3 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3.1 Introduction

Section 3 of this EIR describes the environmental resources that may be affected by the Proposed Project (Sections 3.2 to 3.23), including potential cumulative effects (Section 3.24). Additionally, Section 3 provides a summary of hydrologic information (Section 3.1.6 *Summary of Available Hydrology Information for the Proposed Project*) that is referenced by multiple environmental resource areas as part of the impact analyses.

Within Section 3, the environmental resource areas are organized as follows:

- 3.2 Water Quality
- 3.3 Aquatic Resources
- 3.4 Phytoplankton and Periphyton
- 3.5 Terrestrial Resources
- 3.6 Flood Hydrology
- 3.7 Groundwater
- 3.8 Water Supply/Water Rights
- 3.9 Air Quality
- 3.10 Greenhouse Gas Emissions
- 3.11 Geology, Soils, and Mineral Resources
- 3.12 Historical Resources and Tribal Cultural Resources
- 3.13 Paleontologic Resources
- 3.14 Land Use and Planning
- 3.15 Agriculture and Forestry Resources
- 3.16 Population and Housing
- 3.17 Public Services
- 3.18 Utilities and Service Systems
- 3.19 Aesthetics
- 3.20 Recreation
- 3.21 Hazards and Hazardous Materials
- 3.22 Transportation and Traffic
- 3.23 Noise
- 3.24 Cumulative Effects

Each environmental resource area section includes five parts: (1) Area of Analysis; (2) Environmental Setting; (3) Significance Criteria; (4) Impact Analysis Approach; and (5) Potential Impacts and Mitigation. A general description of each part is provided below.

3.1.1 Area of Analysis

The Area of Analysis describes the physical limits or boundaries of the Proposed Project's effects on the different environmental resource areas. Since the Proposed Project may affect each of the resources differently, the geographic scope for each resource area varies and is described in a separate Area of Analysis in each environmental resource area section.

3.1.2 Environmental Setting

The analysis of potential impacts requires a description of a project's current environmental setting as a basis for comparison against which to evaluate project impacts. Pursuant to the CEQA Guidelines Section 15125 (a), the environmental setting for comparison is conditions at the time of issuance of the Notice of Preparation. This EIR describes the relevant environmental setting characteristics of the Proposed Project for each resource area.

3.1.3 Significance Criteria

CEQA Guidelines Section 15382 defines a significant effect as a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project…" In setting criteria for evaluating significance, this EIR relies on scientific and factual data, analysis, consideration of relevant local, regional and state standards, and the questions presented in Appendix G of the CEQA Guidelines.

3.1.4 Impact Analysis Approach

This EIR analyzes the potential direct and reasonably foreseeable indirect effects on the environment associated with the implementation of the Proposed Project (see CEQA Guidelines Section 15358).

The impact analysis approach section describes how the analysis of potential direct and indirect effects associated with the Proposed Project was undertaken for each environmental resource area, including summaries of the data and models used in the impact analysis.

3.1.5 Potential Impacts and Mitigation

The potential impacts of the Proposed Project are evaluated by resource area. Each potential impact is introduced by a **numbered, bolded** potential impact title, followed by an analysis of how the resource area under consideration would be affected by the impact. Where appropriate, the analysis separates short-term and long-term impacts. Where the analysis indicates that the unmitigated potential impact could be significant, the EIR identifies feasible mitigation measures, if they exist. Under CEQA, mitigation can include avoiding, minimizing, rectifying, or compensating for the potential impact, or reducing or eliminating the potential impact over time (CEQA Guidelines Section 15370).

Further, CEQA Guidelines Section 15126.4 (a)(2) states that mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. Because CEQA requires analysis of potential impacts and mitigation measures that are outside the State Water Board's regulatory purview for the Proposed Project, this EIR discusses and analyzes the effects of some mitigation measures that would not be enforceable by the State Water Board. It is the State Water Board's understanding that the KRRC may agree to implement certain mitigation measures through good neighbor agreements or other legally enforceable mechanisms (Appendix B: *Definite Plan – Section 1*). Therefore, this EIR discloses and discusses the potential effects of such mitigation, even though a legally-binding enforcement mechanism is not in place at this time.

Mitigation measures are introduced by a **numbered, bolded** mitigation measure title, followed by a description of the measure, the first time that each measure is invoked in the document. Subsequent references to a particular mitigation measure point back to the original description in this EIR.

Each resource area impact analysis concludes with a significance determination of:

- No significant impact – potential effect either would not cause any adverse alterations to existing conditions or would cause alterations but they would not result in a significant adverse effect.
- No significant impact with mitigation – significant or potentially significant adverse effect would be eliminated or reduced to an effect that is not significant with implementation of an identified mitigation measure(s).
- Significant and unavoidable – effect would be adverse and substantial, or potentially substantial, and cannot be mitigated to less than significant.
- Beneficial – effect on the resource is positive.

The cumulative effects analysis concludes with a significance determination of:

- Beneficial cumulative effects – combined effects are beneficial.
- No significant cumulative impact – combined impact of the Proposed Project and other projects would not be significant and adverse (and would also not be beneficial).
- Not cumulatively considerable – combined impact of the Proposed Project and other projects would be significant and adverse, but the incremental contribution of the Proposed Project would not be cumulatively considerable.
- Not cumulatively considerable with mitigation – combined impact of the Proposed Project and other projects would be significant and adverse, and the incremental contribution of the Proposed Project requires mitigation to reduce it to less than cumulatively considerable.
- Cumulatively considerable – combined impact of the Proposed Project and other projects would be significant and adverse, and the incremental contribution of the Proposed Project is cumulatively considerable (and there is no feasible mitigation).

3.1.6 Summary of Available Hydrology Information for the Proposed Project

The 2012 KHSA EIS/EIR evaluated the potential environmental impacts of removing J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate dams. As part of the analyses, Klamath River flows were modeled for periods before, during, and after dam removal in a number of technical studies referenced in the 2012 KHSA EIS/EIR[18], as well as in the environmental document itself. Flow assumptions for the model largely were based on the forecasted operations of the USBR's Klamath Irrigation Project, located in the Upper Klamath Basin. In the 2012 KHSA EIS/EIR, implementation of the Klamath Basin Restoration Agreement (KBRA) (see Section 2.6.3 *Klamath Settlement Agreements*) was considered to be a "connected action" to dam removal. Thus, the model used

[18] Key technical studies are the Klamath River total maximum daily loads (TMDL) Final Staff Report (North Coast Regional Board 2010) and the Hydrology, Hydraulics, and Sediment Transport Studies for the Secretary's Determination on Klamath River Dam Removal and Basin Restoration (USBR 2012a).

NMFS 2010 Biological Opinion (2010 BiOp) flows for analysis of the scenario where dams would remain in place, and it modified 2010 BiOp flows based on KBRA operations criteria for the Klamath Irrigation Project ("KBRA Flows") for analysis of the scenario where dams would be removed (USBR and CDFG 2012). The KBRA expired on December 31, 2015 due to a lack of Congressional authorization. Consequently, this EIR considers the potential effects of dam removal using Klamath River flows as defined by the current operational standard, the NMFS and USFWS 2013 Joint Biological Opinion for the Klamath Irrigation Project (2013 BiOp Flows) (NMFS and USFWS 2013).

The estimated Klamath River flows under the 2013 BiOp (2013 BiOp Flows) were compared to the previously modeled flows, which included KBRA operations criteria (KBRA Flows), to determine whether 2013 BiOp Flows were sufficiently similar that hydrologic model outputs developed for the 2012 KHSA EIS/EIR would still be applicable. The comparison references and builds upon an analysis conducted in the 2012 KHSA EIS/EIR Supplemental Information Report (SIR) (USBR 2016) for the same purpose. USBR (2016) concluded that the relatively small flow differences between 2013 BiOp and KBRA Flows would not substantively alter the conclusions in the 2012 KHSA EIS/EIR for those environmental resources that would be affected by flows (i.e., water quality, aquatic resources, flood risk, recreation). While the specific timing of flows changed between the 2013 BiOp and KBRA flows, the range of 2013 BiOp Flows is within the range of modeled KBRA Flows, so the previously modeled results still represent the range of conditions under 2013 BiOp Flows (USBR 2016).

Additionally, the sediment transport model developed for the 2012 KHSA EIS/EIR would produce nearly identical suspended sediment concentrations during the main drawdown period between January and May if it was run using 2013 BiOp Flows, because the 2013 BiOp and KBRA Flows are nearly identical for all water year types (generally within a few percentage points) (USBR 2016). Additional analysis presented below assesses the magnitude, timing, and distribution of flows across multiple water years to verify that the range of flows modeled under KBRA Flows are still appropriate for analyses in this EIR.

USBR's consultation with NMFS and USFWS on the 2013 BiOp Flows for the Klamath Irrigation Project is currently underway and it is expected to be completed by August of 2019. The schedule for the biological opinion has been accelerated at the direction of the President, pursuant to a Presidential Memorandum issued on October 19, 2018. At this time, estimates of flows that will be required under the future Klamath Irrigation Project biological opinion are still speculative, so they are not included in hydrologic modeling. However, the flow-related analyses in this EIR acknowledge the re-initiation of consultation on the 2013 BiOp Flows by considering the 2017 court-ordered flushing and emergency dilution flow requirements downstream of Iron Gate Dam as interim flow requirements until formal consultation is completed. The 2017 court-ordered flushing flows are not modeled as part of existing conditions hydrology for the Proposed Project, because they went into effect in February 2017 after the December 2016 Notice of Preparation was filed. These flows are discussed in several locations in this EIR, including, but not limited to, Section 3.24 *Cumulative Effects*, Section 4.2 *No Project Alternative*, and Section 4.4 *Continued Operations with Fish Passage Alternative*, where the aforementioned two alternatives assume that Iron Gate Dam would remain in place.

As appropriate, this EIR assumes that the 2013 BiOp flows in combination with the court-ordered flushing flows are the best estimate for future biological opinion flows.

3.1.6.1 Klamath River Flows under the Klamath Irrigation Project's 2013 BiOp Flows

Under the 2013 BiOp Flows, current and future (2013−2023) operations of the Klamath Irrigation Project in the Upper Klamath Basin include irrigation deliveries consistent with historic operations (subject to water availability), while maintaining Upper Klamath Lake and Klamath River hydrologic conditions that avoid jeopardizing the continued existence of listed species and adverse modification of designated critical habitat (NMFS and USFWS 2013). Operations under the 2013 BiOp Flows include two distinct, real-time water management approaches during the fall/winter (October through February) and spring/summer (March through September) periods. The fall/winter and spring/summer water management approaches prioritize different goals during the two periods, but they are designed to meet the ecological needs of the Upper Klamath Lake ESA-listed Lost River Sucker and Shortnose Sucker and ESA-listed coho salmon downstream of Iron Gate Dam, while also maintaining full irrigation deliveries in accordance with existing contracts, contingent upon available water supplies. Minimum flows downstream of Iron Gate Dam under the 2013 BiOp Flows are presented in Table 3.1-1.

Table 3.1-1. Minimum Klamath River Discharge below Iron Gate Dam under the 2013 BiOp Flows.

Month	Iron Gate Dam Average Daily Minimum Target Flows (cfs)
January	950
February	950
March	1,000
April	1,325
May	1,175
June	1,025
July	900
August	900
September	1,000
October	1,000
November	1,000
December	950

Source: NMFS and USFWS 2013

3.1.6.2 Comparison of Klamath River Flows under 2013 BiOp Flows and KBRA Operations Criteria

In the 2012 KHSA EIS/EIR, the projected Klamath River flows were modeled using the Water Resources Integrated Modeling System (WRIMS) coupled with a RiverWare-based model called the Klamath Dam Removal Model (KDRM) (USBR 2012a, 2016). The coupled model was used to analyze the Klamath River conditions using either the 2010 BiOp Flows or the KBRA Flows based on the KBRA operations criteria for the Klamath Irrigation Project. The 2010 BiOp and the KBRA Flows are generally very similar, particularly from January through May when flows are effectively the same between the two flow scenarios (USBR 2012a). The estimated Klamath River flows under the 2013 BiOp Flows were modeled using an updated and modified WRIMS model (USBR 2012b). The WRIMS model used to evaluate the 2013 BiOp Flows is also known as the Klamath Basin Planning Model (KBPM) and the modeled flow results are sometimes referred to as the "2013 BO" in USBR documents (USBR 2012b, 2016).

Modeled Klamath River flows under the 2013 BiOp and the KBRA operations criteria are nearly identical when examined on an average annual basis, with flows downstream of Iron Gate Dam averaging approximately 1,920 cfs and 1,932 cfs, respectively. The average annual 2013 BiOp and KBRA Flows downstream of Keno Dam are also nearly identical, averaging approximately 1,413 cfs and 1,434 cfs, respectively. While the modeled flows upstream and downstream of the Hydroelectric Reach are within a few percentage points on an average annual basis, some average monthly flows differ between the 2013 BiOp and KBRA flows (Tables 3.1-2 and 3.1-3). The most prominent difference is that the 2013 BiOp Flows when compared to KBRA Flows generally require higher flows in the fall months (October through December) and allow lower flows in the summer months (June through August). Downstream of Iron Gate Dam, fall 2013 BiOp Flows average approximately 200 cfs more than fall KBRA Flows; summer 2013 BiOp Flows average approximately 100 cfs less than summer KBRA Flows (Tables 3.1-2 and 3.1-3). The seasonal differences in 2013 BiOp Flows versus KBRA Flows reflect the joint goal of NMFS and USFWS to protect ESA-listed fish that rely on a shared but finite aquatic resource (most notably, the two endangered sucker species in Upper Klamath Lake and threatened coho salmon in the Klamath River below Iron Gate Dam) (NMFS and USFWS 2013).

Table 3.1-2. Average Monthly Flow at Iron Gate Dam for 2013 Joint Biological Opinion and KBRA Operations Criteria.

Month	Average monthly flow downstream of Iron Gate Dam		Differences (2013 BiOp vs. KBRA Flows)	
	KBRA Operations Criteria	2013 BiOp Operations Criteria		
	(cfs)	(cfs)	(cfs)	(percent)
Oct	1050	1263	213	20 percent
Nov	1149	1387	239	21 percent
Dec	1546	1744	197	13 percent
Jan	2061	2131	70	3 percent
Feb	2628	2545	-83	-3 percent
Mar	3390	3381	-9	0 percent
Apr	3340	3119	-222	-7 percent
May	2431	2523	92	4 percent
Jun	1910	1777	-132	-7 percent
Jul	1272	1096	-177	-14 percent
Aug	1090	1056	-34	-3 percent
Sep	1174	1167	-7	-1 percent

Source: Modified from USBR (2016).

Table 3.1-3. Average Monthly Flow at Keno Dam for 2013 Joint Biological Opinion and KBRA Operations Criteria.

Month	Average monthly flow downstream of Keno Dam		Differences (2013 BiOp vs. KBRA Flows)	
	KBRA Operations Criteria	2013 BiOp Operations Criteria		
	(cfs)	(cfs)	(cfs)	(percent)
Oct	664	885	220	33 percent
Nov	743	980	237	32 percent
Dec	1023	1245	222	22 percent
Jan	1455	1510	55	4 percent
Feb	1925	1850	-74	-4 percent
Mar	2644	2639	-6	0 percent
Apr	2661	2448	-213	-8 percent
May	1858	1960	102	5 percent
Jun	1489	1354	-135	-9 percent
Jul	929	770	-159	-17 percent
Aug	758	748	-10	-1 percent
Sep	803	822	19	2 percent

Source: Modified from USBR (2016).

Figures 3.1-1 and 3.1-2 present monthly flow exceedances for modeled 2013 BiOp and KBRA Flows downstream of Iron Gate Dam and Keno Dam, respectively. In the figure legends, modeled 2013 BiOp Flows are labeled as “2013 BO”, while modeled KBRA Flows are labeled as “KDR KBRA.” Monthly flow exceedance plots are particularly useful for comparing differences between modeled 2013 BiOp and KBRA Flows for different water year types (i.e., wet, median, and dry year types). Here, a wet year type is defined as the highest 10 percent of flows, such that wet year flows are characterized by those at the 10 percent exceedance point in Figure 3.1-1 and 3.1-2 (i.e., typical wet year flows would be exceeded 10 percent of the time). Similarly, a median year is characterized by flows at the 50 percent exceedance point, while a dry year is characterized by flows at the 90 percent exceedance point. While Table 3.1-2 and Table 3.1-3 summarize modeled *average* monthly flows under the 2013 BiOp and KBRA operations criteria, the monthly flow exceedance plots in Figure 3.1-1 and Figure 3.1-2 present the range of possible flows by month under the two operations scenarios.

The monthly flow exceedance plots generally indicate either a temporal shift in the distribution of flows expected within a given month or a shift in the water year type distribution of. In either case, the overall range of 2013 BiOp and KBRA Flows is similar between the two curves (Figures 3.1-1 and 3.1-2). A temporal shift in the distribution of flows expected within a given month is indicated by comparing modeled 2013 BiOp and KBRA Flows across different months. For example, the first panel in Figure 3.1-1 shows that flows in the Klamath River downstream of Iron Gate Dam in October under the 2013 BiOp Flows would be 150 to 400 cfs greater than under the KBRA Flows, regardless of whether it is a wet year (i.e., 10 percent exceedance), a median year (i.e., 50 percent exceedance), or a dry year (i.e., 90 percent exceedance). In October, the modeled 2013 BiOp Flows at Iron Gate Dam range from slightly greater than 1,600 cfs to approximately 1,000 cfs, which is different from the range of modeled KBRA Flows in October, but very similar to the range of modeled KBRA Flows in September. The KBRA Flow exceedance curve for the month of September ranges from slightly less than 1,600 cfs to slightly less than 1,000 cfs with a similar shape as the October 2013 BiOp Flows, such that the October 2013 BiOp Flows represent a one-month temporal shift of the September KBRA Flows. Similar shifts in the monthly distribution of flows also occur in July and August downstream of Iron Gate Dam where the range and shape of the July 2013 BiOp Flows are within approximately 100 cfs or less of the August KBRA Flows (Figure 3.1-1).

The shift in the distribution of flows by water year type is characterized by whether the flow within individual months is higher during some water year types and lower during other water year types when comparing between 2013 BiOp and KBRA Flows. Variations between the modeled 2013 BiOp and KBRA Flows during different water year types is evaluated by comparing the flows at the 10 percent exceedance for wet years, 50 percent exceedance for median years, and 90 percent exceedance for dry years. At both Iron Gate and Keno dams from July through September, the modeled 2013 BiOp Flows are less than modeled KBRA Flows during wet years (e.g., 10 percent exceedance), while the 2013 BiOp Flows are greater than KBRA Flows during dry years (e.g., 90 percent exceedance) (Figure 3.1-1 and 3.1-2). The lower left panel of Figure 3.1-1 highlights this trend during July at Iron Gate Dam where the wet year 2013 BiOp Flow is approximately 700 cfs less than the KBRA Flow, the median year 2013 BiOp Flow is approximately 100 cfs less than the KBRA Flow, and the dry year 2013 BiOp Flow is approximately 200 cfs greater than the KBRA Flow. At both Iron Gate and Keno dams, June is a unique month where there is both a monthly temporal shift in the range of flows (i.e., KBRA Flows in May bracket the range of 2013 BiOp Flows in June) and a water year type shift (i.e., 2013 BiOp Flows are greater than KBRA Flows in wet years, less in median years, and approximately the same in dry years).

Despite the aforementioned differences between the modeled 2013 BiOp and KBRA Flows, the KBRA Flows capture the range of possible 2013 BiOp Flows in the Klamath River at Iron Gate and Keno dams (Figure 3.1-3). At Iron Gate Dam, a comparison of the maximum flow exceedances under the 2013 BiOp and KBRA operations criteria in Figure 3.1-3 shows the maximum range of 2013 BiOp Flows in the Klamath River is represented by KBRA Flows, because maximum monthly KBRA Flows are greater than the maximum monthly 2013 BiOp Flows for flow exceedances of 10 percent or less (representing wet water years). Additionally, at Iron Gate Dam, the minimum monthly KBRA Flows capture the range of the minimum monthly 2013 BiOp Flows as shown by how flow exceedances of 90 percent or more (representing dry water years) for KBRA Flows are less than flow exceedances of 90 percent or more for 2013 BiOp Flows (Figure 3.1-3). Flow exceedances where the minimum 2013 BiOp Flows are less than minimum KBRA Flows (i.e., minimum flow exceedances 50 percent or less) or the maximum 2013 BiOp Flows are greater than the maximum KBRA Flows (i.e., maximum flow exceedances 40 to 15 percent) are due to shifts in the distribution of flows by water year type as previously discussed. All flow exceedances where the minimum or maximum 2013 BiOp Flows are different than the minimum or maximum KBRA Flows are still contained within the flow exceedances less than 10 percent or greater than 90 percent for KBRA Flows, so the range of 2013 BiOp Flows are still bracketed by the range of KBRA Flows.

It is reasonable to assume the outputs of hydrologic models using the KBRA Flows represent the entire range of results of hydrologic models using the 2013 BiOp Flows because the entire range of modeled 2013 BiOp Flows at Iron Gate and Keno dams is captured by modeled KBRA Flows. Farther downstream of Iron Gate Dam, Klamath River flow estimates are only affected by assumptions regarding tributary inflows (accretions) that are not affected by operations of the Klamath Irrigation Project[19]. While variations may exist in timing between 2013 BiOp and KBRA Flows, the range of model results would be similar if the 2013 BiOp Flows were used in the hydrologic model rather than the KBRA Flows, since the KBRA Flows bracket the 2013 BiOp Flows.

In summary, the hydrologic model outputs previously developed using the KBRA Flows for the 2012 KHSA EIS/EIR are sufficient to estimate conditions under 2013 BiOp Flows. As explained above, the primary differences are temporal shifts in the flow distribution within some months and changes in expected flows in different water year types. The previous KBRA Flows bracket the range of 2013 BiOp Flows, supporting the conclusion that the prior modeling using the KBRA Flows sufficiently represents the range of potential effects of Klamath River flows under the 2013 BiOp Flows.

Consequently, this EIR considers the potential effects of dam removal under the Proposed Project by applying existing hydrology information presented in the 2012 KHSA EIS/EIR, as well as in the numerous technical studies that were foundational to that effort.

[19] PacifiCorp coordinates operations with the USBR and operates the Lower Klamath Project in compliance with the 2013 BiOp for the Klamath Irrigation Project. The 2013 BiOp does not require independent releases from the Lower Klamath Project to supply the minimum flow requirements downstream of Iron Gate Dam.

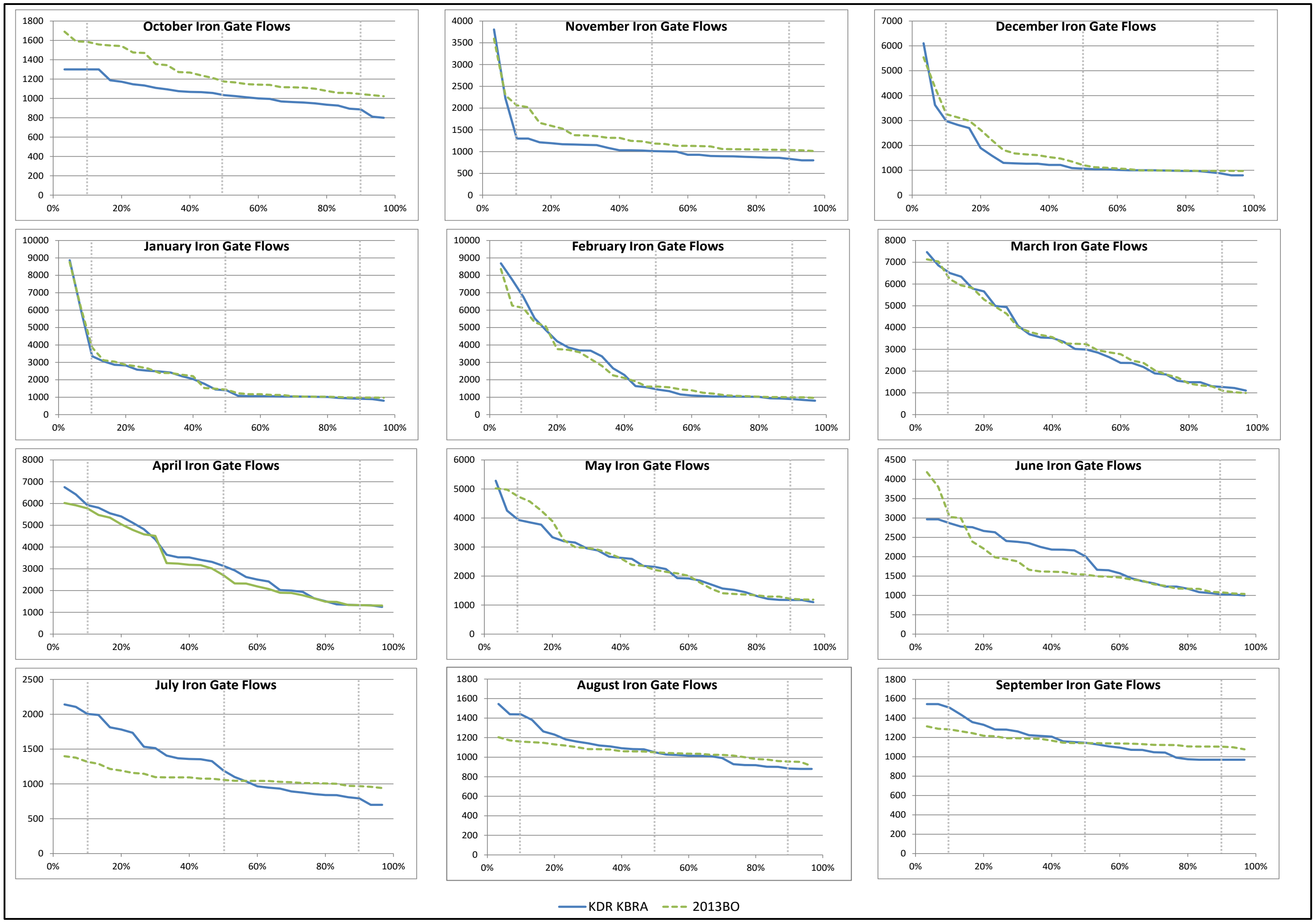

Figure 3.1-1. Monthly Flow Exceedance Curves at Iron Gate Dam for the KBRA Flows (KDR KBRA) and 2013 Joint Biological Opinion Flows (2013 BO). Source: USBR 2016. Note: The scale on the y-axis (flow in cfs) varies significantly between months. Vertical grey dotted lines indicate the 10 percent (wet year), 50 percent (median year), and 90 percent (dry year) flow exceedances.

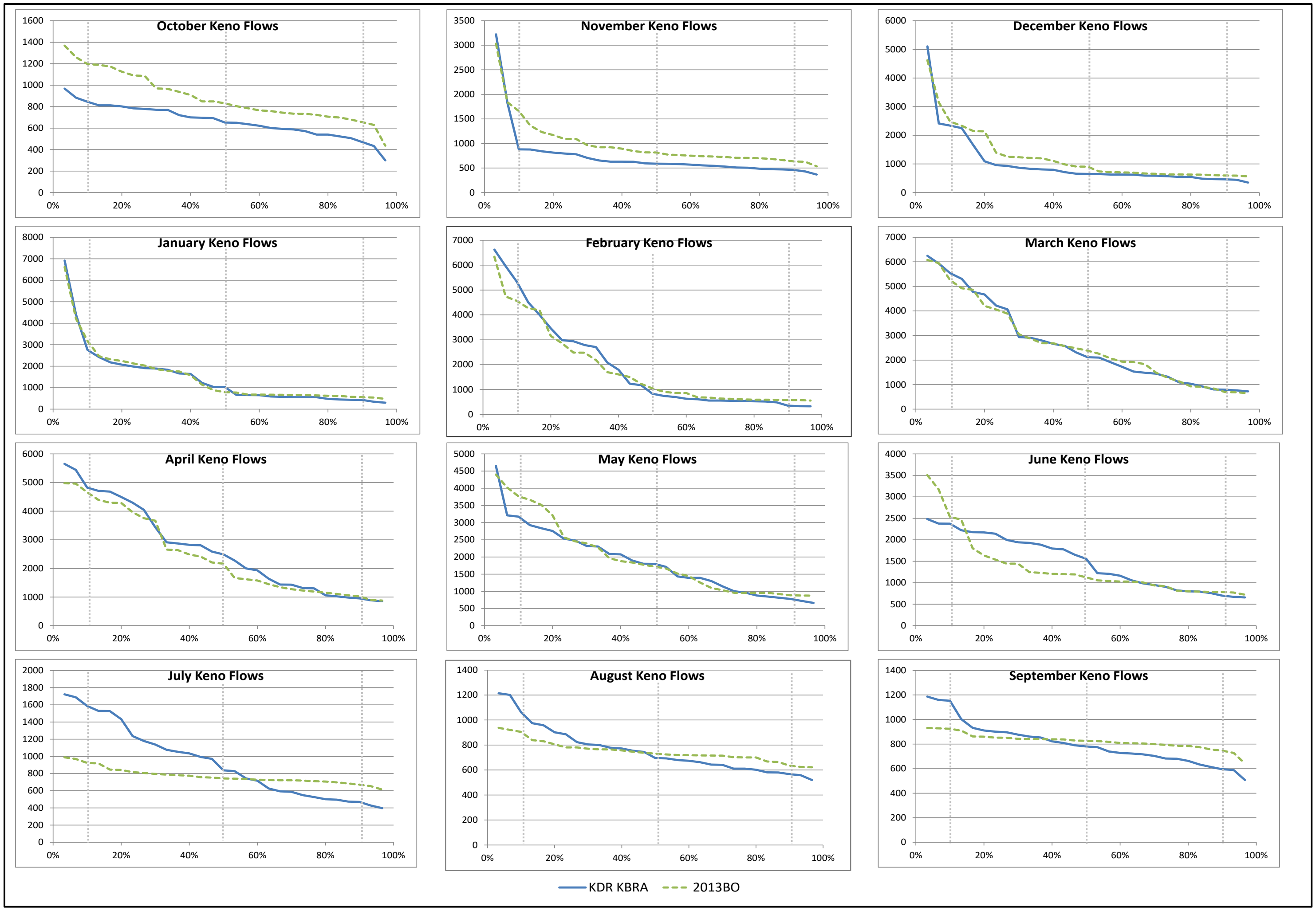

Figure 3.1-2. Monthly Flow Exceedance Curves at Keno Dam for the KBRA Flows (KDR KBRA) and 2013 Joint Biological Opinion Flows (2013 BO). Source: USBR 2016. Note: The scale on the y-axis (flow in cfs) varies significantly between months. Vertical grey dotted lines indicate the 10 percent (wet year), 50 percent (median year), and 90 percent (dry year) flow exceedances.

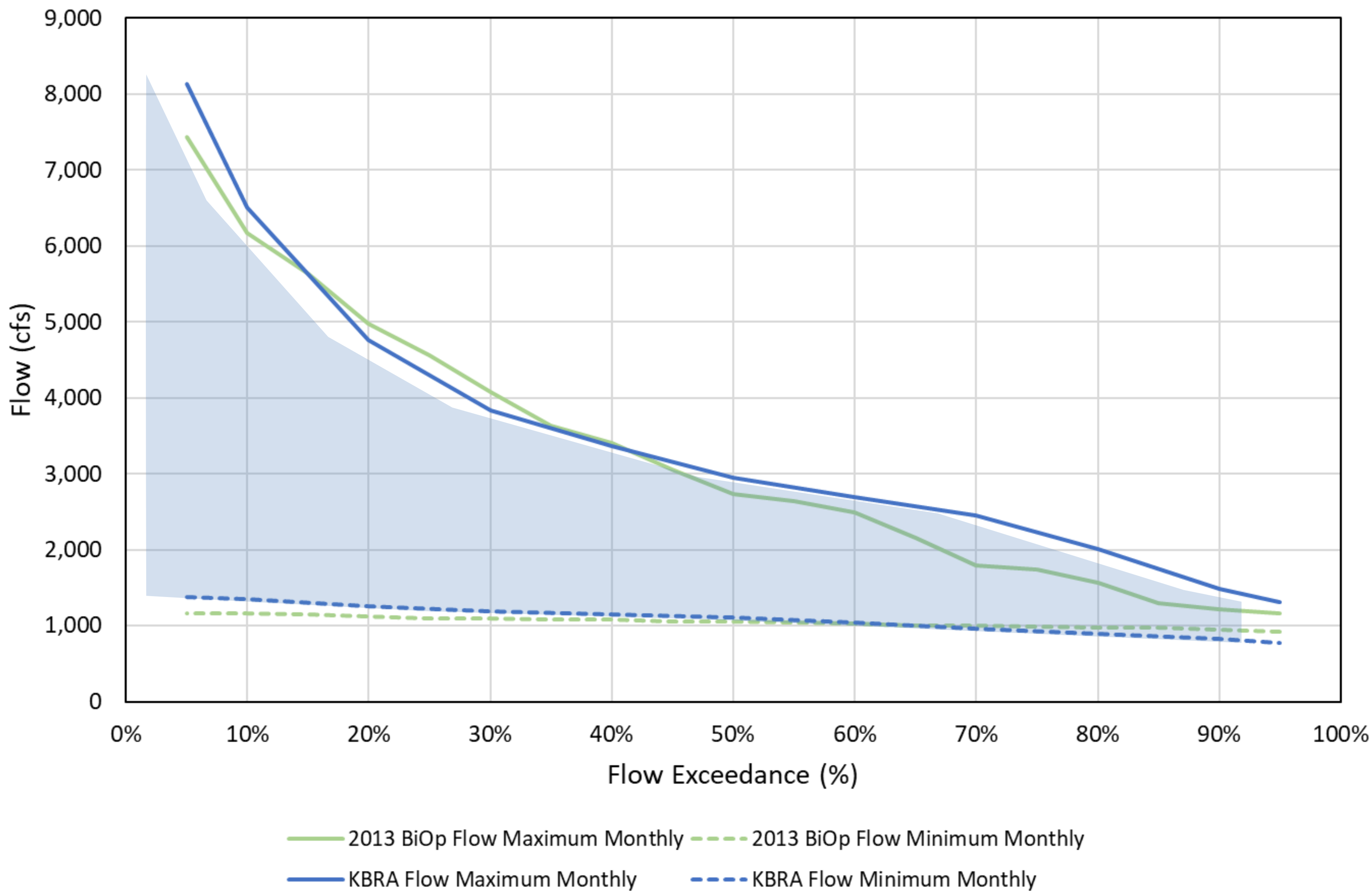

Figure 3.1-3. Comparison of the Maximum and Minimum Monthly Flow Exceedance Curves for the 2013 BiOp and KBRA Flows Between the 5 Percent and 95 Percent Exceedance Flows. Data source: USBR 2012a and USBR 2012b.

3.1.7 References

NMFS and USFWS (National Marine Fisheries Service and U.S. Fish and Wildlife Service). 2013. Biological opinions on the effects of proposed Klamath Project operations from May 31, 2013, through March 31, 2023, on five federally listed threatened and endangered species. Prepared by NMFS, Southwest Region, Northern California Office; and USFWS, Pacific Southwest Region, Klamath Falls Fish and Wildlife Office.

North Coast Regional Board. 2010. Klamath River total maximum daily loads (TMDLs) addressing temperature, dissolved oxygen, nutrient, and microcystin impairments in California, the proposed site-specific dissolved oxygen objectives for the Klamath River in California, and the Klamath River and Lost River implementation plans. Final Staff Report. North Coast Regional Water Quality Control Board, Santa Rosa, California. http://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/klamath_river [Accessed June 2017].

USBR (U.S. Bureau of Reclamation). 2012a. Hydrology, Hydraulics and Sediment Transport Studies for the Secretary's Determination on Klamath River Dam Removal and Basin Restoration, Technical Report No. SRH-2011-02. Prepared for Mid-Pacific Region, Bureau of Reclamation, Technical Service Center, Denver, Colorado. Report dated April 2011, updated January 2012. http://klamathrestoration.gov/keep-me-informed/secretarial-determination/role-of-science/secretarial-determination-studies

USBR. 2012b. Final biological assessment. The effects of the Proposed Action to operate the Klamath Project from April 1, 2013 through March 31, 2023 on federally-listed threatened and endangered species. Prepared by USBR, Mid-Pacific Region, Klamath Basin Area Office, Klamath Falls, Oregon. https://www.usbr.gov/mp/kbao/programs/docs/2012-kpo-final-ba.pdf

USBR. 2016. Klamath Facilities Removal Environmental Impact Statement/Environmental Impact Report. Supplemental Information Report. March 2016.

USBR and CDFG (California Department of Fish and Game). 2012. Klamath Facilities Removal Final Environmental Impact Statement/Environmental Impact Report. Volume 1. December 2012. https://klamathrestoration.gov/sites/klamathrestoration.gov/files/Additonal_Files/VolumeI_FEIS.pdf

U.S. District Court. 2017. Hoopa Valley Tribe v. U.S. Bureau of Reclamation et al. and Klamath Water Users Association et al. Case No. 3:16-cv-04294-WHO. Order modifying February 8, 2017 injunction. U.S. District Court for the Northern District of California, San Francisco Division.

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