

Anticipated Fieldwork Schedule^{1,2} - April 2012 -

Resource Area	Study Name	Anticipated Field Schedule for Month	Running List of Variances to FERC-Approved Studies	Technical Memorandum Due Date
Geology & Soils	Channel Morphology Upstream of Englebright Reservoir (1.1)	4/19: Coarse sediment measuring in Oregon Creek 4/25-26: Coarse sediment measuring in Oregon Creek and Middle Yuba River 4/30: Coarse sediment measuring in Middle Yuba River	--	September 30, 2012
	Channel Morphology Downstream of Englebright Dam (1.2)	4/1- 4/9: LWM surveys on the Lower Yuba River YCWA, in conformance with FERC's September 30, 2011 Study Determination, filed with FERC a modified study plan, including evidence of agency consultation, on March 8, 2012. YCWA will initiate the study when approved by FERC.	--	September 30, 2012 (date subject to revision based on modification of study plan)
Water Resources	Hydrologic Alteration (2.1)	No fieldwork scheduled this month.	--	September 30, 2012
	Water Balance/Operations Model (2.2)	No fieldwork scheduled this month.	--	September 30, 2012
	Water Quality (2.3)	No fieldwork scheduled this month.	--	September 30, 2013
	Bioaccumulation (2.4)	Fieldwork complete.	Variance # 1 ¹	September 30, 2012
	Water Temperature Monitoring (2.5)	4/1- 4/30: Collect water temperature profiles in New Bullards Bar and Englebright reservoirs and check (e.g., monitor and download) continuous water temperature recorders.	--	February 28, 2013
	Water Temperature Model (2.6)	No fieldwork scheduled this month.	--	September 30, 2012
Aquatic Resources	Aquatic Macroinvertebrates Upstream of Englebright Reservoir (3.1)	No fieldwork scheduled this month.	--	September 30, 2012
	Aquatic Macroinvertebrates Downstream of Englebright Dam (3.2)	No fieldwork scheduled this month.	--	September 30, 2012
	Special-Status Aquatic Mollusks (3.3)	No fieldwork scheduled this month.	--	September 30, 2012
	Special-Status Amphibians – Foothill Yellow-Legged Frog Surveys (3.4)	No fieldwork scheduled this month	--	September 30, 2012
	Special-Status Amphibians – Foothill Yellow-Legged Frog Habitat Modeling (3.5)	No fieldwork scheduled this month.	--	September 30, 2013
	Special-Status Turtles – Western Pond Turtle (3.6)	TBD: Potential pre-basking survey visits to assess WPT activity at Log Cabin Dam and Our House Dam impoundments.	--	September 30, 2012

¹ This fieldwork schedule is YCWA's best estimate at this time and is subject to modification by YCWA or HDR|DTA without prior notice. Any Relicensing Participant interested in observing fieldwork listed above should contact Jim Lynch at least one week in advance of the scheduled fieldwork at (916) 564-4214 Extension 581 or james.lynnch@hdrinc.com, who will coordinate with the participant to the extent possible.

² There are no flow modifications scheduled this month to accommodate studies.

Anticipated Fieldwork Schedule (continued)

Resource Area	Study Name	Anticipated Field Schedule for Month	Running List of Variances to FERC-Approved Studies	Technical Memorandum Due Date
Aquatic Resources (continued)	Reservoir Fish Populations (3.7)	4/3-4/5: New Bullards Bar Fish Passage Tributary Assessments	--	September 30, 2012
	Stream Fish Populations Upstream of Englebright Reservoir (3.8)	4/10-11, 19-20, 25-26: Fry emergence sampling.	--	September 30, 2013
	Non-ESA-Listed Fish Populations Downstream of Englebright Dam (3.9)	No fieldwork scheduled this month.	--	September 30, 2012
	Instream Flow Upstream of Englebright Reservoir (3.10)	4/10-13: Agency site visit, setup, and LF measurements below NBB 4/16-19: Low Calibration Flow data collection on Middle Yuba below Our House Diversion Dam 4/24-26: Mid Calibration Flow data collection on Oregon Creek below Log Cabin Diversion Dam.	--	September 30, 2012
	Fish Entrainment (3.11)	Study on hold. YCWA, in conformance with FERC's September 30, 2011 Study Determination, filed with FERC a modified study plan, including evidence of agency consultation, on December 29, 2011. YCWA will initiate the study when approved by FERC.	--	September 30, 2012 (date subject to revision based on when FERC approves the modified study plan)
	New Colgate Powerhouse Ramping (3.12)	Study on hold. YCWA, in conformance with FERC's September 30, 2011 Study Determination, filed with FERC a modified study plan, including evidence of agency consultation, on March 8, 2012. YCWA will initiate the study when approved by FERC.	--	To be Determined
Wildlife Resources	Special-Status Wildlife – California Wildlife Habitat Relationships (4.1)	No fieldwork scheduled this month.	--	September 30, 2012
	Special-Status Wildlife – Bats (4.2)	4/2-4/6: Install Long-term acoustic monitoring (LTAM) equipment at all sites. 4/13: Download LTAM data.	--	October 30, 2012
Botanical Resources	Special-Status Plants (5.1)	4/1-4/5 & 4/14-4/30: Fieldwork anticipated to continue through April.	Variance # 1 ²	September 30, 2012
Wetlands, Riparian & Littoral Habitats	Riparian Habitat Upstream of Englebright Reservoir (6.1)	4/10-13: Agency site visit, setup, and LF measurements below NBB YCWA, in conformance with FERC's September 30, 2011 Study Determination, filed with FERC a modified study plan, including evidence of agency consultation, on February 14, 2012. YCWA will initiate the study when approved by FERC.	--	September 30, 2012 (date subject to revision based on when FERC approves the modified study plan)

Anticipated Fieldwork Schedule (continued)

Resource Area	Study Name	Anticipated Field Schedule for Month	Running List of Variances to FERC-Approved Studies	Technical Memorandum Due Date
	Riparian Habitat Downstream of Englebright Dam (6.2)	4/1- 4/20: Large wood surveys YCWA, in conformance with FERC's September 30, 2011 Study Determination, filed with FERC a modified study plan, including evidence of agency consultation, on March 8, 2012. YCWA will initiate the study when approved by FERC.	--	February 2013 (date subject to revision based on modification of study plan)
	Wetlands (6.3)	No fieldwork scheduled in April.	--	September 30, 2012
Threatened, Endangered & Fully Protected Species (continued)	ESA-Listed Plants (7.1)	4/1-4/5 & 4/14-4/30: Botanical surveys	Variance # 1 ²	September 30, 2012
	Narrows 2 Powerhouse Intake (7.2)	No fieldwork scheduled this month.	--	September 30, 2013
	ESA-Listed Amphibians – California Red-Legged Frog (7.3)	No fieldwork scheduled this month.	--	March 31, 2013 ³
	ESA-Listed Wildlife – Valley Elderberry Longhorn Beetle (7.4)	4/1-4/5 & 4/14-4/30: Botanical surveys	Variance # 1 ²	September 30, 2012
	CESA-Listed Plants (7.5)	4/1-4/5 & 4/14-4/30: Botanical surveys	Variance # 1 ²	September 30, 2012
	CESA-Listed and Fully Protected Wildlife – California Wildlife Habitat Relationships (7.6)	No fieldwork scheduled this month.	--	September 30, 2012
	CESA-Listed and Fully Protected Wildlife – Bald Eagle (7.7)	4/30: Second of three bald eagle nesting surveys.	--	September 30, 2012
	ESA/CESA-Listed Salmonids Downstream of Englebright Dam (7.8)	No fieldwork scheduled this month.	--	September 30, 2012
	North American Green Sturgeon Downstream of Englebright Dam (7.9)	No fieldwork scheduled this month.	--	September 30, 2012
	Instream Flow Downstream of Englebright Dam (7.10)	No fieldwork scheduled this month.	--	September 30, 2012
	Fish Behavior and Hydraulics Near Narrows 2 Powerhouse (7.11)	TBD: Snorkeling in vicinity of Narrows 2 Powerhouse. YCWA in process of developing a study plan. When developed, the draft plan will be provided to USFWS, NMFS, SWRCB and CDFG for 30-day review. YCWA will file the modified study plan, including evidence of consultation, with FERC by May 15, 2012. YCWA will initiate the study when approved by FERC.	--	To be Determined
	Evaluation of Project Effects on Daguerre Point Dam and Hallwood-Cordua Fish Facilities (7.12)	Study on hold. YCWA, in conformance with FERC's 9/30/11 Study Determination and 12/8/11 Study Modification, modified the study plan and on 1/19/12 distributed it to Forest Service, USFWS, NMFS, SWRCB and CDFG for 30-day review (i.e., written comments due by COB on 2/20). YCWA will file the modified study plan, including evidence of consultation, with FERC by March 8, 2012. YCWA will initiate the study when approved by FERC.	--	To be Determined

Anticipated Fieldwork Schedule (continued)

Resource Area	Study Name	Anticipated Field Schedule for Month	Running List of Variances to FERC-Approved Studies	Technical Memorandum Due Date
Recreation Resources	Recreation Use and Visitor Surveys (8.1)	4/1, 4/14, 4/16 & 4/25: Recreational use and visitor surveys at New Bullards Bar Reservoir. 4/11: Recreation facility inventory, condition and accessibility evaluation field visit with Forest Service.	--	March 31, 2013
	Recreational Flow (8.2)	4/26: Focus group meeting for boating in the Middle Yuba River below Our Hosue Divresion Dam TBD: Oregon Creek whitewater feasibility assessment site visit	--	September 30, 2013
Land Use	Primary Project Roads and Trails (9.1)	4/10-4/12: Roads survey/assessments	--	September 30, 2012
Aesthetic Resources	Visual Quality (10.1)	No fieldwork scheduled this month.	--	September 30, 2012
Cultural Resources	Historic Properties Study (12.1)	No fieldwork scheduled this month.	--	September 30, 2012
Tribal Interests	Native American Traditional Cultural Properties (12.2)	No fieldwork scheduled this month.	--	September 30, 2012

¹ YCWA’s proposed Bioaccumulation Study (Study 2.4) required, among other things, that YCWA collect 9 brown trout and 9 rainbow trout from each of Our House and Log Cabin diversion dam impoundments and analyze each for methylmercury bioaccumulation. CDFG’s Moss Landing lab visited the impoundments during the week of September 19, 2011 and collected the target number of rainbow trout at each impoundment, but did not find any brown trout, and suggested an additional effort would not be worthwhile. YCWA consulted with SWRCB on September 26, 2011 and it was agreed an additional effort was not needed, but if YCWA collected brown trout in the impoundments during the relicensing Fish Populations Upstream of Englebright Reservoir Study (Study 3.8), up to 9 brown trout from each reservoir would be preserved and analyzed for methylmercury bioaccumulation and the results included in the Bioaccumulation Technical Memorandum.

² YCWA’s proposed Special-Status Plants Study (Study 5.1), ESA-Listed Plants Study (Study 7.1), ESA-Listed Wildlife – Valley Elderberry Longhorn Beetle Study (Study 7.4), and CESA-Listed Plants Study (Study 7.5) required, among other things, that YCWA perform botanical surveys within the FERC Project Boundary. After consultation with the Forest Service, it was agreed YCWA would not enter within 330 fete of a known bald eagle nesting site on New Bullard Bar Reservoir, in conformance with the National Bald Eagle Management Plan (2007). It was agreed this portion of the FERC Project Boundary would not be surveyed for plants.

³ Site Assessment Report is scheduled for completion in June 2012. A supplemental report will be completed in October 2014 if Step 2 of study is warranted.

**Anticipated Target Flows To Perform Studies If Different Than Normal Flows
- April 2012 -**

Resource Area	Study Name	Anticipated Flow Schedule If Different Than Normal Flows
Aquatic Resources	Instream Flow Upstream of Englebright Reservoir (3.10)	<ul style="list-style-type: none"> 4/16-19: Middle Yuba River Below Our House Diversion Dam – 75 cfs 4/23-26: Oregon Creek below Log Cabin Diversion Dam – 50 cfs