

5 OTHER REQUIRED CEQA DISCUSSION AND CONSIDERATION OF SOCIAL AND ECONOMIC FACTORS

CEQA also requires consideration and discussion of several other enumerated factors, including irreversible and irretrievable commitment of resources, growth inducing impacts, and areas of controversy. Additionally, CEQA provides guidance regarding how to assess potential economic and social changes resulting from a project within the context of determining physical effects on the environment. Each of these topics is considered below.

5.1 Irreversible and Irretrievable Commitment of Resources

CEQA requires a discussion of any significant effect on the environment that would be irreversible if the project were implemented or would result in an irretrievable commitment of resources (CEQA Guidelines Section 15126(c)).

Dam removal, deconstruction, construction, and restoration activities under the Proposed Project and the other dam removal alternatives would involve the consumption of nonrenewable natural resources. These nonrenewable natural resources would consist of fuels necessary to operate equipment used during deconstruction activities. The Proposed Project would include removal of four dams and all power generation facilities. This would result in the generation of waste from the concrete, mechanical, and electrical items at the dams and power facilities. Petroleum-fueled transportation equipment would be used to haul these materials to disposal sites in the project area. In addition to fuels used in transportation, the use of the disposal sites would constitute an irreversible and irretrievable commitment of resources. Concrete and earthen materials would be used as backfill to bury dam structures, backfill the excavated tailrace channels, and restore the river to its pre-dam appearance. These materials would be permanently committed during implementation of the Proposed Project and the other dam removal alternatives. Construction activities necessary for implementation of the Proposed Project would require the use of nonrenewable natural resources including petroleum for fuels and other construction materials.

5.2 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires an environmental document to:

“Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...”

Direct growth-inducing impacts generally stem from the construction of new housing, businesses, or infrastructure. Indirect growth inducement could result if a project establishes substantial new permanent employment opportunities or if it would remove obstacles hindering population growth, such as the expansion or the provision of urban services and infrastructure in an undeveloped area. Under CEQA, growth inducement may not necessarily be considered detrimental, beneficial, or of insignificant consequence. Induced growth is considered a significant impact only if it directly

(or indirectly) affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment.

The Proposed Project would not result in the construction of new housing either directly or indirectly. The Proposed Project would not provide new water, wastewater, sewer, electricity, or natural gas infrastructure or facilities and would not require or create any new public services such as schools, public services, or public roads that could support increased growth in the Klamath Basin.

The Proposed Project and the other dam removal alternatives would likely bring in construction workers to the project vicinity during the construction work period. Any Project-related employment required for the alternatives would be temporary and would be needed only during an approximate 17-month period encompassing demolition activities associated with Copco No. 1, Copco No. 2, and Iron Gate dam developments. Construction worker housing would be temporary during the construction period. See Section 3.16.5 [*Population and Housing*] *Potential Impacts and Mitigation* for a detailed discussion of this topic. Implementation of the Proposed Project would not generate any permanent employment opportunities that would attract a substantial number of people to the region or create the need for substantial amounts of new housing or services.

Restoration of the Klamath River fisheries is one of the main objectives of the Proposed Project. If the fish populations were to rebound back to pre-dam levels, this could result in an increase in recreational fishing in the region (see Section 3.20.5 [*Recreation*] *Potential Impacts and Mitigation* for a detailed discussion of this topic) and possibly an increase in overall tourism. Such a change in visitor numbers would likely occur slowly as fish populations rebound, but would be unlikely to result in permanent population growth.

As discussed below in Section 5.4.1.1 *Commercial Fishing*, benefits to the commercial ocean fishery and associated fleets that rely on that fishery could lead to increased regional employment, with ports along the Northern California and Southern Oregon coastlines likely to experience the highest increases. USBR (2012) estimated that under a dam removal scenario, up to 453 full time, part time, or temporary additional jobs would be created in the commercial fishing industry across the five management areas stretching along approximately 600 miles of coastline, from the San Francisco ocean commercial fishing management area to the Central Oregon ocean commercial fishing management area. Given that economic benefits related to increases in the commercial ocean fishery would come in the form of a rebound from historic lows in recent years to levels that previously existed, and estimated job creation would be spread across a region stretching from the San Francisco Bay Area to central Oregon, the increases should not reasonably necessitate new or additional permanent housing, utilities or services in the region. For additional comparative purposes, the Klamath-CA Management Zone, which includes Humboldt and Del Norte Counties, is expected to see an increase of 19 jobs due to the Proposed Project (USBR 2012), or approximately 1 percent of the population growth for that region that is projected to occur between 2020 and 2030 (1,921 people) (California Department of Transportation 2017, Humboldt County 2017).

The Proposed Project and the other dam removal alternatives would not result in new permanent housing, utilities, services, permanent employment, or other growth inducement in the region, nor would the Proposed Project result in any impacts that

would require the provision of new permanent housing, utilities, services, or permanent employment. Therefore, the Proposed Project and the other dam removal alternatives would not create growth-inducing impacts.

5.3 Areas of Controversy and Issues Raised by Agencies and the Public

CEQA Guidelines Section 15123 requires disclosure of the controversial project issues known to the Lead Agency, including those raised by agencies and the public. Table ES-2 in the Executive Summary of this EIR presents a summary of controversies raised by agencies and the public during the scoping period and other forums. These are opinions and issues raised by agencies and members of the public and do not necessarily represent the position of the State Water Board.

5.4 Social and Economic Factors Under CEQA

Pursuant to CEQA, lead agencies must analyze potentially significant adverse impacts of a project to the physical environment. The term 'environment' means "*the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance... The "environment" includes both natural and man-made conditions*" (CEQA Guidelines Section 15360). Under CEQA, potential effects from implementing a project, such as reductions in property values, loss of property tax revenues, and increases in energy costs, that are solely social or economic in nature, would not constitute an effect (i.e., an impact) to the physical environment.

CEQA Guidelines Section 15131 states the following regarding consideration of economic or social factors as part of an EIR:

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

(b) Economic or social effects of a project may be used to determine the significance of physical changes caused by the project... Where an EIR uses economic or social effects to determine that a physical change is significant, the EIR shall explain the reason for determining that the effect is significant.

(c) Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project.

5.4.1 Consideration of Economic Information for Resources Potentially Affected by Dam Removal

Economic studies completed in 2011–2012 by USBR (2012) and DOI (Real Estate Sub-team 2012) for removal of the four dams and alternatives considered likely costs and benefits for a number of topics, including the following:

- Hydroelectric energy costs
- Irrigated agriculture
- Commercial fishing
- In-river recreational fishing
- Ocean sport fishing
- Refuge recreation
- Nonuse values
- Real estate

The USBR/DOI economic studies determined direct dam removal costs from deconstruction, construction, operations, maintenance, and replacement, as well as forgone costs to hydropower, reservoir recreation, and whitewater recreation. Benefits were identified for irrigated agriculture, commercial fishing, ocean sport fishing, in-river sport fishing, tribal fisheries and cultural values, refuge recreation, nonuse values (e.g., desire to preserve ecosystems, altruism towards plants and animals), and real estate. Benefits to tribal fisheries and cultural values, the wildlife viewing component of refuge recreation, and real estate were not quantified in economic terms in USBR (2012). Potential economic impacts on real estate were discussed in a separate report (Real Estate Sub Team 2012).

Of the topics from the 2012 studies, several of the analyses are not relevant to the Proposed Project (i.e., irrigated agriculture, refuge recreation, nonuse values) because the prior studies related to implementation of the Klamath Basin Restoration Agreement (KBRA) (see Section 2.6.3 *Klamath Settlement Agreements*). Under the 2012 analysis, implementation of the KBRA was a “connected action” to dam removal and inclusion of the KBRA is an inherent assumption of the prior economic analyses. Other topics (i.e., hydroelectric energy costs [see Section 3.10 *Greenhouse Gas Emissions*], in-river recreational fishing [see Section 3.20 *Recreation*]) are analyzed in this EIR by focusing on physical changes that would occur as a result of the Proposed Project and the alternatives, and, consistent with CEQA Guidelines Section 15131(b), the results of the previous economic analyses are not required to determine if a physical change to the environment would be significant.

The prior economic studies of potential commercial fishing effects from dam removal is relevant to this EIR, since Proposed Project Objective 2 (see Section 2.1 *Project Objectives*) focuses on advancing the long-term restoration of the natural fish populations in the Klamath Basin, including commercial fisheries. The results of the USBR/DOI prior economic studies for commercial fishing are summarized below in Section 5.4.1.1 *Commercial Fishing*. Although this EIR focuses on the analysis of potential impacts to in-river recreational fishing under the Proposed Project (see Section 3.20 *Recreation*), the prior economic analysis of ocean sport fishing is summarized below in Section 5.4.1.2 *Ocean Sport Fishing* to provide broader context for possible increased recreational fishing opportunities given dam removal. Lastly, as noted in

Table ES-2, the State Water Board received several comments during the NOP public scoping process regarding the potential for regional economic impacts of the Proposed Project, including comments from the Pacific Coast Federation of Fishermen's associations and the Institute for Fisheries Resources, estimating economic benefits from restored fisheries, and comments from the Siskiyou County Assessor-Recorder regarding reductions in property values and the loss of property tax revenues. The results of the DOI's prior economic studies for real estate and the concerns from the Siskiyou County Assessor-Recorder are summarized below in Section 5.4.1.3 *Real Estate and Property Taxes*.

5.4.1.1 Commercial Fishing

The commercial ocean salmon fleets that rely on the affected ocean commercial fishery consist largely of small, independently owned and operated trollers²³² that land (i.e., catch) salmon south of Cape Falcon, Oregon. The fishery is a mixed stock fishery, where the commercial harvest includes salmon stocks from different rivers, including Southern Oregon/Northern California Coast (SONCC) coho and Klamath River fall- and spring-run Chinook salmon (see also Section 3.3.2.1 *Aquatic Species – Anadromous Salmonids*). The Pacific Fisheries Management Council (PFMC) manages the salmon fishery on the basis of "weak stock management," whereby regulations are designed to protect weaker stocks, even if that means foregoing some harvest of the healthier stocks that comingle with the weaker ones in the ocean commercial fishery. For purposes of this discussion the primary implications of weak stock management as it relates to SONCC coho and Klamath Chinook salmon are as follows (NMFS 2012).

- PFMC-managed ocean fisheries south of Cape Falcon are subject to consultation standards for two Chinook and four coho salmon Evolutionarily Significant Units (ESUs) listed under the Endangered Species Act (ESA), including the SONCC coho ESU (listed in 1997). To meet consultation standards for the coho ESUs, the PFMC has banned coho retention (i.e., catching and keeping or retaining individuals) in the troll fishery in Klamath Management Zone in California (KMZ-CA) and in Oregon (KMZ-OR) since 1990 and in all other management areas south of Cape Falcon since 1993 (with the exception of limited fisheries in 2007 and 2009 in Central and Northern Oregon).
- The major salmon stocks targeted by ocean fisheries south of Cape Falcon are Sacramento River fall Chinook and Klamath River fall Chinook salmon. For most of the past three decades, Klamath River fall Chinook has been more constraining on the troll fishery than Sacramento River fall Chinook. Because Sacramento River fall Chinook and Klamath River fall Chinook intermix in the troll harvest, regulations devised to limit harvest of Klamath River fall Chinook necessarily constrain Sacramento River fall Chinook harvest as well to levels below what would have been allowed in the absence of the Klamath River fall Chinook constraint.

Coastal ocean fishing-dependent communities have suffered severe economic impacts due to decreases in fish numbers and related harvest limitations. USBR (2012) identified that the removal of four dams and facilities would result in notable positive regional economic benefits to commercial troll fishing of SONCC coho and Klamath

²³² Trolling is a method of fishing where one or more fishing lines, baited with lures or bait fish, are drawn by a vessel through the ocean surface waters (or at a certain depth) to catch individual fish.

River fall- and spring-run Chinook salmon. The ocean migratory range of these species is mostly south of Cape Falcon, Oregon, and includes the Northern Oregon, Central Oregon, Klamath Management Zone (KMZ-OR and KMZ-CA), Fort Bragg, San Francisco, and Monterey management areas. The KMZ-CA (Oregon-California state line to Horse Mountain) falls within the Area of Analysis for aquatic resources in this EIR (Figure 3.3-1). Within these areas, USBR (2012) considered the effects on the SONCC coho ESU qualitatively through the increase in viability of the Klamath River coho populations. USBR (2012) reported that the removal of the dams and associated facilities would likely increase the viability of the SONCC coho ESU in the Klamath Basin, but would be unlikely to lead to de-listing of the ESU as a whole and thus they considered that coho retention would likely continue to be prohibited. Following dam removal, harvests would be larger because of increased abundance of salmon, which would, in turn, increase commercial fishing revenues.

The USBR (2012) quantitative economic analysis relied heavily on the Evaluation of Dam Removal and Restoration of Anadromy (EDRRA) model, using the average annual Klamath Chinook troll harvest for the period 2001 to 2005 (35,778 fish) as a measure of the existing condition, where this average was also applied by NMFS (2012) to assess the effects on fall- and spring-run Chinook salmon over fifty years. The EDRRA model accounted for the requirement to reserve 50 percent of the Klamath-Trinity River salmon for the Yurok and Hoopa Valley Tribes, where this requirement has been in effect since 1993 (DOI 1993), with the remaining 50 percent allocated to the in-river recreational fishery (7.5 percent), ocean sport fishery (8.5 percent), and ocean commercial fishery (34 percent) (NMFS 2012). The EDRRA model allowed for area-specific estimates of troll harvest and net revenue (gross revenue minus trip expenses) for various alternatives in the Klamath Basin, including a “No Project Alternative” and the removal of the four dams and facilities. In addition to the EDRRA model analysis of Chinook escapement and harvest, the following considerations were part of USBR’s (2012) economic evaluation, based on information from Hamilton et al. (2011), Lindley and Davis (2011), and Goodman et al. (2011):

- Partial or full dam and facilities removal would provide habitat (coldwater tributaries and thermal refugia) favorable to spring-run Chinook salmon;
- Viable populations of spring-run Chinook salmon in the Upper Klamath Basin would improve the sustainability of the ESU;
- Removal of the four dams and associated facilities offers greater potential for increased harvest and escapement of Klamath Chinook salmon than current conditions, and the potential for positive benefits is greater for the fall-run than for spring-run Chinook salmon.

Primarily using the EDRRA model, and dependent on the management area, dam and facilities removal was estimated by USBR (2012) to provide an additional 11 to 218 commercial fishing industry jobs within the five management areas, an increase of labor income between \$0.06 million to \$2.56 million, and an economic output of \$0.13 million to \$6.6 million (all 42 to 43 percent increases) for commercial fishing compared with the status quo (see Table V-4 in NMFS 2012). The average annual increase in net revenue for all areas modeled with removal of the dams and associated facilities would be \$7.296 million (43 percent increase), and ocean commercial fishery benefits for 2012 to 2061 were estimated to be \$134.5 million (discounted to 2012 value). The KMZ-CA portion of this annual net revenue benefit was estimated to be \$267,131 (2012 dollars).

Overall, the prior economic studies concluded that commercial troll fishery harvests of SONCC coho and Klamath River fall- and spring-run Chinook salmon would increase over existing conditions due to an increased abundance of salmon resulting from dam removal. For the reasons discussed in this EIR in Section 3.3.5 *Aquatic Resource Impacts*, the KRRC's Proposed Project would be beneficial for populations of fall-run Chinook salmon (Potential Impact 3.3-7), spring-run Chinook salmon (Potential Impact 3.3-8), and coho salmon (Potential Impact 3.3-9). Although some aspects of the KRRC's Proposed Project are different from the dam removal scenarios analyzed in the USBR/DOI economic analyses, the primary assumptions regarding the effects of dam removal on coho and Chinook salmon have remained the same, such that the prior economic indication of the benefits of dam removal to commercial fisheries also informs consideration in this EIR that dam removal would advance the long-term restoration of natural fish populations in the Klamath Basin, including having a significant beneficial effect on commercial fisheries and an associated significant beneficial economic impact on the coastal commercial fishing industry.

5.4.1.2 Ocean Sport Fishing

In addition to providing in-river recreational fishing opportunities, salmon support an ocean sport fishery. Based on prior economic studies, sport fishing of the SONCC coho ESU and the Klamath River fall- and spring-run Chinook salmon could economically benefit from the removal of the four dams and associated facilities. Although there would be a substantial economic benefit to the SONCC coho ESU, USBR (2012) determined that it would be unlikely to lead to de-listing from 'threatened' under the ESA. Using the EDRRA model (described for commercial fisheries above), the average combined annual net economic value of the ocean recreational Chinook salmon harvest (all stocks) attributable to Klamath Chinook salmon was modeled to increase from \$6.415 million under the "No Project Alternative" to \$9.159 million following the removal of the four dams and associated facilities (43 percent increase). With the removal of the four dams and associated facilities, this would equate to an increase in the net economic value for the period 2012 to 2061 (discounted to present value) of \$50.5 million in excess of the "No Project Alternative." Potential for increases in the harvest of spring- and fall-run Chinook salmon were also identified, with timing of migrations meaning that an increase in fall-run Chinook salmon abundance would be more likely to be advantageous to the ocean recreational fishery (USBR 2012). Overall, the prior economic studies concluded that ocean sport fishing of SONCC coho and Klamath River fall- and spring-run Chinook salmon would increase over existing conditions due to an increased abundance of salmon resulting from dam removal. This finding is generally consistent with the discussion in this EIR in Section 3.20.5 *[Recreation] Potential Impacts and Mitigation* that the KRRC's Proposed Project would benefit in-river recreational fishing opportunities in the long term (Potential Impact 3.20-6), although the aforementioned projected economic effects on ocean sport fishing are not required to support the significance determination for in-river recreational fishing.

5.4.1.3 Real Estate and Property Taxes

Removal of the four dams and their reservoirs could affect real estate values of parcels surrounding Copco No. 1 and Iron Gate reservoirs, and parcels adjacent to the Klamath River downstream of Iron Gate Dam. In prior studies, the outcome of the regional economic real estate analysis was complex indicating that there would be both positive and negative local value changes as a result of dam removal. Dam removal represented

only one factor driving the value changes, while local circumstances and ongoing economic trends also had a major influence on predicted values (USBR 2012, Real Estate Sub-team 2012). USBR (2012) qualitatively assessed dam removal based on net economic benefits associated with various resources, and found that removal of the four dams and facilities could result in short-term declines in real estate values, which would be partially offset as the barren landscape is revegetated. USBR (2012) indicated that for some parcels that are currently adjacent to the reservoirs, loss of reservoir frontage may have a permanent adverse effect on their values. For other parcels downstream of Iron Gate Dam, USBR (2012) indicated that improvements of water quality could lead to increased real estate values in the long term. Additional details regarding the USBR (2012) and Real Estate Sub-team (2012) studies are provided below, along with a discussion of Siskiyou County Assessor-Recorder scoping comments on the Lower Klamath Project, as applicable.

The Siskiyou County Assessor-Recorder provided comments during the Lower Klamath Project scoping period (see Appendix A) expressing their view that the prior assessment on property values and tax revenues under a dam removal scenario was deficient. In their comment letter, the County Assessor-Recorder provided their assessment that PacifiCorp's assets (total \$162.6 million) would be greatly reduced (by \$32.5 million in value) by removal of the dams and associated infrastructure, resulting in a loss of approximately \$370,000 per year in taxes for Siskiyou County, in addition to financial effects on the Hornbrook Elementary School District. While the assumptions used to arrive at the numbers in the USBR real estate reports are explained in the text of these reports, both viewpoints suggest that the County would lose some tax revenue from the removal of the dams.

The Siskiyou County Assessor-Recorder expressed concerns that while the USBR (2012) appraisal considered nearly 1,500 Potentially Impacted Parcels (PIPs) as part of their analysis, they determined that the number of parcels that could be impacted was only 700 Impacted Parcels (IPs). The County Assessor-Recorder also expressed their concern that the approach by USBR (2012) understates the reduction in appraised value and that structural and site improvements, the largest portion of a property's value, were excluded from the appraisals.

The Real Estate Sub-team (2012) Report provided the below reasoning for determining the numbers of PIPs and IPs:

“Based on the field inspection, it was determined that those parcels on the near side of the ridgeline were determined to have potential impacts and therefore were included in the parcel list. Those parcels on the far side (backside of the ridgeline) had limited to no views (no lake views), limited access to the reservoirs, and appeared to be larger parcels. It was concluded that these parcels would not be significantly impacted by the dam removals (any influence could not be reliably measured); therefore they were not included on the PIP list.”

The Real Estate Sub-team (2012) Report also stated that the purpose of the study was *“...to determine the impacts to the value of the real property of those parcels that align and/or are influenced by the reservoirs that have formed behind the three identified dams. This study is from a macro perspective, to wit, it is designed to look at the financial impacts, in the aggregate, it is not an analysis of an impact to any given parcel or property. It was determined that the primary value influences or enhancements to*

parcels attributable to the reservoirs include water-frontage and reservoir views. Since these value influences or enhancements are directly attributable to the land component of the real property interest and not to the improvement component it was determined that it would be unnecessary to evaluate the combined house/lot interest.”

Further, the Real Estate Sub-team (2012) Report stated the following:

“No building improvements are included in the analysis although approximately 12 percent of the parcels on the impacted parcel list, according to the assessor, have improvements.”

As reported in Real Estate Sub-team (2012), Figure 3.14-3 indicates the number of vacant properties (88 percent of the PIPs) that have not been developed since the surrounding subdivisions were recorded, noting that many of the lots are not ideal for building on and instead are used by owners for camping, and that the remoteness of location, limited access and high utility connection costs were also factored into the analysis. The remaining 12 percent “have land use indicating development (land is improved based on assessed value)”. The Real Estate Sub Team (2012) identified 668 parcels that were likely to be negatively affected (i.e., de-valued) as a result of dam removal, and differentiated these parcels into the following three categories:

- Parcels with a view of Iron Gate Reservoir
- Parcels with a partial view of Copco Reservoir
- Parcels with Copco Reservoir Frontage/Access

Table 5.4-1 differentiates the 668 parcels by type of use, of which 127 parcels are used by single-family residences. Table 5.4-2 indicates that less than one-third of the single-family homes in the area are occupied by primary residents.

Table 5.4-1. Land Use Breakdown.

Land Use	No. of Impacted Parcels
Vacant Commercial	2
Commercial	5
Rural (20-acre minimum)	3
Vacant Rural Land (20-acre minimum)	13
Single Family Residence	127
Vacant Residential Land	518
Total Parcels	668

Source: Real Estate Sub-team 2012

Table 5.4-2. Single-family Homes on Copco No. 1 and Iron Gate Reservoirs.

	Single Family Residences (SRFs)	SRFs Serving as Primary Residences	Percent Primary Residents
Partial View of Copco Reservoir	40	11	28 percent
Partial View of Iron Gate Reservoir	13	5	38 percent
Copco Reservoir Frontage/Access	74	23	31 percent
Total	127	39	31 percent

With regard to concerns of diminishing property value as a result of the Proposed Project, confirmation of the property value effect is difficult because many variables, (including market conditions, number of distressed sales, buyer resistance) can affect the sale price of a residence (Bender and Rosenthal 2011). In the appraisal process, the Real Estate Sub-team (2012) looked at comparable units which had sold in a similar area of the development. The actual property value effect on housing units cannot be known until the first unit is sold after implementation of the Proposed Project, should this project occur. However, as described below, the Real Estate Sub Team (2012) Report notes that the effect of the Proposed Project on property values would not necessarily only be negative, but may be mixed.

Further, the amount of property tax that municipalities, school districts, and fire districts receive from the State fluctuates over time due to a number of factors in addition to property values. Some of the most significant factors that affect local revenue-raising include (ILG 2016):

- The allocation of local property tax among a county, and cities, special districts and school districts within each county is controlled by the Legislature.
- Property taxes may not be increased except with a two-thirds vote to fund a general obligation bond.
- Voter approval is required prior to enacting, increasing or extending any type of local tax.
- Assessments to pay for public facilities that benefit real property require property owner approval.

The Siskiyou County Assessor-Recorder scoping comments also expressed their view that the prior studies ignored the perception that with removal of the dams, property values for residents downstream of Iron Gate Dam would drop because people believe that they will be subject to additional flooding as a result of the removal of the dams. The County asserted in their comment letter that "*Perception is reality when it comes to property values*". The Real Estate Sub Team (2012) Report notes that dam removal would reduce or eliminate many of the effects of poor water quality in the river (e.g., extensive algae mats, odors and algal toxins), which could increase values for downstream properties located adjacent to the river, and that more robust runs of anadromous fish could also increase property value. The potential effects of the Proposed Project on flood risk, water quality, and fisheries, are robustly considered in this EIR by analyzing those specific resource topics in Section 3.6 *Flood Hydrology*, Section 3.2 *Water Quality*, and Section 3.3 *Aquatic Resources*.

Under CEQA, potential effects from implementing a project, such as reductions in property values, loss of property tax revenues, and increases in energy costs, that are solely social or economic in nature, would not constitute an effect (i.e., an impact) to the physical environment and are not further analyzed in this EIR. While Siskiyou County currently receives tax revenues from PacifiCorp for hydroelectric power generation at the Lower Klamath Project, it would be expected that these revenues would cease. This would result in a lowering of County tax revenues for operation of County government.

Under the Proposed Project, if Parcel B lands were operated as income-producing wildlife management areas after being transferred to the State then California Fish and Game Code section 1504 would apply. Subdivision (a) of section 1504 states:

When income is derived directly from real property acquired and operated by the State as wildlife management areas, and regardless of whether income is derived from property acquired after October 1, 1949, the department shall pay annually to the county in which the property is located an amount equal to the county taxes levied upon the property at the time title to the property was transferred to the State. The department shall also pay the assessments levied upon the property by any irrigation, drainage, or reclamation district.

5.4.2 Consistency Under CEQA With Respect to Consideration of Economic or Social Factors

According to Section 15131(a), socioeconomic effects themselves are not required to be discussed under CEQA, but rather discussion should be focused on any physical changes that would occur as a result of such effects. If the resulting physical changes are reasonably foreseeable and significant, then the conclusion that there would be an impact is supported; otherwise it is speculative. Additionally, under Section 15131(b), economic or social effects may be used as a rationale to determine if any physical change to the environment is significant. The prior economic studies conducted by USBR and DOI for removal of the four dams and alternatives did not identify reasonably foreseeable physical impacts that could occur as a result of anticipated economic effects due to dam removal, nor did the 2012 KHSA EIS/EIR that relied upon those studies. Additionally, during scoping the public did not raise any substantial concerns that the potential economic or social changes resulting from the Proposed Project would, by themselves, result in significant adverse physical changes to the environment separate from any impacts already identified by the analyses. Based on subsequent review of the prior economic studies for preparation of this EIR (see Section 5.4.1 *Prior Economic Studies for the Klamath Basin Dam Removal*), there would be economic benefits to commercial fisheries that could lead to physical changes to the environment. While increased commercial fish catch could impact the ocean environment near the Klamath River mouth and result in the need for additional infrastructure onshore, because the potential environmental effects associated with a long-term increase in commercial harvests are speculative, and would be subject to local or other regulations, they are not considered further.

Additionally, the concerns and issues raised by the public during the NOP scoping process (Section 5.3 *Controversies and Issues Raised by Agencies and the Public*) do not provide substantial evidence that potential economic changes or social changes resulting from the Proposed Project would, by themselves, result in significant adverse physical changes to the environment separate from any impacts already identified by the analyses. Where the potential for socioeconomic effects has been raised, the effects have themselves been speculative, and while these remain speculative, so would the potential for any resulting physical impacts to the environment.

Having considered CEQA Guidelines Sections 15131(a) and (b), reasonably foreseeable physical environmental effects of the Proposed Project and alternatives (e.g., transformation of reservoirs into a free-flowing river, downstream transport of reservoir sediment deposits, alterations in the 100-year floodplain, changes in seasonal water temperatures in the Klamath River) have been rigorously assessed in this EIR using significance criteria that directly reflect the characteristics of the associated environmental resource being analyzed. Further, a number of potential environmental effects of the Proposed Project and alternatives that could have related socioeconomic

effects (e.g., unplanned population growth, displacement of existing people or housing necessitating the construction of replacement housing, changes in connectivity between areas of a community, conversion of agricultural or forest lands) also have been rigorously assessed in this EIR using significance criteria that directly reflect the characteristics of the associated environmental resource being analyzed, such that a separate social or economic analysis is not required, consistent with Section 15131(b).

According to Section 15131(c), consideration of appropriate mitigation measures and/or alternatives to a project should include an assessment of whether there are any socioeconomic effects that would render the proposed measures or alternatives infeasible, such that they would not avoid significant adverse physical changes to the environment. Consideration of potential economic impacts of Lower Klamath Project mitigation measures and alternatives to the Proposed Project was undertaken throughout EIR preparation. For example, the physical removal of reservoir bottom sediments prior to drawdown (i.e., dredging) was deemed to be infeasible, in part due to the high cost of this approach (Lynch 2011) and thus cannot serve as mitigation for short-term increases in suspended sediment concentrations due to dam removal. Section 4 *Alternatives* also presents a discussion of the selection of feasible alternatives that includes consideration of the cost of implementing project alternatives.

Note that a number of impacts have been identified as significant and unavoidable under the Proposed Project, because mitigation is infeasible due to preemption of the Federal Power Act over state authority (see Section 2.8 *Intended Uses of the EIR*) rather than for socioeconomic reasons.

In summary, this EIR is consistent with CEQA Guidelines Section 15131 regarding consideration of economic or social factors associated with a project. The use of potential economic or social effects of the Proposed Project to determine the significance of physical changes caused by the project is unnecessary given that the significance criteria used in this EIR directly reflect the characteristics of the associated environmental resource being analyzed, and any other potential physical changes are speculative. Lastly, consideration of potential economic impacts of Lower Klamath Project mitigation measures and alternatives to the Proposed Project has been undertaken throughout this EIR.

5.5 References

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