

SUMMARY OF THE PANEL DISCUSSION

The panel members were given 3 to 4 minutes to summarize their views of the meeting. The remainder of the time was spent in a question and answer session.

Panel Members:

Steve Huffaker, Idaho Department of Fish and Game
Jim Martin, Oregon Department of Fish and Wildlife
Chris Randolph, Idaho Power Company
Paul Kucera, Nez Perce Tribe
Bill Shake, U.S. Fish and Wildlife Service
Lt. Col. Robert Volz, Corps of Engineers

Steve Huffaker, Chief, Bureau of Fisheries

We should not separate harvest and production program. We are trying to hit a moving target with smolt and adult goals. I suggest fishery goals should be designated rather than numbers of adults or pounds of fish produced. We are meeting goals fairly well with the hatchery steelhead program but the hatchery program should not act as a replacement for wild steelhead production. We must reexamine locations and methods for harvest to allow rebuilding of wild steelhead stocks.

We are not meeting our goals at any chinook hatcheries. There is a need to improve quality of smolts. Methods to look at are: shade, exercise, disease control, and improved transportation techniques. The use of endemic stocks is desirable. We must increase natural production along with hatchery production. It is time to start looking at new and innovative ways of using hatcheries. We need to achieve a balance between hatchery and wild fish. We need to reexamine fisheries in Zone 6 and below Bonneville Dam. I agree with the Nez Perce Tribe's approach to rebuilding wild stocks instead of just releasing fish for harvest. The key for improving chinook runs is improved mainstem survival for both hatchery and wild fish. Both improved flows and passage facilities are needed. (NOTE: Steve Huffaker provided a written summary of his remarks--they follow the panel summary)

Jim Martin, Chief, Fisheries Division

I have gotten everything expected out of the workshop. People are challenging assumptions with energy and creativity. I am anti-poor planning, not anti-hatchery. The future is tied to hatcheries, but they must be effective to meet fishery and wild fish production goals. The challenge is to make hatcheries effective. I will promote pilot programs and evaluation before committing to major production programs. Goal posts have changed from restoring fisheries to supplementing wild production. We need careful planning when developing broodstocks. Supplementation programs need to take a careful look at programs and change direction when necessary.

Chris Randolph, Aquatic Program Coordinator

This is not the time for "old timers" to step aside; we need experience from the past. Future fish management will be impacted by the Integrated System Plan (ISP), Endangered Species Act (ESA), water budget, and hatchery management. The future will require changes in hatchery practices which will affect smolt quality, disease, release strategies, and broodstock development. Exciting times lie ahead.

Paul Kucera, Fisheries Division

The value of the conference has been to develop a forum to look at programs and areas for change. The process should not stop here. Lower Snake River Comp fish should go into the habitat. The Nez Perce Tribe supports gravel-to-gravel management using endemic stocks. We all need to review the Columbia River Intertribal Fish Commission's production report and develop a position on supplementation. We need to manage broodstocks to encourage diversity and preservation of individual stocks. We must get serious on passage issues. Alternative rearing and release strategies as related to smolt quality and disease need to be tested. We need to be careful because hatchery steelhead may increase to a point where we have a problem deciding what to do with them!

Bill Shake, Assistant Regional Director, Fisheries

The next five years will be most challenging. If we do not take aggressive action now we will be writing recovery plans and will lose management flexibility. ESA does not have to be a "black cloud". We can view ESA as an opportunity with LSRCP as a tool. LSRCP facilities are state-of-the-art and funded by users. I challenge colleagues to reevaluate LSRCP and give it a new future through reprogramming and aggressive action. We should decide changes needed and "sell" them to people up and down the river. The LSRCP Boise office can be used as a focal point to begin aggressive actions.

Lt. Col. Robert Volz, District Engineer, Walla Walla District

This was an objective meeting without vindictiveness. The Corps role in LSRCP is nearing completion with Clearwater Anadromous Hatchery to be completed in 1993. The Corps will still be involved in our fish passage projects. Smolt production should be based on quality, not quantity. We need a balance between actions and evaluation to get the most benefit to the resource. Research dollars should be used in areas where there is the highest payoff. Evaluation results, rather than quotas, should be used to make decisions. Lastly, I would like to see a follow-up to this meeting.

Questions and Answers

Question 1:

Doug Dompier: Are these "state-of-the-art" facilities? Why weren't sockeye and coho addressed in the LSRCP? Are we studying the stocks to death? Are there broodstock plans for Clearwater Hatchery? Does the Corps feel guilty about (not including) coho and sockeye?

Answer 1:

Col. Volz: I didn't say I felt guilty, I said I did not want to be guilty of holding agencies to production quotas.

Steve Huffaker: There has been no lack of planning for Clearwater Hatchery. It is premature at this time to decide on a broodstock.

Joe McMichael: Agencies provided input on species and production goals for LSRCP (that is, the decision not to include sockeye and coho in the LSRCP was a collective decision).

NOTE: The note takers were not sure whether Joe McMichael or Vic Armacost made the above comment.

Question 2:

Dexter Pitman to Bill Shake: If LSRCP were doing its job, would we be facing listing under ESA?

Answer 2:

Bill Shake: If the program had gone as planned, wild stocks would not be declining. LSRCP did not cause the decline but it is not achieving its goals in terms of chinook survival and adult returns.

Question 3:

Jay Marcotte: What is necessary to move toward natural production? What are the steps? I am not getting a sense of moving toward a single coordinated program. What will the program look like?

Answer 3:

Bill Shake: Managers collectively review programs, make recommendations, and get administrators to revisit programs. Sometimes legislation is necessary.

Steve Huffaker: Both hatchery and natural production will be increased through mainstem survival improvements.

Jim Martin: I agree with Steve's response; mainstem survival must be improved. More and larger hatcheries are not the answer to low survival. The forums for coordination are the Columbia Basin Fish and Wildlife Authority, (CBFWA), ISP, agencies and tribes, and individual decisions made from basin plans. We should consider a variety of programs even though they may be difficult and complicated.

Question 4:

Jay Marcotte: How are we going to use existing agencies/programs to solve problems?

Answer 4:

Dan Herrig: The LSRCP has flexibility within the program to solve many problems.

Jim Martin: We already have a well-coordinated agency program within the basin, i.e. the CBFWA.

Question 5:

Chris Christianson: What actions are necessary to improve barging of chinook and return chinook to Hells Canyon?

Answer 5:

Jim Martin: We need flows to get fish to Lower Granite Dam before we even have an option to transport them.

Steve Huffaker: Some problems probably cannot be resolved. More research is needed on passage and transport as related to migration time.

(NOTE: There was a comment here about high in-system vs. low in-system migration losses that was not clear in the meeting notes.)

Bill Shake: ~~Barging is an "ambulance" method.~~ Therefore, mainstem passage must be improved.

Question 6:

Ken Witty to Steve Huffaker: Your opening remarks made a comment regarding the fact that harvest and production are separated in the basin. Would you give your views on how harvest and production should be coordinated?

Answer 6:

Steve Huffaker: As it is now, harvest drives the river's fish management systems. It may be better to set escapement goals based on natural and hatchery production needs and then harvest the available surpluses.

Question 7:

Doug Dompier: What are the agencies doing to improve the quality of smolts from present facilities?

Answer 7:

Bill Shake: Evaluation of each facility is built into the LSRCP. We practice adaptive management.

Jim Martin: LSRCP has the most active evaluation program in the Northwest. Studies are identifying problems, recommending solutions, and generating new ideas.

Steve Huffaker: We should expect a difference in quality between hatchery and wild smolts.

Question 8:

Vic Armacost: How do we know when we have a quality smolt?

Answer 8:

Steve Huffaker: We do not know for sure at this time. We are developing a process to determine smolt quality. Quality should be measured in terms of adult returns.

Jim Martin: We need to monitor fish through rearing and on through adult returns.

Question 9:

Mike Bannock: Why don't we evaluate the entire life cycle (i.e. egg-to-adult survival) rather than focusing on smolt-to-adult survival?

Answer 9:

Ed Crateau: Egg-to-smolt survival is 70 to 80 percent and cannot be greatly improved.

Question 10:

Virgil Moore: Should we change hatchery goals from production (pounds, numbers, etc.) and adult returns to smolt to adult survival?

Answer 10:

Jim Martin: No, we need to keep track of the original goals of the program which was to restore runs. Smolt-to-adult survival should be used as an indicator of success but should not be used exclusively.

Joe McMichael: In the past, smolt-to-adult survival was affected by nitrogen associated with high flows. Attempts have been made to solve this problem but they have not been thoroughly evaluated because of low flows in recent years. Also, if barging is an ambulance, what is a hatchery? We should be careful of what we describe as our goals.

Question 11:

Gary James: We need to be sure that ideas expressed at this meeting are carried through. What process will assure that this momentum continues? I suspect we know enough to make changes. What will be the immediate follow-up?

Answer 11:

Bill Shake: There will be a record of this meeting. Managers will convene and establish policy changes, and a time-line will be developed.

Steve Huffaker: Idaho is developing a 5-year plan. The plan will contain recommendations and guidelines.

Summary Panel Remarks
Snake River Hatchery Review
Steven Huffaker

The goal of the mitigation for mainstem dams has been described in various ways. Sometimes in terms of numbers and pounds of smolts, and more recently and appropriately, in terms of adults back to the "project area." I think it is time to recognize that the goal of mitigation is appropriately to replace lost fisheries and not just lost fish. The dams took a toll on wild fish. Mitigation was intended to build hatcheries which would provide adults for fisheries to replace the portion lost. Some folks have apparently interpreted the future as a replacement of wild fish with hatchery production and some preservation level of wild fish as museum pieces. This is not acceptable to Idaho. We need harvestable surpluses of both hatchery and wild stocks, and an appropriate balance between hatchery and wild production methods.

Chinook hatchery projects above eight dams, according to the evaluation we have seen here, have thus far provided only enough returns for perpetuating the hatchery product. In good survival years, Rapid River has returned harvestable surpluses to Idaho and other fisheries, but to date, the LSRCP hatcheries have not provided fisheries above Lower Granite. It is obvious that the factors which decimated wild chinook are also severely limiting the success of hatchery chinook populations.

Steelhead hatchery programs have been markedly more successful than chinook programs. It appears that steelhead hatcheries are doing exactly what they were intended to do, i.e. provide harvestable surpluses. What they are not doing is providing wild fish. That should be no surprise. Hatchery selection processes are different from those in nature. Many fish which survive the hatchery rearing process do not have the characteristics that make fish survive in the wild, and these fish can have a net negative effect on total natural production, at least in the short-term, until stocks readapt to the wild. If we expect hatcheries to help rebuild self-sustaining populations, a non-traditional objective, we will need to use them in non-traditional ways.

With steelhead, we need to maintain hatchery production and use wild stock protection and non-traditional hatchery operations to restore wild/natural production to full seeding levels in the habitat. This will require constraint in harvest management arenas.

The new and innovative use of artificial production in combination with a commitment to a "gravel to gravel" approach to wild/natural production seems to beg for some equally new and innovative harvest measures. Tributary harvest, non-lethal gear, known stock management, and even the sanctity of the Columbia River Compact and non-tribal commercial fishery in zones one through five need to be reexamined. "Business as usual" has led to the current weak wild stock situation, so some change is clearly needed for recovery of wild steelhead.

CLOSING REMARKS BY JIM MARTIN

We now collectively know what we individually knew prior to the meeting. The meeting has demonstrated the high quality of people working on the LSRCP Program and other Snake River basin hatchery programs. The USFWS and IDFG have done an excellent job in coordinating the program for this meeting. There is a paradox in having a long planning and development program in a rapidly changing world. The workshop demonstrated common problems throughout the basin. The greatest challenge now is to stop the decline of chinook. Flow problems must be resolved. Public expectations are high. I believe we have met the objectives of this workshop. We now must follow-up by reviewing what we have heard and implement changes.

Dear Reviewer:

Panel discussion and closing remark notes were requested from four people attending the workshop. I combined the notes and in many cases had to paraphrase them. I sincerely hope that I have not changed the meaning of comments made by the panelist or of those people asking questions.

Ken Witty

SRHW. NTS

Comments from Steve Huffaker (IDFG), Dated 1/2/91

I think we need to focus some of the energy that has been released at this meeting into new directions and actions on the ground and in the water. I propose that as a result of what we have learned at this conference, we implement the following:

- 1) Optimize hatchery practices to improve chinook survival. Bacterial kidney disease, E.I.B.S., water supply sanitation, and rearing density appear to be areas which should be addressed first. Rearing practices and the timing of marking also must be investigated.
- 2) Learn how to transport chinook. The clear difference between the success of hatchery steelhead and hatchery chinook is testimony to this need.
- 3) Use new artificial production facilities for the expressed purpose of rebuilding natural production to self-sustaining levels. I am pleased to see upriver tribes headed in that direction.
- 4) Strive for the 50-50 balance that was intended when the LSRCP goals were set forth. We must use short-term harvest constraint to restore wild/natural production to a seeding level capable of sustaining harvest while we make long-term improvements in system survival. We can then gear production hatchery operations to provide the other half of the adults.
- 5) Clearly if the primarily limiting factor for both wild and hatchery chinook -- mainstem survival -- is not resolved, chinook cannot recovery. No production method can be fruitful if all the fish produced die as juvenile outmigrants. Once system survival is restored, we must maintain a balance of hatchery and wild chinook so harvest management for chinook is not plagued with the same weak stock problems we have with steelhead.

I feel this has been a very productive session one which has shown that hatcheries and hatchery products have done what they were asked to do. Steelhead have succeeded. Chinook failure is due primarily to system survival problems. We are now changing the goal for some hatcheries, and I hope they can again rise to the challenges placed before them.

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