

System Configuration Team (SCT)
Reasonable & Prudent Measure #26
Meeting Notes
January 16, 1997

Greetings and Introductions.

This supplemental meeting of the System Configuration Team, held at the National Marine Fisheries Service's offices in Portland, Oregon, was co-chaired by Jim Ruff of the Northwest Power Planning Council staff and Bill Hevlin of NMFS. The agenda for the January 16 meeting and a list of attendees is attached as Enclosures A and B. The following is a summary (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Mott of NMFS at 503/230-5420.

I. Lower Snake River Feasibility Study -- Overview of Study Plan.

The purpose of this presentation is to give you an overview of the engineering and biological components of the Corps' Lower Snake Feasibility Study, said Mike Mason of COE. He introduced Pete Poolman of the Corps' Walla Walla District, the study manager for the project, who provided some background information on this effort and a report on current status and schedule.

Phase I of the System Configuration Study (SCS) was undertaken in response to regional requests following the Salmon Summit and the release of the Power Planning Council's Fish and Wildlife Amendments in 1991, Poolman said. The original objective of the SCS was to lay out physical changes to the Columbia and Snake River systems to improve the survival of juvenile and adult anadromous salmonids.

SCS Phase I included a wide range of activities -- more than 22 Lower Snake drawdown activities, as well as projects at John Day, Poolman continued. It also included the assessment of additional sites for upstream storage; three sites were selected for detailed feasibility study by the Bureau of Reclamation, but only one of those sites -- Moore Hollow (? -- hard to hear), near Ontario, is still under consideration.

SCS Phase I was a recon-level study, Poolman continued -- preliminary assessment of implementation costs, environmental effects and economic impacts. The study looked at upstream collection, migratory canals and pipelines; there was also a long list of existing system improvements considered in that process. A draft Phase I report was issued in 1994, said Poolman; it contained a number of conclusions:

- ? The migratory canal and pipeline options were eliminated from consideration.

- ? Upstream collection was eliminated from consideration.
- ? The number of Lower Snake River drawdown options under consideration was substantially reduced.
- ? Alternatives recommended for further consideration included Lower Snake River drawdown, additional upstream storage and a variety of system improvements.

In response to the 1995 Federal Columbia River Power System Biological Opinion, said Poolman, the System Configuration Study was transformed from a study into a program. A number of pieces recommended in the SCS were broken off for separate study and implementation: extended-length screens, raceway shading, new barges, improvements to the Lower Snake handling facility, among other items.

The other piece of the puzzle was the Lower Snake River Juvenile Salmon Migration Feasibility Study, which included Snake River drawdown, Poolman said. This study was undertaken in response to RPAs 10 and 11, which called for investigation of drawdown and surface bypass. That led us down a much narrower path than we had initially anticipated that system configuration would take, Poolman explained. Under RPA 10, we were required to produce an interim status report, laying out preliminary conclusions, by mid-1996. As most of you are aware, Poolman said, that status report was released in December.

The interim status report also laid out a study plan for the remainder of the feasibility studies, Poolman said. The main point to make about these is that the methodologies used for these analyses are still being developed. A Drawdown Economic Advisory Committee (DEAC) has been convened, he added.

Who is on that committee? asked Ruff. The Corps has the lead, replied Mason. It has been agreed to bring in an independent professional economist to function as facilitator; the Corps is currently putting together the necessary contract to get him or her on board. It is anticipated that the Council's new Independent Economic Advisory Board will also be involved, primarily in a review capacity. As far as membership, said Mason, we invited a broad spectrum of entities to participate in the DEAC process; the states have been invited to attend future meetings, and need to provide the names of their representatives to the committee as soon as possible. I would suggest that you write a letter to each governor's office, asking him to nominate a representative, suggested Idaho's Steve Pettit. We'll do so, Mason replied, with a cc to each state's Council members.

So this group will be leading the effort to develop economic analyses of the various drawdown and surface collection alternatives under consideration? asked Ruff. That's correct, Mason replied. It's important for people in the region to know that this is going on, observed Ruff.

We've only just begun to establish the regional interface that will be a big part of this effort, Poolman continued -- the Drawdown Economic Advisory Committee is one facet of that. As far as public involvement, we will produce a final feasibility report, including draft and final Environmental Impact Statements. Associated with those documents, there will of course be periods for public review and comment.

How confident are you about the cost estimates you've developed so far for each of the alternatives? asked Steve Rainey of NMFS. I'm a little perplexed that we're seeing some pretty detailed dollar figures quoted in the newspapers, before the economic analysis committee has really begun its work. There have been a lot of numbers in the media, but those are definitely not feasibility-level numbers -- they're recon-level numbers, Poolman replied. However, my personal confidence in those cost estimates is very high.

It's not clear to me how this whole process will be coordinated with the states and tribes, said Ron

Boyce. You're talking about the process for taking all the information generated by the various committees and study efforts and coming up with our final recommendation? asked Mason. That's correct, Boyce replied. Good question, Mason replied -- we've begun to look at various decision analysis models. We welcome any suggestion other entities may have, because it's our goal to have full regional involvement in this decisionmaking process. It's possible that the District may need to convene some kind of biological coordination group, added Witt Anderson of COE.

Poolman described the traditional Corps feasibility study process, and the various internal COE review processes required before such a study goes to Congress for funding appropriation. The EIS and feasibility work will be started in 1997, with the final feasibility report due out in the summer of 1999 for COE and OMB review. Bear in mind that the 1999 decision date is not very far away now, and we really need to move out on this process, Poolman said. Will this schedule allow construction to begin in 2000? asked Boyce. No, replied Mason -- if we end up recommending drawdown at the four Lower Snake projects, we can't move on that activity until Congress first authorizes funding, then appropriates funds. If we end up choosing one of the non-drawdown alternatives, it won't necessarily be an authorization question -- it's an appropriations issue.

Bear in mind that although there is generally about an 18-month lead time for Congressional appropriations, we could begin detailed design work before we receive construction funds, said Mark Charlton of COE -- in other words, we're not going to stop work until Congress appropriates funds. In reality, though, if a natural river drawdown alternative is chosen, we're probably looking at the post-2001 period for initiating construction -- 2001 will be a best-case scenario. This will all be laid out in the feasibility report, he added.

Next up was Steve Tatro, the lead engineer on the Lower Snake River Drawdown Feasibility Study, who took the SCT through a detailed slide show on the natural river drawdown alternative. What I'm going to present today, he said, is a summary of the Corps' current thoughts on natural river drawdown, which separates out into five distinct activities: reservoir evacuation, embankment removal, reservoir modifications, project decommissioning and channelization. He went on to describe each of these activities in detail (see Enclosure C for details of Tatro's presentation).

The meeting participants spent a few minutes discussing the magnitude of the breach and

removal

process necessary to achieve natural river flows through Lower Granite Dam. Are you going to look at the feasibility of removing the entire structure? asked Heinith. It may turn out to be cheaper to remove the dam completely. Not even close, Tatro replied -- there's no way you could

remove that entire structure for the amount of money we're projecting under the natural river option, and we can provide a justification for that if the region desires.

What we're hoping to get from the study of each of these tasks, said Tatro, is a well-developed concept design which answers all of the major engineering questions, and addresses procedures, schedules and task interrelationships. Because in reality, this project is probably going to turn into

a network of 500-600 major interrelated tasks.

The budget for this work is about \$1.2 million in FY'97, and \$700,000 for FY'98, Tatro said.

Our

goal is to finish all of these studies by September 30. And in the final report, you'll detail implementation strategies and schedule? asked Rod Woodin of WDFW. Yes, Tatro replied -- all of that will be wrapped up in this document, which will be attached as Appendix A to the feasibility report.

Just out of curiosity, said Pettit, in your final design criteria for the 100-year flood, do you design it to pass fish for that event, or do you decide that, for ten or so days of that extreme maximum flow, you don't have any passage? What we've done with fish ladders in the tributaries is take the

high five-day event flow level, Rainey replied. But here, since we have the Bjornn studies, it seems to me that it would be appropriate to ask the biologists what the highest flow would be under which they would want to see fish pass through a breach. It boils down to a bioengineering

call, but I don't have the answer at this time. But given the fact that a 100-year flood might be expected to produce flows in the neighborhood of 400 Kcfs at Lower Granite, we would never expect to have a breach large enough to limit velocities to 8 f.p.s. under those conditions, Rainey said.

It was suggested that the Fish Facilities Design Review Work Group might be the venue in which

to discuss the appropriate criteria to ensure safe passage under all flow conditions. Mason asked Rainey to place the risk question on the agenda for the next FFDRWG meeting, perhaps with an eye toward establishing a FFDRWG subcommittee to look at this issue.

Up next was Rick Jones, to discuss non-anadromous fish biological considerations associated with

drawdown. What I want to apprise you of today is four studies we're planning to conduct in 1997, Jones said; at this point in time, these are only study concepts. Because of the current state of our contracting process, I would rather not address the cost of these studies at this time, Jones said. The studies include:

- ? A sediment contaminant/nutrient study. The goal of this study is to locate areas, within

the substrate of all four Lower Snake reservoirs, that have contaminants locked up in their substrates, and to quantify what biological effects, if any, these sediments may have if disturbed.

? An economic evaluation of the recreational fishery that exists in the reservoirs now, and what can be expected if the system is returned to a riverine environment.

? A basic Biological productivity study, the goal of which would be to determine primary productivity in each of the reservoirs. A second component of this study would be an examination of representative surrogate free-flowing reaches, to yield an estimate of productivity in a riverine system. Modeling would be used to predict secondary productivity at the mid-level stage. The basic idea here is to compare the ability of the system to produce fish food organisms in an impounded condition vs. a free-flowing condition, Jones said. Several SCT participants commented that there has already been considerable work done on this issue, and questioned the need for further study.

? A final limnological baseline survey for Lower Snake reservoirs and tributaries, incorporating existing data with a final year of basic limnological study in the four Lower Snake reservoirs.

I'm curious about why we weren't given the opportunity to review these proposals sooner, since they would appear to be part of the cost cap, and of the line items that we approve under the 1997

spreadsheet, said Boyce. Why wasn't this integrated into the AFEP process? We're doing the same thing on the engineering elements that Steve just talked about, and I didn't hear the same concern about that review process, replied Mason. There are things we have to do to meet the timeline. I didn't realize that there was this level of interest in this work outside of AFEP, which has been well-coordinated. The drop-dead date on awarding some of these contracts is early February, if we're to accomplish the necessary work in 1997, Mason added.

There are some real questions about both the need for and methodology of some of this work, said Boyce. It's a potential cost saving issue as well, said Pettit. Those are legitimate concerns, said Mason, and I guess we need to look at how best to address them in the limited time that we have. Overall, though, I would make the point that we need a lot more information than we currently have to make an informed decision about drawdown, and to satisfy the NEPA requirements for this project.

After some minutes of further discussion, Ruff made the point that the issue of how to coordinate the various drawdown studies probably requires further thought -- we need to talk about, and think about, the role SCT plays in relation to FFDRWG, he said. It seems to me that we have a void in the biological study arena, he said, and we need to discuss a process for oversight of all the studies that are currently being proposed.

What's the total funding for these four studies? asked Steve Pettit. The spreadsheet says that the cost for biological investigations for FY'97 is \$5 million, Ruff replied, but it doesn't break those costs out on a project-by-project basis.

Moving on, Dan Kenney spent a few minutes discussing key informational items needed to support the feasibility study. He went through a series of overheads, identifying questions

associated with how to get the needed information, with gas supersaturation, surface bypass/collection, reach survival and juvenile and adult transportation. The specific questions raised by Kenney are attached as Enclosure D.

How do you quantify the survival that you would expect to see under the drawdown scenario? asked Boyce. Good question, Kenney relied -- one way would be to take a look at what you believe dam/reservoir passage route mortality would be. Another way would be to look at survival in existing free-flowing stretches that might be similar to the Lower Snake. A third way would be to look at the historical measures of survival.

Mason said that one of the tasks facing him and Poolman is to lay out when the benefits for anadromous fish need to fit into the overall schedule for this project. It was agreed to convene an ad hoc group to discuss scheduling needs for anadromous fish analysis; specifically, to identify the linkages between the milestones, and to clarify the responsibilities of the various entities interested in this process.

After a few minutes of additional discussion, the meeting was adjourned.