Houser, Paul R

From: Schultz, Keith C
Sent: Saturday, September 17, 2011 7:00 PM
To: Houser, Paul R; Moore, Kevin L; Phillips, Jason R; Taylor, Darin E; Tyler, Torrey J; Wilkens, Alexander X (Alex); Carlson, Rick A
Cc: Zeitzmann, Nellie
Subject: RE: Press Release Review

Dr. Houser

There is a wide range of uncertainty in the potential impacts (beneficial and adverse) of dam removal, and in my opinion, the draft press release stresses the optimistic end of the beneficial range.

Expert Panels were convened composing of independent fish experts to review, evaluate, and synthesize influential information regarding removing four Klamath River hydroelectric dams. The Expert Panels produced several reports, including a report on Chinook salmon (Klamath River Expert Panel Scientific Assessment of Two Dam Removal Alternatives on Chinook Salmon, dated June 13, 2011) and one on coho salmon (Klamath River Expert Panel, Scientific Assessment of Two Dam Removal Alternatives on Coho Salmon and Steelhead, dated April 25, 2011).

I believe that the Expert Panel did an excellent job identifying uncertainty. However, many of the uncertainties raised by the Expert Panels are not included, or at least not articulated well in the draft press release. I note; however, that the Expert Panel reports were not well received by the majority of the local stakeholders. There is significant resistance by local stakeholders in identifying uncertainties that could result in less than optimal responses with dams out.

Examples:

Example 1) The draft press release states "*Chinook salmon: Removal of the dams, combined with restoration of aquatic habitats as anticipated in the KBRA, is expected to increase the annual production of adult Chinook salmon by an average of 83 percent*."

This statement implies a level of precision/accuracy that is not present. The Expert Panel laid out their concerns on Chinook salmon well. "*The Panel concludes that achieving substantial gains in Chinook salmon abundance and distribution in the Klamath Basin is contingent upon successfully resolving the following nine factors:*

1. Water Quality. The limitations on access to the upper basin because of water quality problems in Upper Klamath Lake (UKL) and Keno Reservoir (KR) are resolved. The water quality issues must be solved if the principle of minimizing ongoing intervention, as stated in the KBRA, is to be followed. Otherwise, the benefits of access to the upper basin habitat will not be fully realized.

2. Disease. Changes in hydrology, sediment movement, and spawning distribution reduce disease incidence to levels that do not cause high mortality in out-migrating juveniles or pre-spawning adults.

3. Colonization of the Upper Basin. Chinook salmon are able to migrate freely to the upper basin, adapt to new conditions, and successfully complete the upper basin portion of their life cycle.

4. Harvest and Escapement. Chinook salmon are sufficiently abundant after escaping the fisheries to colonize all habitats, including newly accessible habitat.

5. Hatchery Versus Wild. Straying of hatchery Chinook salmon to spawning grounds does not overwhelm the evolution of new life histories that develop to capitalize on new habitat.

6. Predation. Predation by redband trout and other predators is sufficiently low.

7. Climate Change. The buffering effect of greater upper basin access is not overwhelmed by climate change, or by a climate regime shift wherein drought and continued high agricultural water demands are persistent features.

8. Fall Flows. Any reduction in productivity of Chinook salmon associated with lower fall flows is sufficiently small compared to the magnitude of productivity gains.

9. Dam Removal Impacts. Dam removal does not have a substantial multi-year adverse impact on mainstem Chinook salmon.

…. Insofar as KBRA is open-ended and must be capable of evolving and coping with uncertainty, the Panel was concerned about a tenth factor that will bear on that evolution:

10. Scientific Leadership. A governance structure for the overall program is established that includes a science program with a strong Lead Scientist. The science program, which must be integrated with the rehabilitation2 program, should be tasked to implement modeling, monitoring, data management, analysis, assessment, and reporting. And, of course, the rehabilitation program will need to be funded adequately. The science program provides the feedback that is essential to adaptive management."

Example 2) The draft press release states that dam removal "*would be expected to reclaim 68 miles of habitat…..*" for coho salmon and "*advance the recovery of federally listed coho salmon*"

While the draft press release is technically accurate, the Expert Panels phrased the likely result differently. They stated "*The more likely small response will result from modest increases in habitat area usable by coho with dam removal, small changes in conditions in the mainstem, positive but unquantified changes in tributary habitats where most coho spawn and rear, and the potential risk for disease and low ocean survival to offset gains in production in the new habitat.*"

More specifically addressing uncertainty, the Expert Panel further stated "*The questions posed to the Panel are not answerable in quantitative terms. The Panel was provided with qualitative information and asked to respond to questions requiring quantitative answers. The Panel identified six principal obstacles to drawing convincing conclusions between the two alternatives: (1) insufficient specificity of the KBRA; uncertainties about (2) fish passage through Keno Reservoir and Upper Klamath Lake, (3) hatchery effects, (4) disease, and (5) water demand responses to KBRA; and, (6) limited understanding about coho and steelhead abundances, migration patterns, and factors affecting survival at each life stage*."

There are many more examples I could provide upon request.

Keith Schultz

From: Houser, Paul R
Sent: Thursday, September 15, 2011 8:06 AM
To: Moore, Kevin L; Phillips, Jason R; Schultz, Keith C; Taylor, Darin E; Tyler, Torrey J; Wilkens, Alexander X (Alex);

[attachment 4]

Carlson, Rick A
Cc: Zeitzmann, Nellie
Subject: Press Release Review

Hello – I have been asked to look at the attached press release, and it raised some red flags with me. I am hoping to get some perspective from you before returning my suggested edits. I am concerned that this press release generally presents a biased view of the Klamath situation. It tends to present only the positive, without the uncertainties or negatives. For example:

- climate changes are projected to play an important role in fish recovery, but climate is never mentioned in the draft.
- The section on Chinook Salmon recovery projects an 83 percent recovery, but says nothing about the nine contingencies summarized in the June 13, 2011 report that could completely negate this projected recovery: Upper Klamath Lake (UKL) and Keno Reservoir (KR) water quality issues, reduction in disease, enabling free migration to the upper basin, hatchery salmon do not overwhelm spawning grounds, predation is sufficiently low, climate change, small reductions in fall flows, and no long-term dam removal impacts.
- Press release states that "Coho salmon reclaim 68 miles of habitat", but says nothing about the April 25, 2011 statement "the difference between the Proposed Action and Current Conditions is expected to be small, especially in the short term (0-10 years after dam removal). Larger (moderate) responses are possible under the Proposed Action if the KBRA is fully and effectively implemented and mortality caused by the pathogen C. shasta is reduced.".

Please let me know if you think there is a bias issue here or not.

Best Regards, Paul

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