Response to Van Ness Feldman Comments - Second Request for Correction

Klamath Non-Use Valuation Survey – OMB Control Number 1090-0010

The Klamath Non-Use Valuation Survey is designed to address an important area of benefits that can be defined as "non-use values." Non-use values accrue to members of the public who value Klamath Basin improvements regardless of whether they ever consume Klamath fish or visit the Klamath Basin. Non-use value is a component of the total value an individual places on the environmental change. To measure these benefits, the Department of the Interior (DOI) has designed a stated-preference (SP) valuation survey of the U.S. public. The survey will be the only component of the larger economic analysis that assesses the benefits that the U.S. public as a whole (who are federal taxpayers) hold for dam removal and implementing the Klamath Basin Restoration Agreement (KBRA), which will be funded in part by the federal government. The survey does not address the cost of the Klamath Hydroelectric Settlement Agreement (KHSA) or the KBRA, but rather asks individuals to focus on what they would be willing to pay for environmental improvements to derive an estimate of the benefits they receive, which can be above and beyond the actual costs. In this context, costs associated with the status quo are not relevant for the survey. The survey was designed and pretested to address a complex set of issues. As such, it needs to be as simple and straightforward as possible. Including every nuance or detail about the KHSA or KBRA would create excessive cognitive burden on survey respondents and is unlikely to influence individuals' responses in a material way for a survey that will administered at a national level.

On February 16, 2011, the DOI published an announcement for revision of the information collection "Klamath Non-use Valuation Survey," Office of Management and Budget (OMB) Control No. 1090–0010, and requested comments. This Notice supplements the Notices that were published on August 30, 2010, and September 8, 2010.

Comments by PacifiCorp (submitted via Van Ness Feldman letter dated March 18, 2011)

COMMENTS ON NO-ACTION PLAN (as portrayed in the survey)

Comment 1:

Effects inaccurately or inadequately portrayed

- No Action plan does not reflect effects of actions that could realistically be anticipated in absence of dam removal (e.g., PacifiCorp's Habitat Conservation Plan, Inspector General's Hatchery conservation, fish passage, total maximum daily loads implementation (TMDL).
- Need to consider contribution of hatcheries to historical fish returns (citing Fortune et al. 1966 and Snyder 1931).

Response:

The goal of the survey is to evaluate the public's maximum willingness to pay (WTP) for the incremental environmental improvements compared to the status quo. The non-use valuation survey's description of the "No Action" Alternative is meant to be consistent with the characterization of the No Action/No Project Alternative used in the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) currently being prepared to evaluate the potential impacts of the KHSA along with the KBRA. Broadly, the EIS/EIR defines the No Action/No Project Alternative as continuation of current operations with the dams remaining in place and PacifiCorp operating under the current annual license. We disagree with the comment.

Furthermore, the survey is not a referendum on the KBRA and the No Action plan is not supposed to represent the variety of outcomes that might occur if there were no KBRA and KHSA. The most straightforward and easily understood way to elicit respondents' values for the environmental improvements associated with dam removal and KBRA (their WTP) is to ask about improvements relative to a static baseline.

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

COMMENTS ON ACTION PLAN

Comment 2:

Effects inaccurately or inadequately portrayed.

- Benefits portrayed as more certain than indicated by science (e.g., expert panels) survey based on hypothetical outcomes that do not reflect specific effects of proposed actions on salmon abundance and extinction risk should not implement survey until specific effects and associated uncertainty of each alternative clarified in EIS. The survey asserts 30-150 percent increase in salmonid abundance how to reconcile quantitative projections for fall Chinook with qualitative projections for steelhead. Quantitative extinction risk levels for coho (high 25-50 percent to low 0-15 percent) inconsistent with National Marine Fisheries Service's (NMFS) qualitative ratings (high, moderate, low).
- Dam removal will not address legacy affects contributing to salmon population declines (e.g., mining, timber harvest, fisheries).
- Dams' energy may be replaced by coal, "which can create air pollution and exacerbate climate change."

Response:

The benefit of stated-preference surveys is that they can be used to evaluate a range of outcomes, including outcomes that may be outside current thinking. In this case, where there is uncertainty about the outcome, the survey will provide information about the value of a range of possible outcomes. Expert panel reports and various technical analyses are still in

preparation. If the survey was limited to focusing on one outcome based on currently available information, survey results will be much less useful if new information is developed that suggests, for example, a higher or lower outcome in terms of fishery improvements. In addition, the survey results will tell us whether people are willing to pay more for greater improvements, which will help with understanding how the public views the improvements.

The survey cannot portray all of the effects in a detailed manner. There is no reason to believe that the best available information, which is a mix of quantitative and qualitative information -- will impair individuals' understanding of the scenarios. The survey was tested with focus groups and cognitive interviews with the goal of designing a survey that individuals can complete in a manageable timeframe, consistent with the information collection requirements of The Paperwork Reduction Act. While dam removal will not address legacy effects, habitat restoration (which is also part of the Action Plan) will help in this regard.

Comment 3:

On page 5 of the Revised Non-use Valuation Survey (NVS), the five uses listed in the survey (i.e., the five bulleted statements on page 5) do not include all human uses of the Klamath River basin waters. Timber production and management effects water yield and quantity from sub-watersheds. Mining, although not prevalent today, was a major use of the Klamath River in the past and affected the river channel in ways that are still evident. In the first comprehensive study of Klamath River salmon, Snyder (1931) concluded that the river's salmon runs were diminishing before the construction of the dams, and described a key cause as the advent of placer mining in the Klamath River basin. On page 5, in the bulleted statement on "Commercial Fishing," the Revised NVS incorrectly states that the Klamath River has been the third largest producer of salmon on the U.S. West Coast. It would be accurate to alternatively state that "the Klamath River has been the third largest producer of salmon among rivers in California and Oregon."

Response:

The purpose of the bullets is to highlight major current uses.

Comment 4:

On page 6 of the Revised NVS, the "reasons for declining fish populations" should include fish disease or habitat degradation, which are major factors affecting salmon populations in the basin. Fish disease in particular is completely absent from this survey. On page 6 of the Revised NVS, the bulleted statement on "Water Quality" should be rewritten to state:

The Klamath River has naturally warm water temperatures in summer and naturally grows algae blooms that affect water quality. Different human activities in the basin, including agriculture, hydropower, forestry, and mining, also affect water quality. Despite efforts to better manage these human uses, water quality is still a problem for fish.

The statement presently included in this bullet, that "Algae that grow in the warm water can kill fish[,]" is theoretically true, but there are no actual documented cases of fish kills in the Klamath River from algae.

• Response:

The results from the pretest suggest that the majority of respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 5:

Page 6 of the Revised NVS states that (in the bulleted statement on "Overfishing"): "Currently, fisheries are better managed to help protect weak fish populations." This line implies that fishing is not a reason for declining fish populations in the basin. Fisheries continue to take upwards of 40 percent of the returning adults each year and also select the larger fish which reduces population productivity. The bulleted statement that contains this line should be changed to read as follows:

Fish Harvest. In the past, poor management of commercial, ocean and river fishing in the Klamath area contributed to the decline in fish numbers. Over time, fishing regulations have been improved to reduce harvest impacts to salmon. Despite these efforts, harvest continues to be a factor that reduces fish abundance in the basin.

The above correction also is consistent with the bullet provided for Water Quality. Page 6 of the Revised NVS states that "[a]lthough past and current efforts to improve conditions by governments, tribes, communities, and landowners have been helpful, more is needed to significantly increase wild fish populations in the basin." The survey should delete or replace the term "significantly," as it is used here. "Significant" is a term with a specific meaning for scientists (i.e., in the context of statistical analysis), but has a potentially varied meaning for lay respondents. Thirty percent more wild fish may not be "significant" if the population is still at risk of extinction.

Response:

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 6:

Page 8 of the Revised NVS lists "Main Threats" for coho salmon. Under this heading, "habitat loss and degradation," "fish diseases" and "overfishing" should definitely be added.

Response:

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 7:

Page 8 of the Revised NVS states that "[t]he Klamath coho salmon is part of a distinct coho salmon population that lives only in the Klamath River basin and a few nearby rivers in Southern Oregon and Northern California." This is incorrect as written. According to NMFS, there are nine coho populations in the Klamath River basin. These nine populations are part of the Southern Oregon/Northern California Coasts (SONCC) coho salmon Evolutionarily Significant Unit (ESU) that was listed as threatened in May 1997 by NMFS. PacifiCorp also notes that only one of these nine coho populations (i.e., the "Upper Klamath" population) is affected by "Klamath River dams blocking the river" (as listed under "Main Threats").

Response:

It should be noted that the three Klamath populations (Upper Klamath, Scott, and Shasta) would be most affected by proposed Klamath restoration agreements (which includes, but is not limited to dam removal) and that these three populations are at high risk of extinction (as found in the NMFS 2010 Biological Opinions (BO) due to low numbers, which have been found to be below depensation levels, in recent years. Detailed technical elaboration, as suggested above, is not considered suitable for a public survey.

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 8:

Page 8 of the Revised NVS states that "[f]ish raised in hatcheries compete for food and habitat with wild coho salmon." For accuracy, this sentence should be changed to read: "Fish released into the river from hatcheries compete for food and habitat with wild coho salmon."

Response:

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the stated-preference conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 9:

Page 9 of the Revised NVS states that "I am concerned about the Klamath coho salmon that are at high risk of extinction." However, NMFS describes coho salmon in the Klamath River as having only a moderate risk of extinction (NMFS, 2010). Thus, the question presents an extinction risk that is not scientifically supported and will create a misperception among respondents that coho salmon are currently at high risk of extinction. The question should be revised to state "I am concerned about the Klamath coho salmon that are at moderate risk of extinction."

Response:

The NMFS 2010 BO finds that the three population units most likely to be affected by the Klamath restoration plans (Upper Klamath, Scott, and Shasta) are at high risk of extinction due to low numbers, which have been found to be below depensation levels, in recent years.

Comment 10:

On page 10 of the Revised NVS, the survey states that "[I]ow water flows in the river were one of the main reasons" for the 2002 fish kill in the Klamath River. Actually, in addition to low flows, there were other important factors that contributed to this kill, including crowding of fish, elevated water temperature, degraded water quality, and disease.

Response:

This is true. However low flows likely contributed to high water temperatures and crowding. These conditions were favorable for the disease outbreak that occurred.

Comment 11:

On page 10 of the Revised NVS, regarding the 2006 cut in commercial salmon harvest, the survey states that "[t]he main reason was a lack of fish from the Klamath River, due in part to dams and low water flows." The "due in part" approach to this sentence does not provide balance. The sentence should also list other important factors leading to this cut in harvest, including poor ocean conditions, tributary and mainstem habitat degradation, disease, and water quality conditions. It is more appropriate to say that the ocean fishery is managed as a weak stock fishery, and the fishery was closed in 2006 because of the projected low numbers of fish returning to the Klamath River.

Response:

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 12:

On page 12 of the Revised NVS, regarding Question 10, the question should be clarified such that it is clear that PacifiCorp also serves customers as "Rocky Mountain Power" in Utah, Wyoming, and Idaho.

Response:

We believe this level of detail may not be necessary to convey the major differences in the scenarios. The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 13:

Page 13 of the Revised NVS states that "[t]he agreement would also ... cost many millions of dollars ... to replace the dams' energy, some of which may come from renewable sources like wind or solar power, and some may come from more sources like coal which can create air pollution ... " The EIS being prepared for the Secretarial Determination will spend considerable effort evaluating the effects climate change will have on outcomes. The sentence should reflect this fact. We suggest the following: " ... to replace the dams' energy, some of which may come from renewable sources like wind or solar power, and some may come from more sources like coal which can create air pollution and exacerbate climate change"

Response:

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 14:

Page 13 of the Revised NVS states that the agreement is intended to "improve water quality by increasing water oxygen levels in Upper Klamath Lake and the Klamath River.... "Interior appears to be making an assumption that Dissolved Oxygen (DO) levels can be increased in Upper Klamath Lake, which will alone improve water quality. Improving water quality in Upper Klamath Lake has been studied and debated for decades. To PacifiCorp's knowledge, no single treatment or solution has been put forth. PacifiCorp is currently engaged in organizing and funding a water quality workshop to bring national water quality experts together to discuss the appropriate technologies that may be available. To suggest that increasing DO levels is the only action necessary to improve water quality in Upper Klamath Lake and the Klamath River is incorrect and misleading.

Response:

The text in the survey does not imply that DO levels alone will be responsible for improvement water quality.

Comment 15:

Page 13 of the Revised NVS uses the term "many millions of dollars" to describe costs of implementing the Agreements. As used in the survey, the term "many millions" covers a range from several million (assistance to farmers) to \$1.5 billion (cost of dam removal and KBRA actions). The use of the term "many millions" to describe impacts ranging over this wide range of value results in a false equivalency between the items discussed. PacifiCorp questions why the survey relies on a qualitative description (i.e. "many millions") for costs (which can be estimated with greater certainty), but uses precise numeric values when describing fish outcomes (which all parties agree are highly uncertain). For the public to make an informed decision on WTP, both anticipated fish benefits and costs need to be presented clearly and equitably. The use of the term "many millions of dollars" does not achieve this objective. PacifiCorp requests that our original comment regarding text changes be implemented as described in our comments of December 17, 2010.

Response:

We believe "Many millions of dollars" does not create a false equivalency. Costs are not known with certainty, as introduction of Congressional authorization is still pending more than 1 year after the agreements were signed.

Comment 16:

On page 13 of the Revised NVS, the Revised NVS does not adequately describe other impacts of dam removal. PacifiCorp suggests the following wording: "The agreement would also ... eliminate whitewater rafting supported by dam releases, the reservoir fishery, and other recreational activities supported by the dams; about 100 homes now located near the shores of the reservoirs would lose their lakefront view."

Response:

Whitewater rafting dependent on peak power releases primarily occurs on the upper portions of the Klamath River (i.e., Hell's Corner Reach). However, portions of the lower Klamath River would still support whitewater rafting and suggested text edits could give survey respondents the impression that whitewater rafting on the entire Klamath River would be eliminated. For rafting opportunities that would exist after dam removal and implementation of KBRA, rafters will be experiencing more natural flow conditions and will also be able to enjoy improved water quality conditions. We believe the text in the survey adequately captures the major impacts in sufficient detail such that individuals can evaluate the hypothetical scenarios.

Comment 17:

On pages 16 and 17 of the Revised NVS, the survey indicates that extinction risk for coho salmon will be reduced from "HIGH RISK" (25-50 percent extinction risk) to "LOW RISK"

(0-15 percent extinction risk) under ACTION PLAN A. The inclusion of very specific ranges presents information to the public that cannot be supported (or confirmed) with the analysis that is being pursued for the EIS. The analysis should use the qualitative ratings currently used by NMFS for describing possible outcomes.

Response:

The characterization of extinction risks for suckers and coho salmon under the NO ACTION Plan, ACTION PLAN A, and ACTION PLAN B are meant to convey complex biological information about the status of endangered species and to help ensure respondents view the range of hypothetical outcomes in a consistent manner. The information presented reflects the general scientific understanding and predictions, while at the same time communicating this information in terms that are meaningful and understandable to respondents. Given the complexity of this issue, use of percentages is reasonable. The survey instrument has undergone significant preliminary testing in focus groups and cognitive interviews, where, in all cases, participants did not make any comments on the manner in which extinction risks were characterized.

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 18:

On pages 16 and 17 of the Revised NVS, regarding "Low Numbers of Wild Chinook Salmon and Steelhead Trout," the inclusion of "Low" biases the statement. The NVS should simply state that fish abundance levels will remain constant.

Response:

We disagree that the use of the word "low" biases the statement. The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 19:

On pages 16, 17, and 19 of the Revised NVS, the graphs display 100,000 fish each year. The title of the graphs needs to be consistent with the text. The text states that the number refers to wild fish. The graph labels also need to make this distinction.

Response:

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional

detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 20:

On pages 16 and 20 of the Revised NVS, it is crucial for the credibility and validity of the survey to accurately characterize the "NO ACTION Plan." The "NO ACTION Plan" in the survey is purely hypothetical, and does not realistically capture future actions that would occur in the absence of dam removal and KBRA actions, such as PacifiCorp Habitat Conservation Plan measures, Iron Gate hatchery conservation measures, future fish passage at PacifiCorp dams (if not removed), and TMDL implementation actions. The survey's portrayal of the "NO ACTION Plan" as being the status quo with a "current average" has the misleading effect of inflating the incremental environmental improvements of ACTION PLAN A and ACTION PLAN B.

Response:

We disagree with the comment. The non-use valuation survey's description of the "No Action" Alternative is meant to be consistent with the characterization of the No Action/No Project Alternative used in the EIS/EIR currently being prepared to evaluate the potential impacts of the KHSA along with the KBRA. Broadly, the EIS/EIR defines the No Action/No Project Alternative as continuation of current operations with the dams remaining in place and PacifiCorp operating under the current annual license. Habitat Conservation Plans (HCP) should address population constraints to the extent practicable, which in this case would leave dams in place; therefore, effectiveness of the HCP in reversing population declines may be limited. The TMDL effectiveness will be compromised should dams remain in place, and technological solutions to water quality issues are highly uncertain at this time. Incremental environmental improvements may not result in recovery of coho, given the magnitude of the habitat and water quality issues that impact species survival.

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 21:

On pages 17 and 21 of the Revised NVS, it should be made clear to respondents that the number of returning Chinook salmon and steelhead portrayed under the Action Plans are uncertain, hypothetical projections. We understand that DOI believes that the use of different versions of the survey represents a range of outcomes to address these uncertainties. However, PacifiCorp remains convinced that a respondent's WTP for a given Action Plan scenario could differ if he or she knew that the assumed outcomes of DOI's presented scenarios are highly uncertain. For example, on page 17 of the Revised NVS, in describing Action Plan A, the survey states that "[s]cientists expect that by 2060, there would be 100 percent more wild fish than today." PacifiCorp believes that a respondent's thinking on WTP would differ if the

survey alternatively stated: "If dam removal, restoration projects, and water sharing agreements were fully implemented and successful, many scientists expect that by 2060 there could be 100 percent more wild fish than today, although this outcome is uncertain given the various factors that affect these fish."

Response:

Incorporating multiple sources of uncertainty into the scenarios individuals are being asked to evaluate may complicate the survey and individuals' ability to respond. Implementing different versions of the survey is an appropriate approach to address the range of possible outcomes. This will provide empirical data on individuals' WTP.

The results from the pretest suggest that most respondents could understand the questions, followed instructions, and had adequate information to answer the SP conjoint questions. See Table 6 and Table 10 of Enclosure 2, Summary of Klamath Pilot Test Results, for additional detail. As such, additional edits to the text of the survey instrument were not made in response to this comment.

Comment 22:

On pages 17 and 21 of the Revised NVS, the survey should reflect that available scientific evidence shows a wide range of uncertainty and potential outcomes for fish population responses to dam removal and KBRA actions. For example, the Klamath River Expert Panel has concluded that the benefits to coho salmon of dam removal and the KBRA "are expected to be small, especially in the short-term (0-10 years after dam removal)." The Panel was more optimistic that dam removal and KBRA actions could result in increased numbers of steelhead in the long-term (decades) relative to the current population abundance in the Klamath system. However, the Panel stated that "if the dam removal and KBRA is implemented ineffectively, there may be no detectable response of steelhead."

Response:

The Panel's preliminary conclusion was confirmed in their final report. The action alternative is intended to reflect effective implementation of dam removal and KBRA. It was not feasible to incorporate varying degrees of effectiveness in the survey in addition to all the scenario variations already being considered.

Comment 23:

Page 23 of the Revised NVS asks respondents to respond to the statement: "Some of the plans cost too much compared to what they would deliver." How can a respondent respond to this statement when the costs presented are not specific and quantitative, but only qualitative?

Response:

The survey asks that individuals compare the specific cost their household is being asked to incur with the anticipated environmental improvement. Past experience with this type of survey has found that individuals are able to respond to this type of question.