

National Marine Fisheries Service's
Draft FCRPS BiOp,
Draft Upper Snake BiOp
& Draft Supplemental
Comprehensive Analysis
October 31, 2007 Drafts
December 12, 2007





Draft Documents Released on October 31st

Draft FCRPS BiOp

- Analyzes the FCRPS Action Agencies' Biological Assessment, including proposed RPA (August 2007)
- Note: As determined in the 2000 FCRPS BiOp, the hydrosystem actions alone cause jeopardy; so additional mitigation actions described in RPA are necessary

Draft Upper Snake BiOp

- Analyzes the Upper Snake Biological Assessment, including Proposed Action (August 2007)
- Consistent with Nez Perce Settlement over Snake River Basin water rights



Draft Documents Released on October 31st

Draft Supplemental Comprehensive Analysis

- a reference document that supports the findings of both as well for future BiOps dealing with the same species
- incorporates certain elements of FCRPS Action Agencies' Comprehensive Analysis by reference (August 2007)

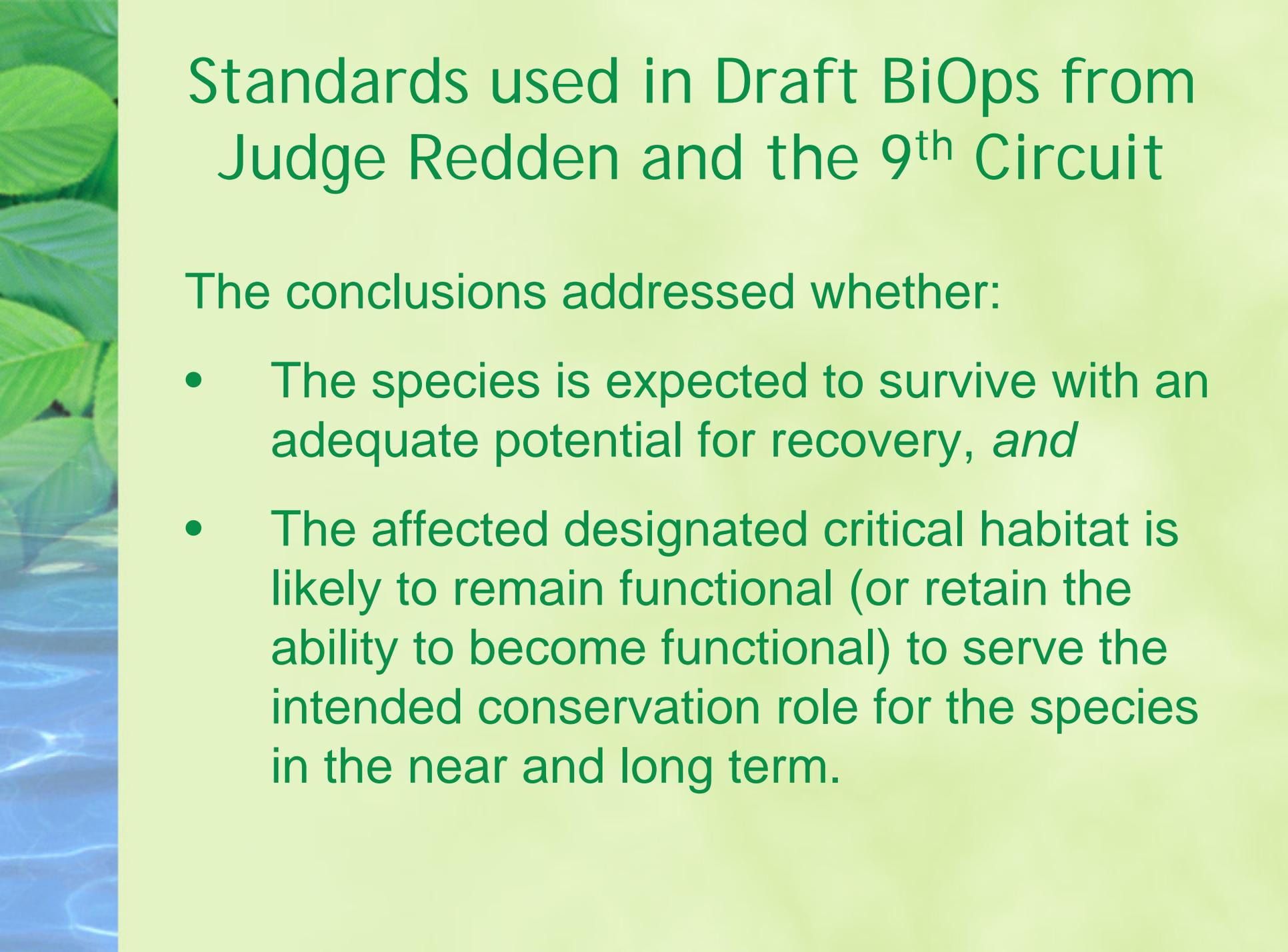
Draft Executive Summary

13 Listed Species Addressed in the BiOps

Snake River	Upper Columbia River	Middle Columbia River
<ul style="list-style-type: none">• Fall Chinook Salmon• Spring/Summer Chinook Salmon• Sockeye Salmon• Steelhead	<ul style="list-style-type: none">• Spring Chinook Salmon• Steelhead	Steelhead
Lower Columbia River	Columbia River	Upper Willamette River
<ul style="list-style-type: none">• Chinook Salmon• Coho• Steelhead	Chum Salmon	<ul style="list-style-type: none">• Chinook Salmon• Steelhead

What is Different About These BiOps?

- Higher standard as a result of Judge Redden's rulings – we think we get it
- Based on unprecedented regional collaboration
- More rigorous analysis



Standards used in Draft BiOps from Judge Redden and the 9th Circuit

The conclusions addressed whether:

- The species is expected to survive with an adequate potential for recovery, *and*
- The affected designated critical habitat is likely to remain functional (or retain the ability to become functional) to serve the intended conservation role for the species in the near and long term.



Remand Collaboration

Policy Working Group (PWG)

- One representative from each of the sovereign entities (federal and state executives and Tribal chairs).
- Number of policy subgroups
- Provided input to AA's on development of Biological Assessment & Proposed RPA
- Focused on “narrowing our areas of disagreement and clarifying policy issues”

Technical working groups:

- Open to other parties to the litigation.

Metrics and Considerations used to Reach Conclusions*

- Abundance Trend
- Productivity
- Population growth rate (λ)
- Quasi-extinction threshold (QET)
- Recruits per spawner (R/S)
- Spatial structure & diversity
- Existence of Safety-Net Hatchery programs
- Life stage survival improvements
- Effectiveness of monitoring, performance standards, adaptive management & oversight
- Key Uncertainties

**From Bob Lohn memo to PWG, September 11, 2006*



Population-Based Analysis

- For species with sufficient data, NMFS first described the performance of each population within an MPG with respect to quantitative and qualitative indicators
- NMFS also reviewed the relative importance of each population to the MPG and ESU



Considerations

- Recovery Potential

example: SR Sp/Sum Chinook

- Status of all populations has been improving in recent years
- All populations will additionally benefit from Prospective Actions, which address limiting factors
- Most populations (19/23) are expected to have $R/S > 1.0$
 - Most well above 1.0 (mean 1.5), so can help to offset weaker populations



Considerations

- Recovery Potential

example: SR Sp/Sum Chinook

- All pops have lambda and BRT trend >1.0
- Main problem is pops in Grande Ronde MPG. Problems there will take a long time to solve. Prospective Actions represent significant improvements that reasonably can be implemented in next 10 years.
- Uncertainty – statistical, climate, and effects of actions
 - Monitoring and adaptive management

Considerations - Survival

example: SR Sp/Sum Chinook

- Short-term risk will be reduced by Prospective Actions
- Abundance expected to be increasing for almost all populations (including $R/S > 1$)
- There are safety net hatchery programs to reduce short-term risk for key populations (e.g., in Grande Ronde)
- Main problem is pops in Middle Fork MPG at $QET = 50$
 - QET below 50 may be relevant for short-term
- Uncertainties: statistical precision, QET , climate conditions, and effectiveness of conservation/restoration actions
 - Monitoring and adaptive management

Draft FCRPS RPA

- Draft FCRPS BiOp includes 73 RPA actions, many of which include a number of components
- RPA includes expanded programs for predation management, tributary & estuary habitat improvements & hatchery improvements
- New habitat actions & hatchery reforms are specifically targeted to each listed stock & the factors that impede their recovery

Draft FCRPS RPA

- Hatcheries play a key role in preventing short-term extinction for very small populations. There are still key uncertainties as to their long-term contribution to recovery. The long-term risks associated with supplementation will be analyzed and managed through on-going hatchery reviews & consultations.

Draft FCRPS RPA

- In hydro, a scientifically designed program of flow and spill operations at the dams reflecting the best mix of flow and spill to yield better survival for fish:
 - Increase summer daytime spill at Bonneville Dam from 75 kcfs to 85 kcfs through July 31.
 - Altered Spring Transport Strategy at Snake River collector projects when seasonal average flows are expected to be > 65 kcfs:
 - Apr 3 to Apr 20 - spill and bypass at all dams (leave all fish inriver)
 - Apr 21 to May 14 – spill and transport at all dams (transport only those collected)
 - May 15 to June ?? – no voluntary spill and transport (full transport operation)
- New kelt (not kilt) management plan

Consideration of Climate Change

- Over the past century, about half of the years have had favorable (For our Canadian Friends – favourable) ocean condition, and half have had unfavorable (unfavourable) ocean conditions
- Deliberately conservative approach
- Analysis based on the results experienced in a recent 22 year period:
 - ocean conditions in a favorable phase for 4 years
 - ocean conditions in an unfavorable phase for 18 years

Draft Conclusions

Draft FCRPS BiOp

- with the RPA – the comprehensive set of actions -- each of the listed species will avoid extinction & have an adequate potential for recovery.

Draft Upper Snake BiOp

- the proposed action, taken together with all the other actions, will not cause jeopardy to any of the listed species. When considered along with the other components of the Nez Perce settlement, these actions provide an adequate potential for recovery.

Next and Recent Steps

- Remand Collaboration PWG discussion took place on November 27th
- Court status conference today (December 12th)
- End of comment period (anticipated) December 14th
- Depending on Judge's orders, final BiOp anticipated in early spring