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December 5, 2012
File No. 502-1

Betty Yee, Senior Water Resource Control Engineer
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, No. 200
Rancho Cordova, CA 95670-6114
byee@waterboards.ca.gov

RE: Placer County Water Agency's Comment Letter – Central Valley Regional Water Quality Control Board Basin Plan 2013 Triennial Review

Dear Ms. Yee:

Please find Placer County Water Agency's (PCWA) attached comments to the Central Valley Regional Water Quality Control Board's (CVRWQCB) 2013 Basin Plan Triennial Review regarding updating the freshwater habitat beneficial use designations for the Yuba River and American River watersheds based on information that may have been previously unavailable to the CVRWQCB.

Thank you for your consideration of these comments. If you have any questions, please contact me at (530) 308-4554 or by email at bransom@pcwa.net.

Sincerely,

Benjamin Ransom
Environmental Scientist

Enclosure

**PCWA's Comments on the Water Quality Control Plan
for the Sacramento River and San Joaquin River Basins (Basin Plan)
2013 Triennial Review**

SUBMITTING ORGANIZATION

Placer County Water Agency (PCWA)
Contact: Ben Ransom (Environmental Scientist)
Phone Number: (530) 308-4554

GENERAL ISSUE STATEMENT

PCWA is a California public agency organized and existing pursuant to the Placer County Water Agency Act, California Statutes of 1957, Chapter 1234, as amended (California Water Code App. §§ 81-1 to-25). It has a broad range of responsibilities and functions, including water resource planning and management, retail and wholesale supply of irrigation water and drinking water, and production of hydroelectric energy. Under water resource planning and management, PCWA assists other water service providers throughout Placer County in technical, legal, and regulatory matters. In this capacity, PCWA serves as an advocate on water resource issues on behalf of the citizens of Placer County. PCWA's boundaries are coterminous with those of the County of Placer, State of California. PCWA is governed by a five person Board of Directors elected by the voters in Placer County.

PCWA's primary interest in the 2013 Triennial Review is to revise the current habitat beneficial use designations for the Yuba and American river tributaries to include WARM freshwater as an existing beneficial use for the mid to low elevations of the South, Middle, and North Yuba rivers and the North Fork and Middle Fork American rivers based on existing and historical species distributions and water temperatures. In the current Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region (Fourth Edition), the habitat in these rivers is designated as COLD (in some cases COLD and potentially WARM). The updated designation will ensure that water temperatures can be appropriately managed to protect the WARM water sensitive species and their habitat that exist in these rivers. At the same time, the COLD freshwater habitat that exists in the upper elevation portions of the rivers can also be appropriately managed. Neighboring rivers and watersheds along the west slope of the Sierra Nevada with similar physical characteristics and species assemblages (e.g., Middle Fork Feather River, Consumnes River, and Mokelumne River) have both WARM and COLD existing freshwater habitat designations that protect both the WARM and COLD freshwater habitat beneficial uses in the rivers. The beneficial use designations in the Yuba and American river watersheds should be revised in a similar manner.

REQUESTED REVISION

The requested beneficial use revisions to the current version of the Basin Plan (Table II-1) are shown below with the revisions in red text:

Requested Revisions to the Basin Plan Beneficial Use Designations for the Yuba River and the American River (changes are shown in red text).

SURFACE WATER BODIES		HYDRO UNIT NUMBER	FRESHWATER HABITAT ¹	
			WARM	COLD
41	YUBA RIVER			
	SOURCES TO ENGLEBRIGHT RESERVOIR	517		€
	NORTH YUBA RIVER	517.5	E	E
	MIDDLE YUBA RIVER	517.41	E	E
42	SOUTH YUBA RIVER	517.42	E	E
	ABOVE ENGLEBRIGHT DAM TO FEATHER RIVER	517.3	E	E
AMERICAN RIVER				
44	NORTH FORK, SOURCE TO FOLSOM LAKE	514.5	≠ E	E
45	MIDDLE FORK, SOURCE TO FOLSOM LAKE	514.4	≠ E	E
46	DESOLATION VALLEY LAKES	514.4		E
48	SOUTH FORK	513.3		
	SOURCES TO PLACERVILLE	513.3	P	E
49	PLACERVILLE TO FOLSOM LAKE	514.32	E	E
50	FOLSOM LAKE	514.23	E	E
51	FOLSOM DAM TO SACRAMENTO RIVER	519.21	E	E

¹E: Existing beneficial uses; P = Potential beneficial uses

JUSTIFICATION

Hardhead (*Mylopharodon conocephalus*), foothill yellow-legged frog (*Rana boylei*), and western pond turtle (*Actinemys marmorata*) are designated State Species of Special Concern and United States Department of Agriculture - Forest Service/Bureau of Land Management Sensitive species. Additionally, foothill yellow-legged frog and western pond turtle recently have been petitioned for listing under the Federal Endangered Species Act (Center for Biological Diversity 2012) (Table 1). To ensure that the habitat of hardhead, foothill yellow-legged frog, western pond turtle and other associated warm water species assemblages is protected, the freshwater habitat beneficial use designation of the Yuba and American river tributaries should be revised to include WARM as an existing beneficial use. Because the existing water temperature regimes are potentially controlled by cold reservoir releases, it is possible to transform large portions of the WARM summer freshwater habitat that exists in these rivers to COLD freshwater habitat without violating the current water temperature objectives. This would result in large losses of sensitive WARM species and their habitat. In contrast, neighboring watersheds along the west slope of the Sierra Nevada with similar species assemblages do have WARM freshwater habitat designations to protect WARM freshwater habitat (Figure 1 and Table 2). It is important to recognize that currently, and historically, the west slope Sierra rivers supported a unique combination of both cold and warm water species and that the beneficial use designation should reflect this.

Hardhead are part of the “pikeminnow-hardhead-sucker” native fish assemblage that occurs in warmer water portions of streams and rivers downstream of the cold water assemblage along nearly the entire

west slope of the Sierra Nevada (Moyle 2002). Foothill yellow-legged frog and western pond turtle also exist in the same warm water habitat as the “pikeminnow-hardhead-sucker” native fish assemblage in the Yuba and American river tributaries. The specific locations where sensitive WARM freshwater species exist currently and existed historically in these rivers are shown on Map 1.

Recent studies conducted by PCWA, Pacific Gas and Electric Company (PG&E), Nevada Irrigation District (NID) and others (e.g., Gard [2004]; Gast et al [2005]; Knight [1985]; Kupferberg et al [2012]) that support adding the WARM water temperature designations in the Yuba and American river watersheds, including measured and modeled water temperature, flow data (existing and unimpaired), and species distributions, are listed in Table 3. PCWA is available to assist the Water Board, as needed, to obtain and synthesize the available information that supports modifying the freshwater habitat temperature designations in the Yuba and American river tributaries.

REFERENCES

- Center for Biological Diversity. 2012. Petition to List 53 Amphibians and Reptiles in the United States as Threatened or Endangered Species under the Endangered Species Act. Before the Secretary of the Interior. July 11, 2012.
- Central Valley Regional Water Quality Control Board (CVRWQCB). 2009. The Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan), Fourth Edition revised October 2011 (with approved amendments).
- Moyle, P. B. 2002. Inland Fishes of California. Berkeley, CA, University of California Press.

TABLES

Table 1. WARM Water Sensitive Species Currently and Historically Present in the Mid to Low Elevations of the Yuba and American River Watersheds and Their State and Federal Designations.

Species	State and Federal Designations				Mid to Low Elevation Occurrence ¹					
	Current			Pending	North Yuba River	Middle Yuba River	South Yuba River	North Fork American River	Middle Fork American River	South Fork American River
	Forest Service Sensitive Species	BLM Sensitive Species	California Species of Special Concern by CDEG	Federal Endangered or Threatened Species						
WARM WATER SPECIES										
Foothill Yellow-legged Frog	X	X	X	X ¹	X	X	X	X	X	X
Western Pond Turtle	X	X	X	X ¹	X ²	X ²	X	X	X	X ²
Hardhead	X		X		X ²	X	X	X	X	X

¹Center for Biological Diversity (2012).

²Potentially present.

Table 2. WARM and COLD Freshwater Habitat Beneficial Use Designations in Several Western Sierra Nevada Watersheds¹.

Watershed ²	Freshwater Habitat ³	
	WARM	COLD
Feather		
North Fork, Feather River ³		E
Middle Fork Feather – Little Last Chance Creek to Lake Oroville	E	E
Yuba - sources to Englebright ³		E
American		
North Fork - source to Folsom Reservoir	P	E
Middle Fork - source to Folsom Reservoir	P	E
South Fork - source to Placerville	P	E
South Fork - Placerville to Folsom Reservoir	E	E
Consumnes – source to Delta	E	E
Mokelumne – source to Pardee	E	E
Calaveras – source to New Hogan	E	E
Stanislaus – source to New Melones Reservoir	E	E
Tuolumne – source to Don Pedro Dam	E	E
Merced – source to McClure Lake	E	E
Fresno – source to Hidden Reservoir A/	E	E
Chowchilla River – source to Buchanan Reservoir B/	E	E
San Joaquin – source to Millerton	E	E

¹Source: CVRWQCB (2009) Revised October 2011 (with Approved Amendments).

²E: Existing beneficial uses; P = Potential beneficial uses

³Pacific Gas & Electric (PG&E) has also provided comments on the Basin Plan Triennial Review to revise the designated uses of these watersheds to include WARM water habitats.

Table 3. Recent Studies that Support Adding the WARM Water Temperature Designations in the Yuba and American River Watersheds.

References for Recent Studies
Yuba River Watershed
Aquatic Species and Habitat
Kupferberg, A., C. Addley, and P. Graf. 2012. Water Temperature Effects on Foothill Yellow-legged Frog and Hardhead. Filed September 14, 2012 to the Federal Energy Regulatory Commission in Reply Comments of Placer County Water Agency on the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service Preliminary Recommendations of Measures under Federal Power Action § 10(j) and Preliminary Federal Power Action § 18 Fishway Prescriptions. Appendix A.
Gast, T., M. Allen, and S. Riley. 2005. Middle and South Yuba Rainbow Trout (<i>Oncorhynchus mykiss</i>) Distribution and Abundance Dive Counts August 2004. FINAL DRAFT. August 2005. Appendix G in Upper Yuba River Watershed Chinook Salmon and Steelhead Habitat Assessment. Submitted to the California Department of Water Resources. Prepared by the Upper Yuba River Studies Program Study Team.
Placer County Water Agency (PCWA). 2012. Hardhead and Sacramento Pikeminnow Distribution in the South Yuba River. Filed September 14, 2012 to the Federal Energy Regulatory Commission in Reply Comments of Placer County Water Agency on the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service Preliminary Recommendations of Measures under Federal Power Action § 10(j) and Preliminary Federal Power Action § 18 Fishway Prescriptions. Appendix B.
Nevada Irrigation District (NID) and Pacific Gas and Electric Company (PG&E). 2010. Technical Memorandum 3-6, FERC Project No. 2266. Special Status Amphibians: FYLF VES. Yuba-Bear Hydroelectric Project (FERC Project No. 2266-096) and Drum-Spaulding Project (FERC Project No. 2310-173). October 2010. Available at: http://www.eurekasw.com/NID/default.aspx .
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Knight, N.J. 1985. Microhabitats and Temperature Requirements of Hardhead (<i>Mylopharodon conocephalus</i>) and Sacramento squawfish (<i>Ptychocheilus grandis</i>), With Notes for Some Other Native California Stream Fishes. Doctoral Dissertation: UC Davis.
Gard, M. F. 2004. Interactions Between and Introduced Piscivore and a Native Piscivore in a California Stream. <i>Environmental Biology of Fishes</i> 71: 287-295.
Gard, M. F. 1994. Biotic and abiotic factors affecting native stream fishes in the South Yuba River, Nevada County, California PhD thesis, University of California, Davis, California.

Table 3. Recent Studies that Support Adding the WARM Water Temperature Designations in the Yuba and American River Watersheds (continued).

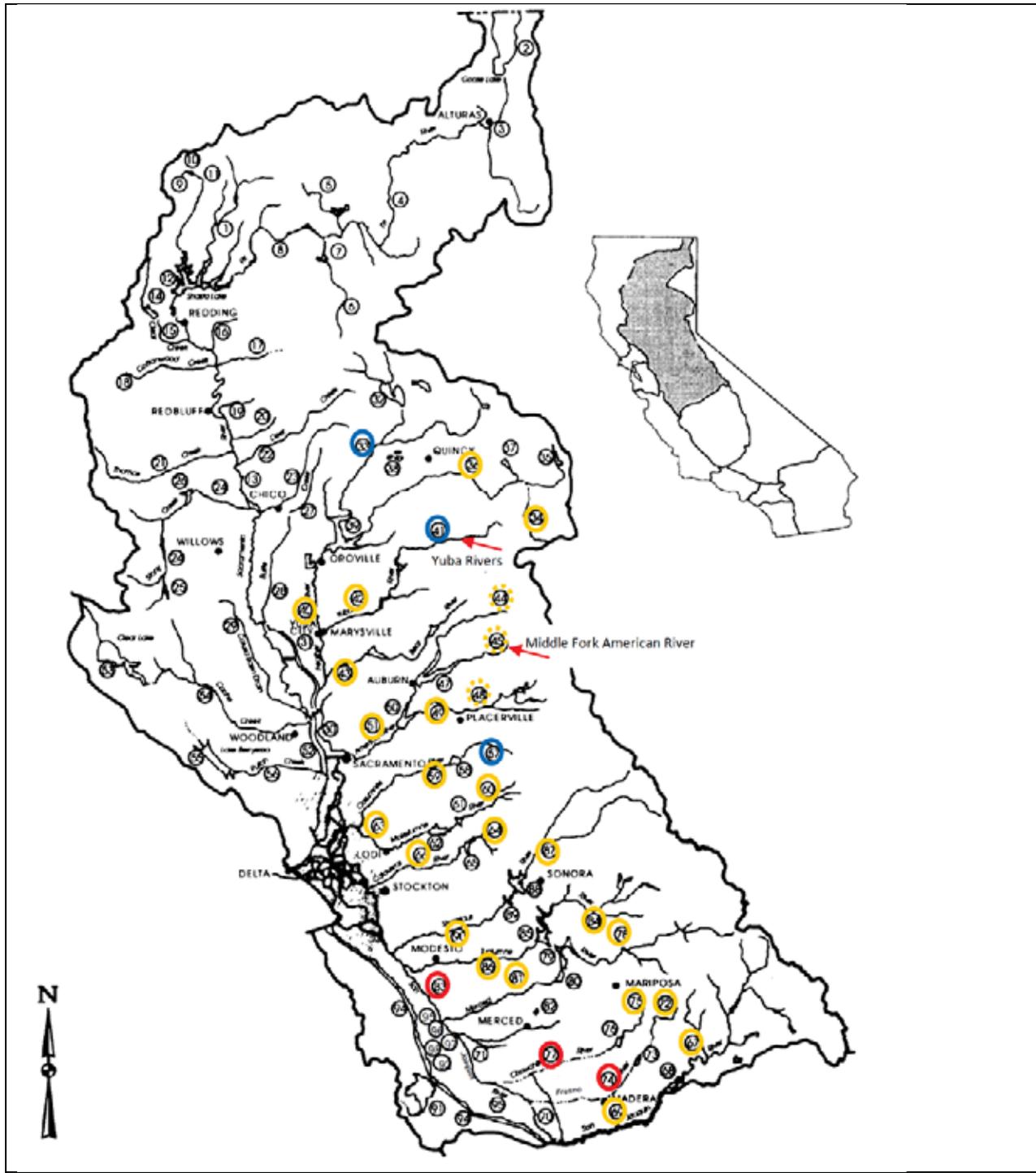
References for Recent Studies
Hydrology and Temperature
NID and PG&E. 2011. Application for New License, Major Project – Existing Dam. Yuba-Bear Hydroelectric Project (FERC Project No. 2266-096) and Drum-Spaulding Project (FERC Project No. 2310-173). Volume II, Exhibit E. Section 6 (Introduction to Environmental Analysis) and Appendix E12, Licensee’s Operations Model, Hydrology Information, Technical Memoranda and Project Videos April 11, 2011. Available at: http://www.eurekasw.com/DS/Final%20License%20Application/Forms/AllItems.aspx
PG&E. 2012. Drum-Spaulding Project, FERC Project No. 2310-193, Amended Application. Exhibit E, Appendix E12, Licensee’s Operations Model, Hydrology Information, Technical Memoranda and Project Videos. Filed with FERC June 18, 2012. Available at: http://www.eurekasw.com/DS/Final%20License%20Application%20Supplements/Forms/AllItems.aspx
PG&E. 2012. Drum-Spaulding Project, FERC Project No. 2310-193, Supplemental Information. Supplement No. 2, Updated Runs of the Yuba-Bar HEC-ResSim Water Balance/Operations Model. Filed with FERC August 29, 2012. Available at: http://www.eurekasw.com/DS/Final%20License%20Application%20Supplements/Forms/AllItems.aspx
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NID. 2012. Yuba-Bear Hydroelectric Project, FERC Project No. 2266-096. Supplemental Information. Supplemental No. 1, Updated Runs of the Yuba-Bear HEC-ResSim Water Balance/Operations Model. Filed with FERC August 17, 2012. Available at: http://www.eurekasw.com/NID/Final%20License%20Application/Forms/AllItems.aspx
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American River Watershed
Aquatic Species and Habitat
PCWA. 2011. AQ 2 – Fish Population Technical Study Report (2007–2009). Application for New License. Volume 3, Exhibit E, Book 5, Supporting Document B. Filed with FERC February 23, 2011. Middle Fork American River Project (FERC Project No. 2079). Available at: http://relicensing.pcwa.net/html/science/padreportaquatic.php .
PCWA. 2011. AQ 12 – Special-Status Amphibian and Aquatic Reptile Technical Study Report – 2007. Application for New License. Volume 3, Exhibit E, Book 5, Supporting Document B. Filed with FERC February 23, 2011. Middle Fork American River Project (FERC Project No. 2079). Available at: http://relicensing.pcwa.net/html/science/padreportaquatic.php .

Table 3. Recent Studies that Support Adding the WARM Water Temperature Designations in the Yuba and American River Watersheds (continued).

References for Recent Studies
Aquatic Species and Habitat (continued)
Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric Company (PG&E). 2005. Stream Fisheries Technical Report. Upper American River Project (FERC Project No. 2101) and Chili Bar Project (FERC Project No. 2155). January 2005. Available at: http://hydrorelicensing.smud.org/document.htm .
SMUD and PG&E. 2005. Amphibians and Aquatic Reptiles Technical Report. Upper American River Project (FERC Project No. 2101) and Chili Bar Project (FERC Project No. 2155). April 2005. Available at: http://hydrorelicensing.smud.org/document.htm .
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PCWA. 2011. Application for New License. Volume 3, Exhibit E, Section 7 (Affected Environment) and Section 8 (Environmental Effects of the Proposed Action). Filed with FERC February 23, 2011. Middle Fork American River Project (FERC Project No. 2079). Available at: http://relicensing.pcwa.net/html/filings/filings_anl.php .
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SMUD. 2005. Application for New License with Preliminary Draft Environmental Assessment for the Upper American River Project (FERC Project No. 2101). Section 5 (Environmental Consequences). Filed with FERC on July 15, 2005. Available at: http://hydrorelicensing.smud.org/docs/docs_lic.htm
SMUD. 2006. Upper American River Project, FERC Project No. 2101; Supplemental Preliminary Draft Environmental Assessment Analyzing Comprehensive Resource Agency/NGO Alternative. Section 5.0 (Environmental Consequences). Filed with FERC on August 18, 2006. Available at: http://hydrorelicensing.smud.org/docs/docs_spdea.htm .

FIGURE

Figure 1. Yuba River and American River Watersheds and Neighboring Western Sierra Nevada Watersheds with WARM and COLD Water Habitat Beneficial Use Designations¹.



Legend: ○ WARM freshwater habitat. ○ COLD freshwater habitat. ○ WARM and COLD freshwater habitat. ★ COLD and Potential WARM freshwater habitat.

¹ Pacific Gas & Electric (PG&E) has also provided comments on the Basin Plan Triennial Review to revise the designated uses for the North Fork Feather River and Yuba Rivers to include WARM water habitats in a letter dated July 22, 2009.

Source: Fourth Edition of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. Revised October 2011 (with Approved Amendments).

MAP

Watercourse



Warm Water Species Distribution (known hardhead, foothill yellow-legged frog, and/or western pond turtle populations and other associated warm water species exist in these reaches)

Map 1
Warm Water Species Distribution
in the Yuba River and
American River Watersheds



Date: 12/29/12
Projection: UTM, Zone 10N
Datum: NAD 83

