Northwest Power and Conservation Council

May 31, 2007

MEMORANDUM

TO: Council Members

FROM: John Shurts

SUBJECT: Agenda item on "Proposed Action"

The agenda for the June Council meeting will include a staff briefing on the Proposed Action documents that the federal Action Agencies just filed with the federal court. Here is an outline of the discussion:

- The legal significance?
  - is it *the* Proposed Action? draft; disclaimer
  - uncertainty about what happens next, given the odd situation allowing an opportunity for response filings and the status conference before Judge Redden
  - otherwise, firm up, and next stop BiOp. when?

- What's in it? Elements:
  - proposed actions in a number of categories for the years 2007-17
  - sprinkled throughout are analyses of the possible benefits from the particular proposed actions
  - at the end, biological analysis of effects on each population in each listed ESU analyzed, using metrics for productivity, abundance trends and extinction risk

- Hydro Proposed Action
  - nothing dramatically new from 2000/2004 BiOps in terms of operations for salmon and steelhead; evolution of different elements
  - one thing that is new is the summer operation at Hungry Horse and Libby directly from Council's program
  - proposed spill operation when compared to 06 and 07 spill operations ordered by court or agreed to
  - survival improvements estimated for proposed hydro action

- Habitat Proposed Action
  - tributary and estuary
  - Bonneville to implement mostly; some Bureau
  - three elements:
    - habitat projects already decided for implementation in 07-09
    - additional habitat actions in 08-09, fairly specifically defined
    - habitat actions in 2010-17, defined for now mostly in terms of areas, limiting factors, types of actions to address
  - sources -- references to subbasin plans/draft recovery plans
  - implementation -- references to Council/Bonneville process
  - Bonneville funding:
    - additional $11.5 million over the two years of 08-09
    - additional $40-45 million per year in 2010-17
  - benefits analysis/survival improvements expected

- Hatchery Proposed Action
  - two strategies w/ a number of actions identified
  - immediate source is a remand workgroup and "coarse screen" review w/ *US v. Oregon* parties
  - first strategy is to continue efforts to reduce adverse impacts of a.p.
    - reliance on continuing efforts at reform of hatchery practices and on HSRG review
  - second strategy is to bring positive benefits through maintaining and in some cases increasing on-going supplementation and captive production programs and developing new production
    - various supplementation, captive and safety-net programs for SR spring chinook, fall chinook and steelhead
    - increase SR sockeye production
    - fund NEOH construction contingent upon the Nez Perce developing a NOAA-approved management plan
    - Okanogan summer steelhead (in 07-09 projects)
    - Okanogan spring chinook (Chief Joseph hatchery; 3 Step process)
    - expand steelhead kelt reconditioning in Cascade
    - MCR steelhead programs in Yakima, Umatilla, Deschutes, Hood River
    - chum -- fund Duncan Creek reintroduction (07-09 projects) and assess potential for other actions in lower Columbia tribs
  - references to Council program production and implementation process
  - Bonneville noted as main funding source; no specific $$ identified
  - quantified benefits/survival improvements?

- Harvest Proposed Action
  - strategies for selective fishing (techniques and locations) and for improved management
  - Bonneville noted as funding source; no specific $$ identified
  - survival improvements? quantitative estimates of survival improvements for harvest actions in 2001-06; nothing quantitative for 2007-17 actions

- Predator Control Proposed Action
  - "reduce" pikeminnow and other fish predation
  - "manage" avian predation
  - "address" marine mammal predation
  - Bonneville funding for the first; Corps funding for the second two

- RM&E Proposed Action
  - nine sets of strategies for:
    - fish population status monitoring
    - hydrosystem rm&e
    - tributary habitat
    - estuary habitat and ocean rm&e
    - harvest rm&e
    - hatchery rm&e
    - predator rm&e
    - rm&e coordination and data management
    - project implementation and compliance monitoring
  - Bonneville is the sole identified funding source on a couple of these; the primary funding source on others shared with Corps and/or Bureau; no additional $$ identified
  - references to Council work, such as recognition that "rm&e actions will continue to be coordinated through existing program project selection and funding processes, including NPCC and AFEP"

- Accountability for Results and Risk: Performance Standards, Adaptive Management, Reporting, Oversight, and Contingencies
  - performance framework: action commitments, performance targets, performance standards, monitoring, reporting
  - implementation planning and reporting; details and milestones
    - references to work of Council, including: "The Action Agencies will coordinate implementation with other appropriate regional processes. This includes coordination related to statutory provisions for the Federal government (BPA/Power Council), voluntary coordination among Federal agencies (Federal Caucus), and coordination with regional processes for Federal/non-Federal engagement (TMT, SCT, Pacific Northwest Aquatic Monitoring Program (PNAMP), Northwest Environmental Data-network (NED), etc.)."
  - contingencies
  - collaboration and oversight of implementation
    - establish a federal, state and tribal Regional Implementation Oversight Group (essentially an evolution of Policy Working Group it would seem)
    - long list of duties, including "[c]oordinate implementation and oversight of the PA with other regional process (e.g., Power and Conservation Council; Regional Forum; U.S. v. Oregon; NOAA recovery process) to minimize duplication and promote efficiencies."

- Biological Analysis
  - an analysis of the "base," "current" and "prospective" conditions for each population in an ESU in terms of productivity, abundance trends and extinction risk metrics.
  - populations analyzed so far are in Snake River ESUs, Upper Columbia ESUs, and Middle Columbia Steelhead ESU
  - analysis is population by population; no attempt yet to roll up to ESU level
  - this is an Action Agency product, not an official NOAA jeopardy analysis -- but it uses the metrics NOAA set forth in the "Lohn memo" on jeopardy and NOAA personnel have been involved
  - steps in analysis:
    - Step 1: "base" period condition
      - "base" period is 1980-2000
      - assess base period status of each population in terms of metrics for recruit-per-spawner, mean population growth (lambda), trends in abundance, and extinction risk
      - desirable condition is to be >1 for productivity and abundance trend metrics
      - extinction risk target is essentially to be <5% risk of being less than 50 fish in 24 years (one of the "quasi-extinction" levels analyzed)
      - extinction risk analysis appears to relate to the "survival" prong of the jeopardy analysis; productivity and abundance trend metrics aid also in the "recovery" prong of the jeopardy analysis

    - Step 2: calculate "gaps" between base period status and the desirable condition for each metric
      - expressed in terms of % improvement needed to get to desirable condition
      - note: these "gaps" are *not* the "gaps" that come from the TRT recovery analysis (the TRT "gaps" are those between current condition and the viability curves that could represent recovery)

    - Step 3: estimate survival improvements from actions in the 2000-06 period -- the first step in a "base" to "current" adjustment
      - estimate % survival improvements stemming from actions implemented in period 2000-06
      - survival improvement estimates for hydro, tributary habitat, estuary habitat, predator control, hatchery and harvest actions

    - Step 4: assess "current" status -- the second step in the "base" to "current" adjustment
      - apply the survival improvements estimated to result from actions in the "current adjustment" 2000-06 period (above) to see if they reduce the gaps between the base period status and the desirable condition for each metric
      - display "adjusted" or remaining "gaps" between "current" period status and the desirable condition for each metric
      - again, any gaps are expressed in terms of % improvement needed to get to desirable condition

- Step 5: estimate survival improvements to result from Proposed Actions in 2007-17 period -- the first step in a "current" to "prospective" adjustment
  - estimate % survival improvements stemming from actions proposed for implementation in 2007-17 period
  - survival improvement estimates for proposed hydro, tributary habitat, estuary habitat and predator control actions; no quantitative survival improvement estimates for proposed hatchery and harvest actions

- Step 6: assess "prospective" status -- the second step in the "current" to "prospective" adjustment
  - apply the survival improvements estimated to result from actions in the "current adjustment" 2000-06 period (above) to see how they reduce the gaps between the "current" period status and the desirable condition for each metric
  - display the "prospective" status of each population in terms of the adjusted metrics for recruit-per-spawner, mean population growth (lambda), trends in abundance, and extinction risk

- The goal at the end is to have every metric for every population in a desirable condition. This is mostly achieved. Where it is not, there are narrative, qualitative observations addressing the remaining gap, explaining away its significance in terms such as: one remaining gap is tiny and the other metrics are fine; and/or, one population is weak but the others in the ESU are solid; and/or, assuming benefits from supplementation (which are not quantified here), the gap closes; etc.

- The analysis also includes an assessment as to how the Proposed Action satisfies the share of the "conceptual framework gaps" or TRT gaps" tentatively assigned to the hydrosystem. Likely to confuse the casual observer.