SECTION 8

POTENTIAL OR KNOWN ISSUES AND PROJECT EFFECTS

This section presents potential or known issues and effects related to Yuba County Water Agency's (YCWA or Licensee) continued operation and maintenance (O&M) of the Yuba River Development Project (Project). Section 8.1 defines how the terms "issues" and "effects" are used in the Pre-Application Document (PAD). Section 8.2 describes the process Licensee used to identify potential and known issues and Project effects. Section 8.3 provides a preliminary list of issues and effects. Section 8.4 provides, as requested by Relicensing Participants, each preliminary issue or effect identified by Relicensing Participants that Licensee believes is outside the scope of Relicensing, and Licensee's reason for this belief.[1]

8.1 Definitions

8.1.1 Issues

Identification of issues is a key step in any relicensing process because the issues represent specific concerns or questions expressed by federal and State agencies, local agencies, Indian tribes, businesses, non-governmental organizations, and unaffiliated members of the public (collectively referred to as Relicensing Participants) that may need to be addressed in the relicensing. Often, issues are concerns about potential adverse Project effects.

8.1.2 Effects

For the purposes of this PAD, a Project "effect" is simply the change to the natural and human environment attributable to the Project's O&M. Project effects can be direct, indirect, or cumulative. "Direct effects" are caused by a Project-related action and occur at the same time and place as the action. "Indirect effects" are caused by Project-related actions but occur later or are farther removed in distance. A "cumulative effect" results from the incremental impact of continued Project O&M when added to other past, present and reasonably foreseeable future actions in the basin. Cumulative effects can result from individually minor but collectively significant actions that take place over a period of time.

Regardless of whether they are direct, indirect or cumulative, a Project effect may be:

- Significant. A significant effect could be an effect that causes the condition of a resource to be inconsistent with applicable standards or applicable resource management goals, or is otherwise considered consequential.

[1] Licensee also agreed to include in its PAD, whether it agreed with them or not, suggestions that were made during the January 13, 2010 meeting regarding Protection Mitigation & Enhancement measures and studies. See Sections 9.3 and 10.3, respectively, for lists of these measures and studies.

- Less-than-Significant. A less-than-significant effect could be an effect that cannot be reasonably measured or otherwise observed, or an effect that can be measured but the change in the resource is so minor as to not cause the condition of the resource to be inconsistent with applicable standards or applicable resource management goals, or is otherwise considered inconsequential.

- Less-than-Significant-with-Mitigation. A less-than-significant-with-mitigation effect could be an effect that would be deemed significant, but with the application of mitigation, the effect becomes less-than-significant.

Regardless of significance, which is usually subjectively determined based on substantial evidence (i.e., facts in the record, reasonable assumptions predicated upon facts in the record, expert opinion predicated by facts in the record, or some combination of the above), effects may be beneficial or adverse, acceptable or unacceptable, depending on one's point of view.

8.2 Identification of Preliminary Issues and Project Effects

For the Yuba River Development Project Relicensing, a list of preliminary issues and effects was developed from multiple sources including replies to Licensee's PAD Information Questionnaire (PAD Questionnaire), and comments made at Licensee-sponsored Relicensing Participants meetings. Each of these sources is described below.

8.2.1 PAD Information Questionnaire

Licensee mailed or hand-delivered it's PAD Questionnaire to over 140 separate individuals, agencies and organizations. The PAD Questionnaire requested the party to provide to Licensee: 1) any existing, relevant and reasonably available information regarding the Project and resources potentially affected by the Project in the party's possession; 2) the name of any other party that may have existing, relevant and reasonably available information; 3) a description of any known or potential Project effects; 4) a description of any preliminary issues related to the Relicensing; and 5) a description of any studies the party believes are necessary. The PAD Questionnaire, a list of parties to whom Licensee mailed the PAD Questionnaire, and a list of parties that responded to the PAD Questionnaire are included in Appendix A. Licensee received 13 responses to its PAD Questionnaire.

8.2.2 Issues/Effects Identification Meeting

On January 13, 2010, Licensee and Relicensing Participants developed a preliminary issues/effects list related to the Project. Meeting participants included representatives of United States Department of Agriculture, Forest Service (Forest Service); United States Department of Interior (USDOI), Fish and Wildlife Service (USFWS); USDOI National Parks Service (NPS); State Water Resources Control Board (SWRCB); and California Department of Fish and Game (CDFG). A "blue sky" approach was used in which meeting participants offered potential

issues/effects that were transcribed onto flip charts by Licensee with little discussion other than clarification and to confirm that the issue was captured accurately.

At the meeting, it was clearly understood that the issues/effects list was preliminary, draft and an initial effort. Licensee stated that because an issue/effect was included on the preliminary list, Relicensing Participants should not infer that Licensee concurs that the issue or effect should be addressed in the Relicensing. Licensee clarified that when it reviewed the preliminary issues/effects list, Licensee may conclude that, in Licensee's opinion, one or more of the issues or effects does not result from a Project effect, or is otherwise outside the scope of the Relicensing.

Relicensing Participants requested that Licensee identify in its PAD any issues or effects that Licensee believed were outside the scope of Relicensing, and provide Licensee's reason for this conclusion. Licensee agreed to do so, and provides this information in Section 8.4.

Some Relicensing Participants that attended the January 13, 2010 meeting specifically stated "for the record" that they reserved the right to identify additional issues as the relicensing proceeds. In particular, both the Forest Service and CDFG expressly stated that the issues and effects they put forward at the meeting were based on their preliminary knowledge of the project at that time and that additional Project effects on resources may be identified later in the relicensing process.

8.3 Preliminary Issues/Effects List

The preliminary issues/effects list developed at the January 13, 2010 Relicensing Participants meeting and amended based on responses to the PAD Questionnaire is provided below by major resource area. For ease of reference, Licensee has assigned an alpha-numeric designation to each issue/effect. Licensee has also edited some individual preliminary issues/effects from what was transcribed onto flip charts at the January 13 meeting to be clearer, and reorganized the list to better address issues/effects. On January 22, 2010, Licensee posted the issues/effects list developed at the January 13, 2010, meeting on its Relicensing Website (www.ycwa-relicensing.com), where it can be viewed.

The issues identified below should be considered preliminary and subject to modification during Licensee's continued collaboration with Relicensing Participants, during the Federal Energy Regulatory Commission's (FERC) National Environmental Policy Act (NEPA) scoping process, and during the ongoing Relicensing proceeding.

8.3.1 Geology and Soils

G&S-1: Effect of the Project on channel morphology form and function, including effects from Project diversions and flow into and out of Project reservoirs.

G&S-2: Effect of the Project on connectivity to floodplains, including effects from Project diversions and flow into and out of Project reservoirs.

G&S-3: Effect of the Project on channel conditions, including effects from Project diversions and flow into and out of Project reservoirs.

G&S-4: Effects of the Project on sediment transport, especially through Project reservoirs and diversions.

G&S-5: Effect of the Project on bedload including effects from Project diversions and flow into and out of Project reservoirs.

G&S-6: Effects of the Project on particle size and sediment composition, especially at dam outlets, due to flow releases from Project powerhouses and uncontrolled spills from Project dams, especially at New Bullards Bar Dam.

G&S-7: Effects of tailrace discharge from New Colgate Powerhouse on channel morphology and sediment distribution.

G&S-8: Effects of the Project on large woody debris distribution, including how the Project manages large woody debris.

G&S-9: Effects of the Project on fish spawning gravel.

G&S-10: Effects of the Project on soil compaction, especially in dispersed recreation areas around Project diversion and reservoirs.

G&S-11: Effects of Project access roads, especially as sources of sediment.

G&S-12: Effects of the Project on foothill yellow-legged frog (FYLF) and western pond turtle (WPT) populations and distribution, especially as related to the changes in channel morphology and sediment regimes.

G&S-13: Effects of the Project on local aquifers and wells.

8.3.2 Water Resources

WR-1: Effects of the Project on the natural hydrograph by season in each Project-affected stream reach.

WR-2: Effects of the Project the timing, magnitude, frequency, and duration of peak flows.

WR-3: Effects of the Project on water quality criteria in the Basin Plan, especially the Toxicity Water Quality Objective.

WR-4: Effects of the Project on water supply, including reliability of water deliveries to Yuba River diverters.

WR-5: Effects of the Project on availability of water for resources.

WR-6: Effects of Project recreation on water quality in New Bullards Bar Reservoir.

WR-7: Effects of the Project on dissolved oxygen in New Bullards Bar Reservoir and in United States Army Corp of Engineers' (USACE) Englebright Reservoir.

WR-8: Effects of the Project on the life history of *O. mykiss* (both anadromous and resident) in the Yuba River downstream of USACE's Englebright Dam.

WR-9: Effect of the Project on the growth rate of salmonids (both anadromous and resident) in the Yuba River downstream of USACE's Englebright Dam.

WR-10: Effects of the Project on water temperature, specifically with regards to fish and yield of rice and other agricultural crops in the pre-1970, 1970-1993 and post 1993 periods.

WR-11: Effects of predictive climate change over the next 50 years on resources in connection with existing forecasted effects of the Project, including water temperatures.

WR-12: Effects of Nevada Irrigation District's (NID) Yuba-Bear Hydroelectric Project and Pacific Gas and Electric Company's (PG&E) Drum-Spaulding Project on the Project's ability to meet multiple water resource/uses and benefits.

WR-13: Effects of the Project on water conservation for agricultural and residential users (i.e., What are current water losses in agricultural and residential water supply ditches and what would be the savings in water if the ditches were converted to pipes or Best management Practices (BMP) were put in place for the ditches?).

WR-14: Effects of the Project on different water delivery systems, such as piping versus open ditches.

WR-15: Effect of the Project on flood management.

8.3.3 Aquatic Resources

AR-1: Effects of the Project on aquatic macroinvertebrates, a Forest Service Management Indicator Species, downstream of Project dams and powerhouses.

AR-2: Effect of the Project on special-status aquatic species including California floater and hardhead.

AR-3: Effects of the Project on aquatic species due to Project outages.

AR-4: Effects of the Project on stream health and aquatic biota due to Project peaking flows (below all Project facilities), ramping rates and flow fluctuations.

AR-5: Effects of the Project on fish population abundance, distribution and age classes related to altered flows in streams from operations of Project diversion dams and reservoirs.

AR-6: Effects of the Project on fish passage, especially around Project diversion dams and from Project reservoirs into tributaries to the reservoirs.

AR-7: Effects of the Project on fish due to entrainment into Project intakes.

AR-8: Effects of the Project on fish habitat.

AR-9: Effects of the Project on invasive species, such as bullfrogs, mollusk and aquatic plants.

AR-10: Effects of the Project on availability of large woody debris.

AR-11: Effects of the Project on warmwater fish reproduction along reservoir margins due to water level fluctuations.

AR-12: Effects of the Project on coldwater habitat to protect coldwater species due to the reduction in New Bullards Bar Reservoir as draw down occurs through summer and later months.

AR-13: Effects of the Project on American shad in the Yuba River below USACE's Englebright Dam due to changes in water temperature.

AR-14: Effects of the Project on fishes due to barriers including Our House Diversion Dam, including natural barriers.

AR-15: Effect of the Project on juvenile salmonid rearing habitat, especially in floodplains, for spawning and adult holding.

AR-16: Effects of the Project on hardhead due to flow fluctuation or thermal change.

AR-17: Effects of the Project on WPT populations and habitat in relation to upland habitat conditions, water flow patterns, geomorphic/sediment regimes, riparian vegetation and water temperatures, especially from New Bullards Bar Dam to USACE's Englebright Reservoir.

AR-18: Effects of the Project on fish due to stranding.

AR-19: Effects of the Project on aquatic newt (*T. torosa*).

AR-20: Effects of the Project due to the introduction of non-native fish, especially in reservoirs and adjacent riverine ecosystems.

AR-21: Effect of the Project on fish due to restricted passage at USACE's Englebright Dam, New Bullards Bar Dam and Our House and Log Cabin diversion dams.

AR-22: Effects of the Project on anadromous fish from New Bullards Bar Dam and downstream due to changes in the timing and amount of attraction and migration flows.

AR-23: Effects of the Project on anadromous fish outmigration from New Bullards Bar Reservoir downstream due to changes in the timing and amount of flows.

AR-24: Effects of the Project on amphibian/aquatic reptile habitat at the reservoir and tributary sources upstream of the reservoir and survey to assess occupied sites by species abundance and potential of risk associated with reservoir operation and impoundment.

AR-25: Effects of the Project on wild trout (e.g., effects due to introduction of hatchery fish from Englebright Reservoir during spills).

AR-26: Effects of the Project on fish passage, and potential enhancements for fall-run Chinook salmon.

8.3.4 Wildlife Resources

WI-1: Effects of the Project on special-status wildlife species.

WI-2: Effects of the Project on migratory deer winter range and migratory corridors.

WI-3: Effects of the Project on California black rail and other aquatic-dependent avian species.

WI-4: Effects of the Project on special-status raptors, especially on northern goshawk, osprey, golden eagle and California spotted owl.

WI-5: Effects of the Project on special-status bats.

8.3.5 Botanical Resources

BR-1: Effects of the Project on special-statue botanical species.

BR-2: Effects of the Project on invasive exotic plants.

8.3.6 Riparian, Wetlands and Littoral Habitat

RWL-1: Effects of the Project on wetlands and meadows.

RWL-2: Effects of the Project on riparian habitat.

8.3.7 Threatened, Endangered and Fully Protected Species

T&E-1: Effects of the Project on California red-legged frog (CRLF) habitat and populations in Project reaches and ponds or wetlands within 1 mile of Project facilities and features.

T&E-2: Effects of the Project on CRLF populations due to warmwater fish.

T&E-3: Effects of the Project on spring-run Chinook salmon and steelhead juvenile rearing habitat and shaded riparian and floodplain connectivity, especially related to spawning habitat and adult holding habitat.

T&E-4: Effects of Project facilities and operations on bald eagle.

T&E-5: Effects of the Project on valley elderberry longhorn beetle (VELB).

T&E-6: Effects of the Project on anadromous fish attraction and migration flows due to releases from New Bullards Bar Dam.

T&E-7: Effects of the Project on anadromous fish outmigration flow and timing due to releases from New Bullards Bar Dam.

T&E-8: Effects of the Project on spring-run Chinook salmon and steelhead due to migration barriers.

T&E-9: Effects of the Project on spring-run Chinook salmon, steelhead and North American green sturgeon due to migration barriers at USACE's Englebright Dam, New Bullards Bar Dam, Our House Diversion Dam and Log Cabin Diversion Dam.

8.3.8 Recreational Resources

RR-1: Effects of the Project on angling access/opportunities and boat ramps due to water level fluctuation.

RR-2: American Disabilities Act (ADA) compliance of Project recreation facilities on NFS land.

RR-3: Condition, safety and adequacy of recreation facilities on Forest Service land.

RR-4: Effects of the Project on the diversity of instream recreation opportunities below diversions (wading, swimming, fishing, whitewater).

RR-5: Effects of the Project on whitewater boating opportunities, especially as compared to opportunities that would occur under unimpaired flow conditions.

RR-6: Effects of the Project on the availability of real-time flow data for the public.

RR-7: Effects of the Project on access for recreational use of Project-affected reaches.

8.3.9 Land Use

LU-1: Effects of the Project on the condition and use of roads on Forest Service land for Project access, recreation and operations.

LU-2: Effects of the Project on boat ramp access for firefighting water.

LU-3: Is the Project consistent with the Yuba County General Plan?

LU-4: Effects of Forest Service/YCWA Recreation Plan on the Camptonville community needs (e.g., Is it effective in addressing community needs?).

8.3.10 Socio-economic Resources

SE-1: Effects of the Project use of a single, sole-source concessionaire on business opportunities in the Camptonville area.

SE-2: Effects of the Project on local infrastructure, including law enforcement, fire protection and waste management in the Camptonville area.

8.3.11 Aesthetic Resources

VR-1: Effects of the Project on visual quality on Forest Service land.

8.3.12 Cultural Resources

CR-1: Effects of the Project on archeological sites due to water level and changes (e.g., exposure and inundation).

CR-2: Effects of the Project on historic and cultural use of Project area.

8.3.13 Tribal Resources

TR-1: Effects of the Project on tribal access to historic sites and areas.

TR-2: Effects of the Project on access to botanical/resources traditionally used for ceremonial/herbal purposes by tribes.

TR-2: Effects of the Project on salmon.

8.3.14 Air Quality

No Project effects or issues related to air quality were identified during the January 13, 2010 Relicensing Participants meeting or in responses to the PAD Questionnaire.

8.3.15 Noise

No Project effects or issues related to noise were identified during the January 13, 2010 Relicensing Participants meeting or in responses to the PAD Questionnaire.

8.4 Identified Preliminary Issues/Effects Licensee Believes Are Outside the Scope of the Relicensing

At the January 13, 2010 meeting, Relicensing Participants requested Licensee identify in its PAD any preliminary issues or effects that Licensee believes are outside the scope of relicensing. Those issues and effects, as delineated above, and Licensee's reasoning, are provided below.

8.4.1 G&S-13: Effects of the Project on local aquifers and wells

The Project has little to no ability to significantly affect aquifers and wells, nor is it clear how Licensee would assess any Project effects as compared to other conditions and uses that may affect aquifers and wells. In addition, Licensee cannot conceive at this time of conditions under a new license that would result in changes to baseline conditions of aquifers and wells. For these reasons, Licensee believes that an assessment of Project effect on aquifers and wells is outside the scope of relicensing and would not inform any potential license requirements. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.2 WR-10: Effects of the Project on water temperature, specifically with regards to fish and yield of rice and other agricultural crops in the pre-1970, 1970-1993 and post 1993 periods

Licensee recognizes that the temperature of irrigation water has a potential to aeffect crop production. However, the Project does not include any irrigation facilities or irrigation canals. Therefore, Licensee believes that an assessment of Project effects on water temperatures and resulting effects on agricultural crop production is outside the scope of relicensing. The effects of the Project on fish due to changes in water temperature are addressed in other issues/effects. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.3 WR-11: Effects of predictive climate change over the next 50 years on resources in connection with existing forecasted effects of the Project, including water temperatures

The effect does not concern the Project's effects on a resource, but how a resource affects the Project. Licensee believes it was not the intent of the Integrated Licensing Process regulations to require an assessment of this type of effect. Also, to perform the assessment of this effect that has been requested, one first would have to have an accurate prediction of climate change in the Yuba River watershed over the term of the new license. Licensee believes that such a prediction is not available at this time or in the reasonably foreseeable future. This same issue was addressed in FERC's September 2008 Scoping Document 2 for the Yuba-Bear Hydroelectric Project, Drum-Spaulding Project and Rollins Transmission Line Project relicensings. In that document, FERC stated:

> *"While we recognize that global and regional climate change has potential for changes to the water supply, hydroelectric generation, and the environment, we are concerned that reliable models for predicting climate over the term of the new license at a project-specific level do not exist."*

Licensee believes this conclusion has not changed. For these reasons, Licensee believes the effect is outside the scope of relicensing and Licensee has removed this effect from further consideration in the PAD.

8.4.4 WR-13: Effects of the Project on water conservation for agricultural and residential users (i.e., What are current water losses in agricultural and residential water supply ditches and what would be the savings in water if the ditches were converted to pipes or Best Management Practices (BMP) were put in place for the ditches?)

The Yuba River Development Project does not include agricultural or water supply ditches. Therefore, an assessment of such ditches and their operations is outside the scope of relicensing. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.5 WR-14: Effects of the Project on different water delivery systems, such as piping verses open ditches

The Yuba River Development Project includes four tunnels and a penstock, but no open ditches. Licensee does not propose changing any tunnels to open ditches. Therefore, an assessment of changes to the Project water delivery systems is not needed. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.6 WR-15: Effect of the Project on flood management

On January 3, 1978, YCWA and the USACE entered into a "Field Working Agreement" to address flood control operation of the New Bullards Bar Dam and Reservoir. The agreement references a May 9, 1966 agreement between USACE and YCWA to provide 170,000 acre-feet of flood space in New Bullards Bar Reservoir. The Field Working Agreement recognizes that YCWA, as owner and operator of the New Bullards Bar Reservoir, is responsible for normal operations and structural safety of the Project, and that USACE is responsible for the flood control operation plan of the dam and reservoir under Section 7 of the Flood Control Act of 1944. That law requires the Secretary of the Army to "*prescribe regulations for the use of storage allocated for flood control or navigation at all reservoirs constructed wholly or in part with Federal funds provided on the basis of such purposes, and the operation of any such project shall be in accordance with such regulations*."[2] The term of the Field Working Agreement is indefinite. For these reasons, Licensee believes that the effects of the Project on flood control are outside of relicensing, but will be assessed as necessary by USACE if flood control is potentially affected under new license requirements. Licensee has removed this issue/effect from further consideration in the PAD.

[2] 33 U.S.C. § 709. The Corps provided more than $12 million in funding for construction of the Project, in exchange for the flood control that New Bullards Bar Reservoir would provide.

8.4.7 AR-21: Effect of the Project on fish due to restricted passage at USACE's Englebright Dam, New Bullards Bar Dam and Our House and Log Cabin diversion dams

YCWA believes that an assessment of the effects of Englebright Dam on anadromous fish passage is outside of the scope of Relicensing based on the facts listed here:

- USACE's Englebright Dam was constructed in 1941, almost 20 years prior to the formation of YCWA and more than 25 years before the Yuba River Development Project.
- USACE's Englebright Dam was built by the California Debris Commission. YCWA had not been formed at that time, and Yuba County did not contribute to or participate in the construction of Englebright Dam.
- Since its construction in 1941, Englebright Dam has completely blocked anadromous fish passage to upstream habitat. The dam does not now, and never has, included low-level outlets or fish ladders that would permit volitional upstream fish passage, nor has the USACE ever had in place a program, such as capture and haul, to pass anadromous fish upstream of Englebright Dam in a non-volitional manner.
- USACE's Englebright Dam is not part of the Yuba River Development Project facilities listed in the existing FERC license, or otherwise under FERC's jurisdiction. YCWA does not own, operate or maintain any portion of Englebright Dam.
- None of the Yuba River Development Project facilities are integral parts of Englebright Dam: YCWA's Narrows 2 Power Conduit and Narrows 2 Powerhouse, the lowermost Project facilities, are not connected or attached to Englebright Dam in any way, nor do they intersect (e.g., pass through) the dam in any way (i.e., the Narrows 2 Power Tunnel goes through the hillside, not through Englebright Dam).
- Operations of the Narrows 2 Powerhouse, the only Project facility downstream of Englebright Dam, does not block upstream passage of anadromous fish. Fish can and do pass upstream of the powerhouse tailrace to the face of Englebright Dam.
- Operations of Project facilities do not block anadromous fish upstream or downstream passage. Because Englebright Dam has blocked the upstream movement of anadromous fish, these fish have not occurred in the Yuba River basin upstream of Englebright Dam since 1941, over 25 years before the Project was constructed, and 70 years before Project Relicensing began.

For these reasons and for the purpose of continued consideration in the PAD, Issue/Effect AR-21 has been modified to read: "*Effect of the Project on fish due to restricted passage at New Bullards Bar Dam and Our House and Log Cabin diversion dams.*"

8.4.8 AR-22: Effects of the Project on anadromous fish from New Bullards Bar Dam and downstream due to changes in the timing and amount of attraction and migration flows

Anadromous fish do not occur in the North Yuba River or the Yuba River upstream of USACE's Englebright Dam. Therefore, an assessment of Project effects on anadromous fish in these river sections is not needed.

For these reasons and for the purpose of continued consideration in the PAD, Issue/Effect AR-22 has been modified to read: *"Effects of the Project on anadromous fish from USACE's Englebright Dam downstream due to changes in the timing and amount of attraction and migration flows."*

8.4.9 AR-23: Effects of the Project on anadromous fish outmigration from New Bullards Bar Reservoir downstream due to changes in the timing and amount of flows

As described above, anadromous fish do not occur in the North Yuba River or the Yuba River upstream of USACE's Englebright Dam. Therefore, an assessment of Project effects on anadromous fish in these river sections is not needed.

For the purpose of continued consideration in the PAD, Issue/Effect AR-23 has been modified to read: *"Effects of the Project on anadromous fish outmigration from USACE's Englebright Dam downstream due to changes in the timing and amount of flows."*

8.4.10 AR-24: Effects of the Project on amphibian/aquatic reptile habitat at the reservoir and tributary sources upstream of the reservoir and survey to assess occupied sites by species abundance and potential of risk associated with reservoir operation and impoundment

The Project reservoir (New Bullards Bar) and impoundments (Our House and Log Cabin) do not affect habitat in the tributaries upstream of the Project. Therefore, identifying and quantifying habitat upstream of the Project's reservoir and impoundments is not necessary.

For these reasons and for the purpose of continued consideration in the PAD, Issue/Effect AR-24 has been modified to read: "Identify/quantify suitable amphibian/aquatic reptile habitat at the reservoirs and survey to assess occupied sites by species abundance and potential of risk associated with reservoir operation and impoundment."

8.4.11 AR-25: Effects of the Project on wild trout (e.g., effects due to introduction of hatchery fish from Englebright Reservoir during spills)

Licensee does not stock hatchery fish in USACE's Englebright Reservoir as part of the Yuba River Development Project, and USACE's Englebright Dam spilled each year prior to operation of the Project. Therefore, an assessment of the effects of hatchery fish on wild trout downstream of the USACE's Englebright Dam is outside the scope of this Relicensing. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.12 AR-26: Effect of the Project on fish passage, and potential enhancements for fall-run Chinook salmon

Issue/Effect AR-26 focuses on assessing and enhancing passage for fall-run Chinook salmon. As described above, anadromous fish do not occur in the Yuba River upstream of USACE's Englebright Dam, and the dam is not part of the Project. Therefore, this issue/effect is outside the scope of this Relicensing. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.13 T&E-6: Effect of the Project on anadromous fish attraction and migration flows due to releases from New Bullards Bar Dam

As described above, anadromous fish do not occur in the North Yuba River or the Yuba River upstream of USACE's Englebright Dam. Therefore, an assessment of Project effects on anadromous fish attraction and migration flows in these river sections is not needed.

For these reasons and for the purpose of continued consideration in the PAD, Issue/Effect T&E-6 has been modified to read: *"Effects of the Project on anadromous fish attraction and migration flows due to releases from Narrows 2 Powerhouse and bypass."*

8.4.14 T&E-7: Effect of the Project on anadromous fish outmigration flow and timing due to releases from New Bullards Bar Dam

As described above, anadromous fish do not occur in the North Yuba River or the Yuba River upstream of USACE's Englebright Dam. Therefore, an assessment of Project effects on anadromous fish outmigration flow and timing in these river sections is not needed.

For these reasons and for the purpose of continued consideration in the PAD, Issue/Effect T&E-7 has been modified to read: *"Effects of the Project on anadromous fish outmigration flow and timing due to releases from Narrows 2 Powerhouse and bypass."*

8.4.15 T&E-8: Effect of the Project on spring-run Chinook salmon and steelhead due to migration barriers

As described above, anadromous fish do not occur in the North Yuba River or the Yuba River upstream of USACE's Englebright Dam, and that dam is not a Project facility. Therefore, an assessment of Project effects on barriers to spring-run Chinook salmon migration is outside the scope of this relicensing. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.16 T&E-9: Effect of the Project on spring-run Chinook salmon, steelhead and North American green sturgeon due to migration barriers at USACE's Englebright Dam, New Bullards Bar Dam, Our House Diversion Dam and Log Cabin Diversion Dam

As described above, anadromous fish do not occur in the North Yuba River or the Yuba River upstream of USACE's Englebright Dam and the Englebright Dam is not a Project facility. Therefore, an assessment of Project effects on barriers to anadromous fish migration is outside the scope of this relicensing. Licensee has removed this issue/effect from further consideration in the PAD.

8.4.17 LU-4: Effect of Forest Service/YCWA Recreation Plan on the Camptonville community needs (e.g., is it effective in addressing community needs?)

The Forest Service/YCWA Recreation Plan is not part of the Project, nor is the Project responsible for meeting the needs of the Camptonville community. However, outside of Relicensing, Licensee is committed to working with Camptonville as a sister public agency. Licensee has removed this issue/effect from further consideration in the PAD.

8.3 List of Attachments

None.