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July 21, 2009
File No. 01030A

RE: Middle Fork American River Project Relicensing / Final 2008 Technical Study Report
AQ 6 – Fish Passage

Dear Aquatic Resources Technical Working Group Member –

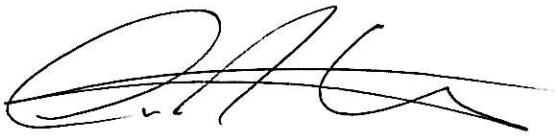
On February 17, 2009, Draft AQ 6 – Fish Passage Technical Study Report (TSR) – 2008 was distributed to the Aquatic Resources Technical Working Group for review and comment by April 18, 2009.

PCWA received two comment letters on the draft report which are attached, along with PCWA's responses. Minor changes were made in response to one of the comment letters; therefore, PCWA deems AQ 6 – Fish Passage TSR – 2008 approved.

Attached for your use is the CD containing the final study report.

If you have any questions, please don't hesitate to call me at (530) 823-4889.

Sincerely,
PLACER COUNTY WATER AGENCY



Andrew Fecko
Resource Planning Administrator

AF:bb

Enclosures:

Comment Letter from John Donovan and PCWA's Response
Comment Letter from Foothills Water Network and PCWA's Response
Final AQ 6 – Fish Passage Technical Study Report – 2008

DRAFT AQ 6 – FISH PASSAGE TECHNICAL STUDY REPORT

APRIL 18, 2009 COMMENT LETTER FROM JOHN DONOVAN

&

MAY 21, 2009 RESPONSE LETTER FROM PCWA

Beverly Bell

From: John Donovan [jmdonovan05@sbcglobal.net]
Sent: Saturday, April 18, 2009 1:22 AM
To: Beverly Bell; Mal Toy; Andy Fecko
Subject: Comments for Fish Passage Report

Middle Fork American Project Relicensing Comments for AQ 6 - Fish Passage Technical Study Report - 2008
John Donovan, as a Member of the Public
4/18/2009

I found this to be another impressive report with meticulous attention to detail. I would like to add the following comments.

The impact of barriers can only be fully measured if the size of the habitat on either side of the barrier is known, which would require at least a summary of all tributaries. Otter Creek, for example, was followed for 1.5 miles despite overgrown conditions that made mapping difficult. However, the North Fork American (NFA) and the North Fork of the Middle Fork American (NFMF) are relatively easier to survey but were not adequately described. The NFA would simply require a mention of no serious barriers until North Fork Dam, 2 miles upstream of the confluence with the Middle Fork. The NFMF may require more study, but is important because it augments the relatively short reach between Ralston Afterbay Dam and Tunnel Chute.

It would be relevant to note that Horeshoe Bend circumvents Tunnel Chute at certain flows and mention what the flow split is between the two channels at higher flows, as well as how often this has occured.

In order to draw the line at a reasonable point between impassable barriers and potential barriers, many barriers are listed as impassable when, technically, they may be passable to certain individuals at certain flows. This makes sense for defining the limits of typical fish movement, but it cannot simultaneously define the limits of occasional movement. Even a single individual migrating to a different reach and becoming part of a different population of fish can introduce important genetic diversity. Therefore, it is important to distinguish between those barriers that may occasionally be passable versus those that are clearly impassable to all individuals at all flows. I see this as being pertinent in situations where a barrier exists because the channel has been partially dewatered or has been reshaped by modifications to the sediment budget. It would seem that the licensee could not be required to mitigate barriers that are considered 100% impassable to all individuals all of the time, but may need to consider barriers that could be made passable for some individuals, especially if it would open up a sizeable or particularly high-quality reach.

In photograph 1 on page 5 of Appendix C, the "American River Canyon" label should say "American Canyon Creek".

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May 21, 2009
File No. 01030A

John Donovan
741 Commons Drive
Sacramento, CA 95825

SUBJECT: Response to Your Email, Dated April 18, 2009, Entitled "Middle Fork American Project Relicensing Comments for AQ 6 – Fish Passage Technical Study Report – 2008"

Dear Mr. Donovan:

Thank you for your comments on the Draft AQ 6 – Fish Passage Technical Study Report – 2008. The following briefly summarizes your comments and PCWA's response.

Comment No. 1. The impact of fish passage barriers can only be fully described if the habitat on either side of the barrier is known, which would require a summary of all tributaries. Specifically, you mention that two tributaries to the Middle Fork American River peaking reach were not adequately described: 1) North Fork American River and 2) North Fork of the Middle Fork American River.

PCWA's Response No. 1. The objective of Federal Energy Regulatory Commission (FERC) – approved AQ 6 – Technical Study Plan (TSP) was to document the location, nature, and characteristics of fish barriers in bypass reaches, the peaking reaches, and inlets to Project reservoirs and diversion pools. These locations were selected for study because operations of the Middle Fork American River Project (MFP or Project) have the potential to effect fish passage through modification of stream flow or reservoir/diversion pool operations. Barriers and habitat in tributary streams (i.e. North Fork American River and North Fork of the Middle Fork American River) unaffected by the operations of the MFP were not assessed. The confluences of six tributaries with the MFP bypass and peaking reaches were identified for assessment of barriers in the AQ 6 – TSP (Pilot Creek, Long Canyon Creek, North Fork of the Middle Fork American River, Volcano Canyon Creek, Otter Creek, and Canyon Creek). The study was never intended to be a comprehensive watershed assessment of fish barriers.

The confluences of the six tributaries identified in the AQ 6 – TSP were assessed and reported in the AQ 6 – TSR. The study was completed in accordance with the AQ 6 - TSP and no additional data collection or analyzes are necessary to evaluate the effects of operations of the MFP.

Comment No. 2. In the report, it would be relevant to note that Horseshoe Bend circumvents the Tunnel Chute fish passage barrier at high flows and mention what the flow split is between the two channels as well as how often this has occurred.

PCWA's Response No. 2. PCWA agrees and the report will be updated to include information regarding the split channel at Tunnel Chute. Information regarding the magnitude of flow necessary to "water" the Horseshoe Bend Channel near Tunnel Chute (including the frequency these flows occur) is currently being developed as part of the AQ 1 – Instream Flow TSP. This information will be reported in the AQ 1 – TSR scheduled to be released in early summer 2009.

Comment No. 3. It is important to distinguish between those barriers that may occasionally be passable versus those that are clearly impassable to all individuals at all flows.

PCWA's Response No. 3. The study was completed in accordance with the FERC-approved AQ 6 – TSP. The AQ 6 – TSR uses the most current, peer-reviewed scientific literature on fish swimming speeds, representative size of fish for the MFP based on fish population studies in the bypass and peaking reaches, and the Powers and Orsborn (1985) and Thompson (1972) methodologies identified in the AQ 6 – TSP to quantitatively estimate fish passage in the MFP at baseflows. Our analysis was conservative and identified many locations as potential barriers rather than absolute barriers due to potential individual differences in fish abilities and sizes and complexity of the channel morphology. Further, many of the locations where barriers were identified were inaccessible and could only be evaluated in the air by helicopter. This constraint precluded definitive assessment of these barriers. Overall, information presented in the AQ 6 – TSP met all the study objectives and provides the best available information to assess potential Project effects and develop new license conditions during subsequent PM&E Measure Development Phases of the relicensing.

Comment No. 4. Photograph 1 on page 5 of Appendix C, the "American River Canyon" label should say "American Canyon Creek".

PCWA's Response No. 4. PCWA agrees. The report will be revised accordingly.

Thank you very much for your interest in the MFP Relicensing. If you have any additional questions or would like to discuss these matters further, please don't hesitate to call me at (530) 823-4889.

Sincerely,
PLACER COUNTY WATER AGENCY

for
Mal Toy
MFP Relicensing Manager

MT:bb

References

Powers, P. D. and J. F. Orsborn. 1985. Analysis of Barriers to Upstream Migration: An Investigation of the Physical and Biological Conditions Affecting Fish Passage Success at Culverts and Waterfalls. BPA Report No. DOE/BP-36523-1.

Thompson, K. 1972. Determining Stream Flows for Fish Life in Pacific Northwest River Basins Commission Instream Flow Requirements Workshop, March 15-16. 1972.

DRAFT AQ 6 – FISH PASSAGE TECHNICAL STUDY REPORT

APRIL 9, 2009 COMMENT LETTER FROM FOOTHILLS WATER NETWORK

&

JUNE 3, 2009 RESPONSE LETTER FROM PCWA

FOOTHILLS WATER NETWORK

julie@foothillswaternetwork.org
P.O. Box 713
Lotus, CA 95651
T: 530-622-8497

Re: Comment on PCWA Middle Fork American Project #2079
Fish Passage Study Results

April 9, 2009

Dear Mal Toy and PCWA,

PCWA has released its Fish Passage Study results for comment due on April 17, 2009.

The Foothills Water Network respectfully submits the following comments on the Fish Passage Study results.

It has come to our attention that there is an Onchorhynchus mykiss population, which has been seen fighting over redds in the wintertime between December and February in the Middle Fork American River reaches impacted by the PCWA Project. Unfortunately, it was an oversight that these fish were not identified as a target species in the Fish Passage, Fish Population, and IFIM Studies.

The Fish Passage Study should have included as a target species these remnant steelhead winter spawning rainbow trout. Given that it did not, we are requesting that PCWA identify the winter spawning rainbow trout as an existing resource impacted by their Project. Since we do not have Habitat Suitability Curves for these rainbow trout, we will see if we can rely on the brown trout Habitat Suitability Curves be used as a surrogate for these winter spawning rainbow trout. We would like to consider this species when we discuss PM&Es that will avoid negatively impacting these fish.

It is unclear at this time whether this is a hatchery or wild population has been impacted by hatchery plantings but we have not seen any studies that question the genetic purity of the strain. It is also unclear whether these rainbow trout are self-sustaining or where their spawning beds and migration patterns are located. There are a number of hypotheses and theories held by the licensee and other relicensing participants regarding these fish but we would need a study to clarify these lingering questions. It is PCWA's responsibility to prove the population is hatchery supported or err in favor that it is a wild strain and manage it accordingly. We are simply requesting that the licensee identify the existence of this winter spawning rainbow trout as a resource that we will consider in the PM&E discussions.

Ideally, these fish would have been included as a target species in the IFIM, Fish Population Studies as well as the Fish Passage Studies.

If PCWA thinks there are not any rainbow trout spawning at this time or have other questions about their spawning and genetics then they should conduct a study.

Thank you for taking this comment into account.

Sincerely,

Julie Leimbach, Coordinator
Foothills Water Network

Foothills Water Network Middle Fork Working Group
Julie Leimbach, Foothills Water Network
Hilde Schweitzer, Private Boater
Dave Steindorf, American Whitewater
Nate Rangel, California Outdoors and California Hydropower Reform Coalition
Gary Estes, Protect American River Canyons
Gary Flanagan, Federation of Flyfishers
Bill Center, American River Recreation Association
John Donovan, Private Boater

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June 3, 2009
File No. 01030A

Julie Leimbach, Coordinator
Foothills Water Network
P.O. Box 713
Lotus, CA 95651

SUBJECT: Response to Your Letter, Dated April 9, 2009, Entitled "Comment on PCWA Middle Fork American Project #2079 Fish Passage Study Results"

Dear Julie,

Thank you for the comments provided in your April 9, 2009 letter entitled "Comment on PCWA Middle Fork American Project #2079 Fish Passage Study Results". In reviewing your letter, we note that the letter provided comments on three specific studies including the AQ 1 – Instream Flow Technical Study, AQ 2 – Fish Population Technical Study and the AQ 6 – Fish Passage Technical Study. The following briefly summaries your comments and PCWA's Response.

Comment No. 1. The Foothill Water Network (FWN) requests that remnant steelhead (winter spawning rainbow trout) be included as target species in the instream flow, fish population and fish passage technical studies in the peaking reach.

PCWA's Response No. 1. The supposition that remnant steelhead trout are present in the Middle Fork American River Project (MFP) study area was thoroughly discussed and dismissed during Aquatic Technical Working Group Meetings conducted as part of study plan development. FWN and its members were active participants in these discussions.

During the study plan development phase, Gary Flanagan (previously associated with the Horseshoe Bar Fish & Game Preserve) identified that some fish had been observed spawning in the fall on the Horseshoe Bar property in the peaking reach. At that time, Stafford Lehr, California Department of Fish and Game, articulated that these fall spawning fish were either brown trout, or if they were rainbow trout, were fish of hatchery-origin selected in hatcheries to spawn in the late fall/ early winter. Hatchery-origin fall/winter spawning rainbow trout have been stocked by CDFG into a number of

rivers and streams in California. Accordingly, hatchery-orgin late fall/winter spawning rainbow trout were not identified as an appropriate target resource in the FERC-Approved Technical Study Plans for the MFP relicensing. However, native spring spawning rainbow trout were identified as an appropriate target resource in the FERC-Approved Technical Study Plans. No changes to the approved technical study are warranted.

In regard to steelhead (anadromous form of rainbow trout), these fish are no longer present in the American River upstream of Nimbus Dam/Folsom Dam complex. Nimbus Dam was constructed in 1955 and has completely blocked upstream migration of all anadromous fish for the last 54 years. Nimbus Dam is owned and operated by the Bureau of Reclamation and is located approximately 24.4 miles downstream of the nearest MFP facility. Accordingly, steelhead are not identified as an appropriate target species in the FERC-Approved Technical Study Plans for the MFP relicensing. No changes to the technical study are necessary.

Comment No. 2. Winter spawning rainbow trout should be included as a target species in the AQ 6 – Fish Passage Technical Study Plan.

PCWA's Response No. 2. Rainbow trout is one of the primary target species for the fish passage analysis. The AQ 6 – TSR assesses fish passage for rainbow trout irrespective of spawning timing. The AQ 6 – TSR uses peer-reviewed scientific literature on salmonid swimming speeds (particularly rainbow trout), representative size of fish for the MFP based on fish population studies in the bypass and peaking reaches, and the Powers and Orsborn (1985) and Thompson (1972) methodologies identified in the AQ 6 – TSP to quantitatively estimate fish passage in the MFP at summer/fall baseflows and qualitatively estimate fish passage at high flows. Therefore, the existing FERC-Approved AQ 6 -Technical Study Plan adequately provides sufficient information to assess fish passage during the Protection, Mitigation and Enhancement (PM&E) discussion.

Comment No. 3. FWN request that PCWA conduct a genetic study and a winter spawning study on rainbow trout in the peaking reach.

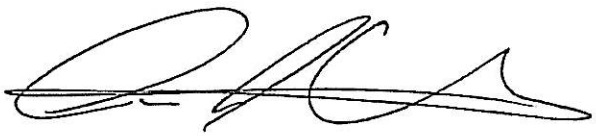
PCWA's Response No. 3. Stakeholder-approved Technical Study Plans (TSP) proposed for the MFP were filed with FERC in December 2007 as Supporting Document H of the Pre-Application Document (PAD). FWN were one of the stakeholders which approved the TSP filed in the PAD. FERC issued its study plan determination on July 18, 2008 thereby approving the technical studies required for the relicensing of the MFP. PCWA is committed to completing the FERC-approved TSP. The FERC-approved TSP will collect all the information necessary to identify potential Project effects and develop appropriate PM&E measures for the MFP.

PCWA's Overall Comment on FWN Study Request

FERC has a well-defined criteria described in CFR § 5.15 (e) and § 5.15 (f) for new study requests after study plan determination is completed. The FWN request for new studies is incomplete and inconsistent with the regulatory requirements (i.e. the request fails to address the FERC-required criteria). Further, this request is late in the process and was not addressed during meetings or comments associated with the 2007 Study Implementation Progress Report (January 2008) or the 2008 Updated Study Implementation Progress Report (January 2009). Regardless, PCWA does not support these study requests. All the information necessary to identify potential Project effects on target fish species and develop appropriate PM&E measures for the MFP is addressed in the FERC-approved TSP.

If you have additional questions on this matter, please do not hesitate to call me at (530) 823-4889.

Sincerely,
PLACER COUNTY WATER AGENCY



Andrew Fecko
Resource Planning Administrator

AF:bb

References

Powers, P. D. and J. F. Orsborn. 1985. Analysis of Barriers to Upstream Migration: An Investigation of the Physical and Biological Conditions Affecting Fish Passage Success at Culverts and Waterfalls. BPA Report No. DOE/BP-36523-1.

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