accession No. 20090716-3099)

¹⁴ Pacific Gas and Electric Company. *Pit 1 Hydroelectric Project, FERC Project No. 2687, Whitewater Boating Flow Recommendations* (February 2011). (FERC eLibrary Accession No. 20110301-5213)

¹⁵ *Pacific Gas and Electric Co.*, 135 FERC ¶ 62,215 (June 14, 2011). FERC Project No. P-2687. (Order Approving Final Whitewater Boating Flow Schedule) (FERC eLibrary Accession No. 20110614-3011)

¹⁶ Draft Environmental Impact Report at p. 5-2 to 5-3, Section 5.1.2.4. We also note that this passage concludes that, because the four October flow days would not happen, “less recreational opportunities would exist with the implementation of the No Project Alternative” when compared to the Proposed Project. This statement is incorrect. Using the logic in the DEIR, the No Project Alternative would result in six days of whitewater flows, where the Proposed Project would result

The DEIR also incorrectly cites language from FERC’s June 14, 2011 Order to support its position, quoting only part of the Order to support the idea that the fall flows were implemented “in lieu of any previously scheduled May, June, and July flows.”¹⁷ However, if the Order is considered in the context of whitewater flows at the time of license issuance, it is clear that the fall flows were not intended to supplant summer flows.¹⁸

The license order reads, “[t]he proposed whitewater flow schedule(s) **should be implemented in a timely manner in order to accommodate** desired late summer or fall flows, in lieu of any previously scheduled May, June and July flows.”¹⁹

When FERC issued the 2011 Order approving the final fall whitewater boating flow schedule, the summer flushing flows had been cancelled for a year and the fall whitewater flows had yet to be implemented. As a result, the Pit 1 Project had not made any of the required releases suitable for whitewater recreation for an entire year. Additionally, FERC’s 2011 Order should not be interpreted as substituting fall flows for summer flows because FERC could not have modified the Water Board’s 401 Certification in that manner. Instead, FERC’s order was encouraging PG&E to implement the fall flows in a timely manner in order to ensure that the Pit 1 Project provided some whitewater opportunities that year.

Finally, CEQA requires that the DEIR “include a description of the physical environmental conditions in the vicinity of the project, as they exist *at the time the notice of preparation is published...*”²⁰ The fall flows have been in place since 2011, two years before the Water Board issued the Notice of Preparation in May 2013 to amend the 401 Certification. Thus, they are part of the baseline and should not be considered mitigation.

B. The Proposed Project has Significant Impacts to Recreation That Must be Mitigated Under CEQA.

If not for the Pit 1 Hydroelectric Project, the Pit River would provide year-round whitewater recreation opportunities. The balance that was struck during the FERC relicensing process ultimately restored a total of 10 days of whitewater recreation flows to the Pit River each year, as described above. The proposed elimination of six days of

in four. Implementing the No Project Alternative would result in *more* days (six) days than the Proposed Project (four).

¹⁷ Draft Environmental Impact Report at 2-4 and 3-63.

¹⁸ American Whitewater concedes that the FERC Order is poorly worded and leaves room for confusion, and we filed comments with FERC to that effect shortly after the order was released. See letter from American Whitewater and Friends of the River to U.S. Fish and Wildlife Service and FERC re: PG&E Biological Evaluation/FERC Biological Assessment for the Pit 1 Hydroelectric Project (P-2687) (June 16, 2011). (FERC eLibrary Accession No. 20110616-5093.)

¹⁹ *Pacific Gas and Electric Co.*, 135 FERC ¶ 62,215. Emphasis added.

²⁰ 14 CCR § 15125(a). Emphasis added.

whitewater flows disrupts that balance. Additionally, the Proposed Project does not protect the water quality goals and objectives relating to REC-1 contact recreation opportunities outlined in the Basin Plan, which include whitewater boating.²¹

The EIR must analyze the significant environmental effects of the proposed action on any of the listed environmental factors,²² and provide mitigation for significant impacts.²³ As we describe in more detail below, eliminating six days of whitewater flows results in a significant impact.

1. REC-3: Conflict with adopted plans, regulations or agreements

The DEIR finds that the impact of the Proposed Project to REC – 3 (Conflict with adopted plans, regulations or agreements) to be less than significant. Reducing the number of days with flows available for whitewater recreation by six out of a total of ten is in conflict with the overall agreement made in the 2003 FERC license for the Pit 1 Project for how to best balance power values with recreation values, as required by the Federal Power Act. Additionally, the Proposed Project harms Water Contact Recreation (REC-1) beneficial uses that includes white water activities as outlined in the Basin Plan.²⁴

2. REC – 4: Substantially reduce recreation uses

The DEIR finds that the impact of the Proposed Project to REC – 4 (Substantially reduce recreation uses) to be less than significant. Reducing the number of days with flows available for whitewater recreation by six out of a total of ten represents a 60% reduction. American Whitewater believes that this is a substantial reduction in recreation uses.

3. REC – 5: Substantially diminish recreational experiences

The DEIR finds that the impact of the Proposed Project to REC – 5 (Substantially diminish recreational experiences) to be less than significant. Reducing the number of days with flows available for whitewater recreation by six out of a total of ten represents a 60% reduction. Additionally, as we describe in more detail below, the Proposed Project also changes the season in which this recreational experience takes place and exceeds the capacity of the existing facilities. American Whitewater believes that all of these changes substantially diminish the recreational experience.

²¹ California Regional Water Quality Control Board, Central Valley Region, Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin. Fourth Edition, Revised July 2016 (with Approved Amendments). Table II-1, page II-5.00.

²² Pub. Res. Code § 21100(b)(1); 14 CCR §§ 15126(a), 15126.2(a), 15143.

²³ 14 CCR § 15126.4(a)(1).

²⁴ Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin at p. II-1.00.

III. Springtime Flow Alternative

The DEIR does not provide an adequate basis for dismissing the springtime flow alternative. The decision to dismiss an alternative should be based on sound science. Instead, the DEIR relies on unsubstantiated statements to support its alternatives analysis, rendering it inadequate.

The introduction to the analysis of springtime flows states,

“While the base temperature in the Bypass Reach is lower in spring than in summer, springtime whitewater boating flows would still represent a temporary change to base conditions. The mainstem of the Pit River does not naturally experience sudden temperature or flow changes in the summer due to a lack of precipitation. During the spring however, there can be runoff and precipitation and the river can experience natural changes in flow and temperature.”²⁵

It is unclear whether the DEIR is citing potential changes in water temperature as a basis for eliminating this alternative. If this is the reason, the DEIR needs to better quantify the potential changes in water temperature and explain the significance of those potential changes on aquatic life. The DEIR also needs to put this discussion in the context of the Project’s cumulative impacts on water temperature. We request that the revised DEIR clarify both this statement, and a similar statement on that same page that “short, pulsed high flow events are not typical of the natural hydrology of the Pit River.”²⁶

We note that the DEIR fails to provide supporting information for many of the conclusions throughout the Biological Resources section (Section 5.2.2.1 on page 5-3 and 5-4), noting several times that spring whitewater flows “may” have certain impacts. The Final EIR should provide supporting data that is preferably quantitative rather than qualitative for the following statements:

- 1) “Spring whitewater boating flows **may** not cause the drastic temperature changes as seen in the summer since the minimum instream base flow conditions are cooler in the spring, and have more natural variability. Temperature fluctuations would still occur, however, as a result of the spring whitewater boating flow releases...[and] spring whitewater boating flows **may** still result in a higher minimum daily water temperature than would occur otherwise.”
- 2) “Spring whitewater boating flows **may** not cause the drastic temperature changes as seen in the summer since the minimum instream base flow conditions are cooler in the spring, and have more natural variability.

²⁵ Draft Environmental Impact Report at p. 5-3. We note that it is not clear how the statement that “the Pit River does not naturally experience sudden temperature or flow changes in the summer due to lack of precipitation” relevant to the discussion of springtime whitewater flows.

²⁶ *Id.*

Temperature fluctuations would still occur, however, as a result of the spring whitewater boating flow releases.”

- 3) “Spring whitewater boating flows **may** reduce the day-to-night water temperature fluctuations that were observed during summer flushing flows due to the presence of cooler air temperatures and spring runoff. However, spring whitewater boating flows **may** still result in a higher minimum daily water temperature than would occur otherwise.”

Additionally, the DEIR further lists concern for critical reproductive events for all three native mussel species in the Pit River Canyon, and the potential for spring whitewater flows to wash eggs and juveniles out of their habitat.²⁷ The California floater (mussel) is present downstream of the Pit 1 Powerhouse. Article 402 of the Pit 1 Project’s 2003 license requires PG&E to maintain a 700 cfs minimum instream flow below the Pit 1 Powerhouse in order to protect and enhance aquatic habitat for the California floater, among other species. This same reach is the peaking reach of the Pit 1 Project that experiences dramatic, rapid flow pulses each day. The flow upramp for peaking flows occurs much more rapidly than that of the summer flushing flows (see Figure 1 below).

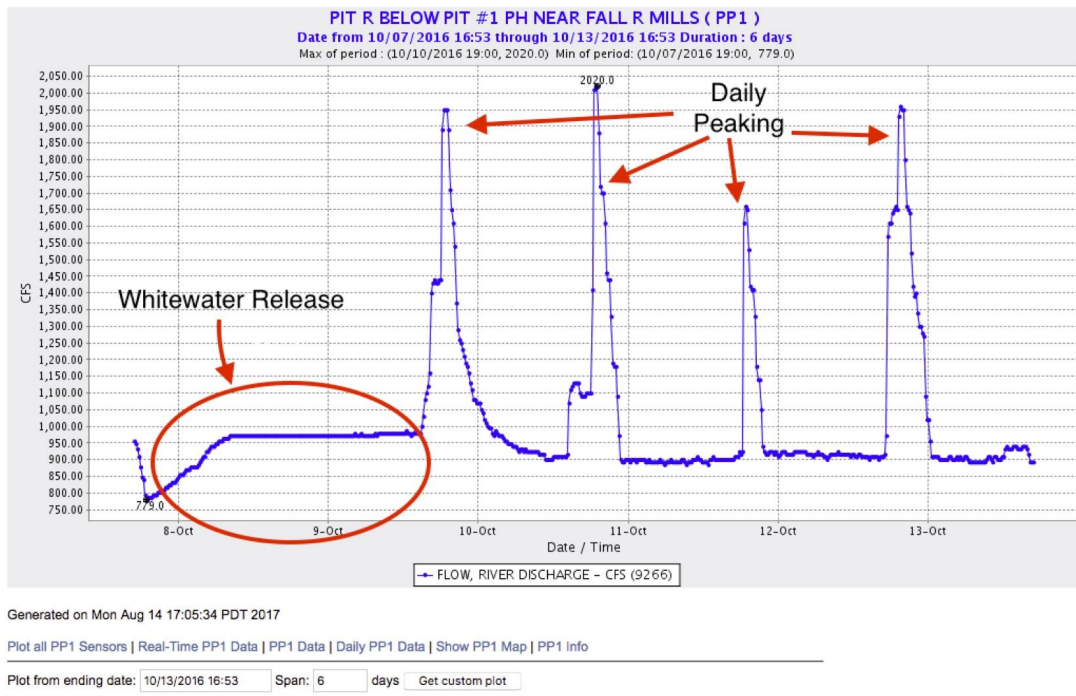


Figure 1. California Data Exchange Center via USGS. Historic hydrograph of 2016 October whitewater flows.

If there are particular concerns about how to best protect these specific mussel species, including how to prevent their eggs and juveniles from being washed out of their habitat, the revised DEIR should evaluate whether and how the impact of these daily peaking flows is different than the potential impact of springtime whitewater flows.

²⁷ *Id.* at p. 4-3 and 5-4.

Additionally, in the recreation section of the analysis of spring whitewater flows, the DEIR concludes:

“Spring whitewater boating flows would likely be considered a less desirable opportunity for whitewater boaters since natural high flow events are more common in the spring and there are many other high-quality alternatives at the same time of year. Adding spring whitewater boating flows would not be adding much in the way of unmet demand for whitewater boating opportunities in the region...[and, concluding]...Although this alternative would provide whitewater boating opportunities on the Pit 1 Bypass Reach in the spring, it is not the ideal time of year for whitewater boaters to use this resource.”²⁸

In 2008, PG&E released a report about whitewater recreation preferences that showed that boaters preferred to recreate in the summer rather than the spring or the fall. However, in our experience, when paddlers are questioned about whether they prefer flows in the spring or fall versus none at all, they will accept flows during those seasons. Additionally, springtime boating opportunities are particularly popular with the paddling community in dry water years.

The DEIR concludes that the alternative to provide springtime flows does not meet the Water Board’s objective of “reducing adverse impacts to the endangered Shasta crayfish, while maintaining the designated beneficial uses related to whitewater boating.” The DEIR does not provide adequate information to support the conclusion that springtime flows would harm Shasta crayfish, and is incorrect in assuming that they would fail to maintain the designated beneficial uses related to whitewater boating. Based on the information above, the revised DEIR should re-examine its conclusion. Additionally, we request that the DEIR examine whether the Pit 1 Project would be better able to provide boating flows closer to the optimal boating flows range during springtime boating flows.

IV. Information on Recreation

The DEIR relies on some inaccurate assumptions about whitewater recreation generally and specifically at the Pit 1 Project. American Whitewater offers this information to provide the Water Board with a more accurate foundation for its analysis in the revised DEIR.

A. Average Boating Days

In support of the finding that there is a less than significant impact to whitewater recreation, the DEIR states:

"Whitewater boating use during the 2011–2014 October whitewater boating flows was more than two times greater than during the 2003–2009 summer flushing

²⁸ Draft Environmental Impact Report at p. 5-4. We note that the DEIR does not provide a citation to support the conclusions in this paragraph and instead references what is “likely.” This is an issue throughout the document that we request the revised DEIR address.

flows. During the 2003–2009 summer flushing flows, an average of 23 boaters boated the Pit 1 Bypass Reach with an average of 22 kayak runs and one raft run each day. During the 2011–2014 October whitewater boating flows, an average of 64 boaters boated the Pit 1 Bypass Reach with an average of 49 kayak runs and 6 raft runs each day.²⁹

The average boating use numbers in the DEIR give an inaccurate picture of the amount of boating use in the Pit River during the summer flushing flows. Table 3.5-2 shows the amount of boater use from 2003 to 2009 during the summer flushing flows, and from 2011 through 2014 during the October boating releases. It is clear that there was less use during the first three years of the flows (2003, 2004 and 2005), as PG&E recorded a grand total of only 36 boater days. In 2006 that number jumped to 128 boaters days and then up to 339 boater days in 2007.

The primary reason for the low use in the first three years was due to the fact that PG&E provided little, if any advanced notice about the timing of the releases. The DEIR states that notice of the flushing flows has been published annually in local newspapers.³⁰ Aside from the fact that this is not a license requirement, we have never found newspaper notices to be an effective way to notify boaters about upcoming releases. The license requires PG&E to provide advanced notice of the releases via phone or on the web. To our knowledge this only happened to a nominal extent during the first three years of the summer flushing flows. For example, our records show that PG&E staff sent an email on July 15, 2003, notifying the Water Board and others about the July flushing flow only four days before it took place. In 2006, after working with PG&E staff to set a summer release schedule in advance and posting this information on the American Whitewater and other websites, boating use during the flushing flows increased significantly.

Simply put, attendance was low in those initial years because the whitewater boating public did not know that the flushing flows were happening due to lack of coordination between PG&E and the whitewater boating community. Rather than averaging the total number of boaters from 2003 to 2009, it makes more sense to remove the outliers and average the totals from July 2006 through 2009. When calculated this way, the average daily boating use was 42 boaters per day.

The Water Board should consider another factor when looking at the averages. While 42 boaters per day is less than the average boating use during the October releases (64 boaters per day), this is primarily a result of the reduction in the total number of days available for whitewater recreation. The summer flushing flows provided six days of recreation opportunities as opposed to four in October, meaning that there was more opportunity to spread out the demand.

As we will discuss in more detail below, this reduction in the total number of days has also strained the ability of the existing recreational access and campground facilities to meet the demand for this resource.

²⁹ *Id.* at 3-63.

³⁰ *Id.* at 3-56.

B. Season of Use

The DEIR states that “[t]he late season demand is substantiated by whitewater boating use during the 2011–2014 October whitewater boating flows, which was more than two times greater than during the 2003–2009 summer flushing flows.”³¹ As we describe above, this is incorrect, and the data should not be used to support the idea that paddlers prefer to boat through the Pit River Canyon in October rather than during the summer. A 2008 study by PG&E shows that boaters preferred to have paddling opportunities in July, August and September as opposed to May and June.³² The survey did not ask paddlers directly about flows in October, however, based on our familiarity with the whitewater boating community, we understand that colder temperatures and shorter days make releases in the late fall less attractive. Even so, the high use numbers in October are a testament to the demand for this section of the Pit River that boaters are still willing to drive long distances late in the season to experience this section of the Pit River Canyon.

C. The Pit River Canyon Provides a Unique Boating Experience

The DEIR states:

“[t]he termination of summer flushing flows would reduce or potentially eliminate periodic summer whitewater recreational opportunities in the Pit 1 Bypass Reach. However, there are other summertime whitewater boating opportunities in the region, such as the August whitewater boating releases in the Pit 5 Reach downstream of the Project Area.”³³

This statement assumes that whitewater rivers are completely interchangeable, which simply is not the case. One of the reasons that the Pit 1 reach has become so popular is that the Pit River Falls, a 40-foot waterfall is a very unique feature that draws paddlers from around the country. It has routes suitable for Class III as well as Class V paddlers, and there is no similar feature on any other scheduled whitewater boating release from a hydropower project in California, no matter the season.

Additionally, the four days of summer boating on the Pit 5 reach, or the eight days of boating on the Feather River do not fully mitigate the lost whitewater recreation opportunity that would have existed on these rivers 365 days a year absent these hydropower projects. To say that they can provide the summer whitewater opportunity instead ignores the cumulative impact that hydropower development has had on whitewater opportunities throughout the state.

³¹ *Id.* at 3-63.

³² Letter from Pacific Gas and Electric Company to FERC, re: Pit 1 License Project (FERC No. 2687) License Article 424–Whitewater Flow Impact Study Final Phase 2 Report (March 26, 2008). (FERC eLibrary Accession No. 20080327-5017)

³³ Draft Environmental Impact Report at 3-62.

V. Adequately Mitigating the Significant Impact to Whitewater Recreation

In the event that the Water Board determines that the best available science supports a determination that cancelling the flushing flows will benefit the endangered Shasta crayfish, then REC-1 beneficial uses of the Pit River that include contact recreation and rafting and canoeing will be significantly impacted. The DEIR incorrectly determines that the fall whitewater flows provide mitigation for the summer flushing flows. As a result, the DEIR as currently written does not propose any legitimate mitigation to whitewater recreation for the significant impact created by the elimination of the summer flushing flows. CEQA requires that the DEIR develop and analyze mitigation measures to replace the lost recreation opportunities,³⁴ and that mitigation must be “‘roughly proportional’ to the impacts of the project.”³⁵

A. Current Conditions

1. Access

The DEIR notes that PG&E constructed a new access site across from the confluence of the Pit River with the Fall River, just downstream of the Pit River Bridge.³⁶ This access location unfortunately does not provide adequate access to the whitewater run. The parking lot is located upstream of a buoy line, requiring boaters to hike their kayaks and rafts ¼ of a mile to get to the put in. Additionally, this site is located two miles upstream of the start of the whitewater run, requiring boaters to paddle flatwater for 40 minutes.

Before PG&E constructed this facility, virtually all paddlers accessed the Pit River Canyon run at the Big Eddy Estates. Throughout relicensing, and in post licensing development of the Recreation Plan, American Whitewater repeatedly stated a preference for access at the Big Eddy location. FERC also recognized this preference in the 2003 license order.³⁷

Big Eddy is a preferable access site because it is located just upstream of the start of the whitewater and vehicle access was available at the river. In 2012 a local landowner refused to allow paddlers to access the PG&E property at Big Eddy, and boaters have had to use the PG&E access since that time. Now, paddlers are required to make a long flatwater paddle and hike to the river. Where they once were able to make multiple runs in a day, they now typically only opt for a single run.

³⁴ Pub. Res. Code § 21002.

³⁵ 14 CCR § 15126.4(a)(4)(B).

³⁶ Draft Environmental Impact Report at 3-48.

³⁷ *Pacific Gas and Electric Co.*, 102 FERC ¶ 61,309 (March 19, 2003). FERC Project No. P-2687. (Order Issuing New License) (FERC eLibrary Accession No. 20030319-0735). License Article 423 accordingly requires that PG&E provide recreational access and facilities (including a car-top boat launch, parking, and sanitary facilities) at Big Eddy, or a comparable site.

2. Camping

Most paddlers coming to enjoy the Pit River Canyon typically stay overnight for both weekend release days. This reach is a significant distance from most population centers—1.5 hours from Redding, 2.5 hours from Chico, and 4.5 hours from Sacramento.

The Bureau of Land Management's Pit 1 Campground is an ideal location for paddlers to stay and enjoy the releases. It is located at the take out for the Class IV Pit River Canyon (the bypass reach) and the put in for the Class II reach that extends three miles downstream to where Highway 299 crosses the Pit River. This campground contains six individual camping sites and one group site. Assuming that each individual campsite can accommodate up to six people, and that the group site can accommodate up to ten, we estimate that a reasonable capacity for this camping area is 45 to 50 people. Using 2006-2009 data, the summer flushing flows had an average daily use of 42 boaters per day. Assuming that there are no other recreationists staying at the site, this facility could potentially handle this level of demand. However, with the cancellation of the summer flushing flows and just four October release days, the average number of boaters per day increased to 64, and in the last few years we have seen this number grow to over 100 paddlers. At these use levels, this facility is inadequate to accommodate the current level of paddler demand. The result has been for paddlers to attempt to camp on the nearby private property, or to seek out other dispersed camping opportunities.

B. Mitigation Recommendations

Unfortunately, reducing the number of days of paddling opportunities, along with degraded access options, has made paddling this section of the Pit River more challenging. In order to mitigate the lost whitewater recreation opportunities as a result of the Proposed Project, American Whitewater recommends all of the following mitigation measures:

- Additional days of whitewater flows in the spring or fall;
- Expanding opportunities for camping in the area; and
- Constructing improved access at the put-in for the Pit River Canyon run.

American Whitewater is willing to work with Water Board staff on the details of these recommendations.

VI. The Water Board Should Reconsider Minimum Instream Flows to Adequately Protect the Shasta Crayfish and Other Aquatic Species

In the bigger picture, American Whitewater seeks to ensure that the daily operation of the Pit 1 Hydroelectric Project both protects endangered species and meets water quality goals and objectives outlined in the Basin Plan, including COLD water habitat, RARE preservation of rare and endangered species and REC-1 contact recreation opportunities. For reasons we outlined in our 2013 comment on the Water Board's Notice of Preparation, American Whitewater does not believe that the Proposed Project will

accomplish these goals. The Water Board has a duty under CEQA and the Basin Plan to examine numerous reasonable alternatives that will protect the endangered Shasta crayfish in the Pit 1 Bypass Reach and address the ongoing temperature impacts of the Pit 1 Project.

Most notably, in separate comments on the Notice of Preparation in 2013, both the California Department of Fish and Wildlife (“DFW”) and American Whitewater requested that the Water Board evaluate the entire flow regime of the Pit 1 Project in order to avoid or minimize potential effects to the Shasta crayfish and other fish and wildlife. Although the DEIR mentions it received comments on this issue,³⁸ it fails to address these concerns. To date, there has not been a scientifically sound investigation into whether increasing minimum instream flows will help protect beneficial uses and mitigate the impacts of Pit 1 Project operations on the Fall and Pit Rivers. At the 5-Year Water Quality Review in 2009 required by Condition 17, PG&E recommended that additional flow releases not be required. The Water Board later agreed.³⁹

PG&E’s recommendation was based on SNTMP modeling completed with data obtained from 1990-1992 and 2004-2008, including a flushing flow event between August 12th and August 18th, 2008.⁴⁰ In their Draft Shasta Crayfish Study Report, PG&E cited this information as evidence for why increased minimum instream flows would not provide a benefit. The California Department of Fish and Wildlife provided comment on the Draft Report on December 21st, 2012, and the agency cited concerns with the SNTMP model and recommended an updated or a new model. PG&E removed the SNTMP model and related results from their Final Shasta Crayfish Study and has not conducted additional monitoring or modeling of increased instream flows to support their recommendation. We urge the Water Board to revisit the adaptive flow release recommendation and seek an updated and comprehensive model of a variety of minimum instream flow release scenarios, including those that bring cooler Fall River water directly into the Pit River, as discussed above.

401 Certification Condition 17 states that reasonable protection of beneficial uses shall be measured by and limited to factors controllable by and related to the Pit 1 Hydroelectric Project operations. If initial streamflow releases are not found to be reasonably protective of the beneficial uses of the Fall and Pit Rivers, the Water Board has reserved the authority to make additional flow releases, up to 400 cfs between June 1 and October 31. As outlined in our 2013 comments, we request that the Water Board study whether the Pit 1 Project is contributing to the impairment of an already impaired water body and fails to reasonably protect the beneficial uses of the Pit River due to controllable factors.

Finally, American Whitewater continues to have serious concerns about the science that is used to support the need for the Proposed Project. In sum, we believe that there are fundamental pieces of scientific information that need to be assessed before the Water

³⁸ Draft Environmental Impact Report at p. 1-9 and 3-2.

³⁹ Pacific Gas and Electric Company, *Pit 1 Water Quality Monitoring Results 2012 Annual Report* (May 2013). Page p. 3. (FERC eLibrary no. 20130531-5135)

⁴⁰ Pacific Gas and Electric Company, *Pit 1 5-Year Water Quality monitoring Report*, 2009, p. 100.

Board can make an informed decision about the impacts of the Pit 1 Project on the Shasta crayfish. These include population surveys (as also requested by DFW), temperature tolerances of the species, and an assessment of how cancelling the flushing flows will benefit Shasta crayfish when similar, and often more extreme population declines are seen in other populations outside of the influence of the flushing flows. American Whitewater's concerns on these matters have not changed, and we incorporate our 2013 comments by reference.

VII. Unsubstantiated and Unclear Information in the DEIR

In addition to the examples highlighted in the springtime flow analysis, the DEIR contains other unclear statements or areas of unsubstantiated information. This should be remedied in the Final EIR. We highlight several examples below.

- 1) At page 4-2, the DEIR states, “[e]xamples of types of projects that may have a cumulatively considerable effect when taking the Proposed Project into account would be discontinuation of other whitewater boating opportunities so as to cumulatively reduce whitewater boating opportunities available in the Proposed Project area. No projects are currently known to be proposed that would discontinue other whitewater boating opportunities in the area at the same time of year as the Proposed Project. Therefore, no cumulative impacts would occur from implementation of the Proposed Project.”

It appears that the DEIR is presuming that the proper assessment for determining cumulative impacts is to examine whether other hydropower projects are also planning to cancel their whitewater recreation flows. CEQA requires that the DEIR examine cumulative impacts, which includes the effects of past actions in addition to future ones.⁴¹ The revised DEIR should also consider how many whitewater recreation opportunities in the region have been impaired because of hydropower projects.

- 2) On page 3-63, the DEIR states: “implementation of the Proposed Project would result in improved angling opportunities during three summer weekends. The higher flows that were associated with the summer flushing flow releases may have affected angling activities and dispersed stream corridor recreation uses. These adverse effects were tied to the loss of beach area, loss of suitable instream flow conditions for wading or swimming, diminished angling conditions, and loss or diminishment of the ability to walk along the streambank. With implementation of the Proposed Project, these high summer flushing flows would not occur.”

Please provide a citation to the recreation surveys or other data that support the conclusion that summer flushing flows have affected angling activities in the Pit 1 Bypass Reach.

⁴¹ 14 CCR §15355(b).

3) At page 3-15 and 5-5, the DEIR discusses the impact of flushing flows on the Northern Western Pond Turtle and Hardhead. Please provide citations to the data that support the conclusions set forth.

4) The DEIR sets forth inconsistent findings on the impacts to Cultural Resources. Where in Section 5.1.1.2 the DEIR finds that implementing the No Project Alternative would have a less-than-significant impact, under Section 5.2.1.2 (spring flow alternative) and Section 5.3.2.2 (barrier alternative), the DEIR finds implementing these alternatives would have no adverse effects. It is unclear in the DEIR how the differences in these alternatives lead to a different finding.

VIII. Conclusion

The DEIR incorrectly represents the Proposed Project as eliminating six days of summer flushing flows and replacing them with four days of whitewater flows in October. This error has impacted the determination of whether it has a significant impact on the environment and how to best mitigate those impacts. Additionally, the Proposed Project fails to adequately protect Shasta crayfish and the DEIR does not go far enough to determine whether additional action, such as increasing the minimum instream flow, will do more to bring the Pit 1 Project into compliance with the Basin Plan. American Whitewater requests that the Water Board correct these errors, perform a new analysis, reconsider mitigation options, and re-issue a DEIR for public review and comment.

Thank you for considering our comments.

Sincerely,



Dave Steindorf
Special Projects Director



Megan Hooker
Associate Stewardship Director