

**Biology Committee Meeting  
April 3, 2000  
DIA Hampton Inn**

**Special Meeting to Discuss Recovery Criteria  
for Humpback Chub and Colorado Pikeminnow**

**Attendees:** Art Roybal, Paul Dey, Larry Crist, Tom Chart, John Hawkins, Tom Nesler, Matthew Anderson, Henry Maddux, Kevin Christopherson, Tom Pitts, Chuck McAda, Tim Modde, Bob Muth, Tom Czapl, Gary Burton, Rich Valdez, Ron Ryel, Bill Davis (via phone).

**Review of summary sheets:** Section A represents site specific management actions to address the threats as identified in ESA. Section B gives downlisting and delisting criteria.

Humpback Chub

Anderson suggests that the actions need to be written as actions that are necessary rather than as recommendations. Recommendations come from the committees and recovery team to FWS as to appropriateness of the criteria. Pitts suggests that with this adaptive management process these criteria are too restrictive.

Pitts and other members suggest rather than implement flow recommendations; provide flows that will achieve recovery of the fish; flow recommendations are not legal and will most likely change. Valdez indicates the need of some assurances in protecting flows. The downlisting package will contain the specific flows needed and identify how they will legally protect flows required to achieve recovery. These changes will apply across the board, with the exception of LCR. The site specific criteria are too specific and do not reflect the adaptive management of this huge and expensive (\$170 M) program. Can the RIPRAP serve as legal document? The Act requires measurable criteria for the threats, and those will be identified in the downlisting/delisting packages. Recognize the role of the RIPRAP as an adaptive process that has identified and has evolving actions to recover the fish.

Continue nonnative fish control, continue is vague - it can be forever; recovering a species means you can walk away from it. But we will continue to provide flows, and that may apply to nonnative. We will not continue control in perpetuity. The level of control needs to be some observable affect to demonstrate a response. Is there a response that is linked to the endangered fish population? Nonnative fish control actions consist of adherence to the nonnative fish stocking by the states. Do we need such an agreement in the lower basin? Implement nonnative fish control actions to provide recovery of the endangered fish. Need some more specifics for lower basin. If its identified as a threat then there should be a management action associated with them. Fish control and agreements are needed.

Potential threat of spills, there has been one in Yampa River, and have potential in Black Rocks/Westwater canyons for train wrecks. Response and prevention are 2 different things. Can't respond any faster. Perhaps minimizing the potential. Satellite pipeline shut-off valves in the Yampa River. Only been two spills that have probably taken fish. Nesler thinks it will keep leading us to more work, the review may require modifying a plan and it keeps leading to bigger projects. We are accepting something blindly. Valdez says we are just trying to insure that the potential risks are addressed. Ryel - we have low redundancy population numbers because we believe there already is some protection out there. Davis suggests coal slurry pipeline at Cameron on the LCR as a potential problem.

1. Provide flows necessary to achieve recovery. Criteria for downlist is to provide flows to achieve recovery. Delist would legally protect flows to achieve recovery, legally protect flows for self-sustainability. Specific flow will be developed and criteria will be developed and the measurable response at the time packages are put out for public comment.

2. Regulate non-native fish releases in basin through agreements for Black Rocks and Westwater. Implement non-native fish control as needed to achieve recovery. For example, there may be a response by the endangered fish through nonnative fish control efforts or not, if not, shift the strategy/action. Under Little Colorado, Yampa and Deso/Grey, Colorado River in Grand Canyon. Don't be specific for populations, apply to all in general and then be specific in text.
3. For spills, leave the language as is: Review and modify, if necessary, state and federal hazardous spills emergency response plans to insure adequate protection from spills, including prevention and quick response to spills. Seems to become open-ended and could lead to costly and long term demands. Limiting the extent of these spills language should be added.

Hawkins suggested for consistency to include the monitoring of parasites and include language to begin monitoring in areas we are not. Valdez noted that not all threats were identified in the summary for each population. It was suggested that Valdez and Ryel provide how they concluded that some threats are more important than others. This will be discussed in the document.

There is some discomfort on the population numbers because some of the estimates have better confidence than others. The alternative is to get new estimates that have better confidence. Where we have good numbers with confidence on a couple of populations, in others put in baseline to be established. All six will then be used.

Criteria following to go from endangered to threatened and then threatened to delist. The numbers are so low that inbreeding is high which produces deleterious genes and move into an extinction vortex. Lambda is less than 1. All or a high proportion of the entire population is at a risk of being lost by a catastrophic event (need redundancy). Delisting provides the assurances that threats have been sufficiently minimized or removed for long periods of time. Therefore threats are the critical things that move it to delist.

Three of eight years good recruitment. Age three (as determined by length frequency within a population) fish within a population to represent recruitment. Prioritize by population.

#### Colorado Pikeminnow

Different demographic criteria are identified between the Colorado and Green rivers. If that's the case we have 2 stock recruitment scenarios between the middle and lower Green river. The genetics number is for the populations for both the Colorado and Green rivers and potentially the San Juan River.

List certain uncertainties, pikeminnow we have uncertainties in genetics and carrying capacity. This is the starting estimate below which we cannot go. It should be similar to what we have for the humpback. Confidence intervals that need to be met, is it possible without overstressing budgets, personnel or fish?

What does it mean if we do not meet a set confidence level? As long as we do not violate the lower interval being below the targeted level, i.e., 2200 for pikeminnow. Do not want to set targets that cannot be met?

Straw Poll: BC Members in favor of considering pikeminnow population(s) for the Green River (Modde's posting to listserv).

1 Population	2 Populations
Nesler	Modde
Pitts	Chart
Roybal	Hawkins
Dey	
Anderson	

Green River: Does the Service have adequate regulatory actions to provide passage between populations.

Turn statement around to more positive aspect, maintain connectivity between populations.

Upper Colorado River: Investigate modification of Aspinall unit for warm releases to allow for upstream range expansion in the Gunnison River. Ensure passage over Price Stubb .

San Juan River: Six most downstream diversion structures. No agreements in the San Juan on nonnative fish stocking.

The 2550 for San Juan is based on assumption of no direct connection via Lake Powell; therefore it has to be itself genetically and demographically viable.

Next Meeting: May 3, 2000. Starting at 08:00 at Grand Junction. McAda to check on FWS Conference Room.