

MEETING SUMMARY

**Hatchery Scientific Review Group
Radisson Hotel, SeaTac, Washington
December 6-8, 2000**

Agenda: The purpose of this meeting was to receive presentations on several ecosystem assessment tools; continue planning for a regional review of the Puget Sound and Coastal Washington hatchery system including preparing a benefit/risk tool and operational guidelines for use in that review; review research progress report comments; discuss the upcoming research review meeting; and consider a budget and work plan for 2001.

In Attendance:

- HSRG members Lee Blankenship (vice chair), Don Campton, Trevor Evelyn, Lars Moberand (chair), Robert Piper, Lisa Seeb, Bill Smoker and alternate Paul Dorn.
- Facilitation team members Kathy Hopper, Michael Kern, Bj Mirk and Jim Waldo (Jim and Kathy were not in attendance on December 6).
- Randy McIntosh of the Northwest Indian Fisheries Commission (NWIFC) and Ed Manary of the Washington State Conservation Commission attended specific agenda items to make presentations, at the request of the HSRG (see below).

Discussions/Presentations:

Michael Kern welcomed Hatchery Scientific Review Group (Scientific Group) members to the meeting and reviewed the agenda.

Lars Moberand introduced the Scientific Group to the Ecosystem Diagnosis and Treatment (EDT) tool. He explained that EDT is an expert system that looks at available information on habitat and productivity. It links habitat characteristics with performance of a population and quantifies the relationships. EDT collects information on 40 attributes of a landscape and applies biological rules on a species and its environment to estimate species response. EDT is intended to answer questions about whether a specific set of actions will lead to recovery goals, to guide decisions and learning. Good correlation has been shown between EDT estimates and observed data, where such data exist. EDT is being used extensively and is moving into the public domain and onto the Internet over the next few months.

Randy McIntosh of NWIFC made a presentation to the Scientific Group on the Salmon and Steelhead Habitat Inventory and Assessment Program (SSHIAP), explaining that it was developed as the habitat component of the Salmonid Stock Inventory Project (SaSI) and has been reshaped to fit Endangered Species Act (ESA) processes. The program has been conducted since 1985, focusing on Water Resource Inventory Areas (WRIAs) 1–23, which corresponds quite closely with the Scientific Group's area of interest, Puget Sound and the Coast. SSHIAP is an information system that characterizes freshwater and estuary habitat and inventories the hydrology in these regions by gradient, confinement, barriers, hydromodification, ponds and other attributes that determine productivity as salmon habitat. All SaSI stocks and stock elements

HSRG Meeting Summary
December 6–8, 2000

are included. The information is incorporated into a Geographic Information System (GIS) and can be used to reveal habitat that would be made available by restoration efforts. The SSHIAP team is working to make the database available over the Internet. Work is also underway to extend coverage to WRIAs 24–62. Randy said the SSHIAP team will help provide information for the Hatchery Reform regional review process, as long as the agency managers give their OK.

Ed Manary of the Conservation Commission provided the Scientific Group with an introduction to the Limiting Factors Analysis. The Legislature directed the Commission to do a Limiting Factors Analysis in 1998 to provide a consistent look at habitat and prioritize habitat restoration. Limiting factors are conditions that limit the ability of habitat to fully sustain populations of salmon. The Commission convenes a Technical Advisory Group (TAG) for a specific WRIA, in consultation with local government and treaty tribes. The TAG collects and assembles known information about the limiting factors related to habitat conditions in their WRIA.

The results are made available to all interested individuals and organizations and are used by locally based selection committees to prioritize projects for funding under the state salmon recovery program. Results may also be used for project identification by local organizations and individuals interested in habitat restoration. The TAG reports will help focus resources on habitat work that will have the greatest benefit to fish and also identify information gaps, so future data collection can be efficiently targeted. Twenty-two WRIA reports have been completed to date. They are published on CD-ROM with data, maps, results and recommendations. Ed agreed that the Limiting Factors Analysis report and team could be of use during the regional review process.

The Scientific Group decided to break into small groups to address three areas that the group felt need to be added to the co-managers' Benefit/Risk Assessment Protocol (BRAP) to create a benefit/risk tool useful for the regional review process: 1) Biological Significance, 2) Population Viability, 3) Habitat/Environment. For each area, the small groups considered: 1) How to define current conditions, 2) How to evaluate those conditions, 3) What designations to assign three evaluative levels for each area. After considering various designations, the group decided to use a 1-2-3 numbering system or green-yellow-red color-coding system to categorize current conditions and to provide definitions for each rating, rather than trying to identify one particular word or phrase for each level.

The definitions for each area were drafted by the small groups and handed out at the meeting in outline form. The scientists from the management agencies will provide these draft outlines to agency personnel for informal review and bring their feedback to the January meeting. They will do the same with the risk portion of BRAP and the BRAP approach to cumulative effects. Lars Moberand said that Jim Scott and Craig Busack, who have been key in developing the BRAP, will help the Scientific Group with these modifications to the tool.

The Scientific Group discussed, modified and approved a more detailed approach to the regional review process. It contains the following steps:

- Identify regional management goals for conservation, harvest and environment for Puget Sound and Coastal Washington SaSI stocks.
- Develop a hypothetical example as a template for the managers.

**HSRG Meeting Summary
December 6–8, 2000**

- Apply the benefit/risk tool and the operational guidelines to a particular program (facility operations within a system).
- Verify and refine results with whatever regional data are available (SSHIAP, EDT, etc.)
- Assess current programs' likelihood of achieving the goals.
- Make recommendations about improving that likelihood (program goals or operations may change based on these recommendations).
- Apply monitoring and evaluation to determine success in meeting regional goals.

The Scientific Group decided to hold the regional review meetings in the regions and to include time before the meetings for some or all members to receive facility and/or basin tours. The group agreed that they will need dedicated staff from the management agencies with skill sets appropriate to: 1) organize regional review meetings, and 2) synthesize and distill information in preparation for the meetings.

Paul Dorn and Kathy Hopper updated the Scientific Group on the draft hatchery operational guidelines under development as part of the regional review preparations. John and Kathy have been putting together a team of agency personnel to help draft these guidelines. The Scientific Group emphasized that the guidelines should be a means of introducing to hatchery managers the best scientific practices the group has identified and provide the prescriptive practices not included in the Scientific Framework. However, these guidelines should be flexible, not rigid, and should consider particular circumstances.

It will be important to keep the question of what you are managing for (the regional reviews) separate from the question of how you are doing it (the operational guidelines). The guidelines will include genetic considerations of broodstock and mating; identify genetic information and broodstock sources; include physical plant and resource inventories; have detailed appendices; and address harvest issues as they affect hatchery success, but not harvest management in general. They will be field tested as part of the regional review process.

The Scientific Group heard back from the small groups assigned in October to review each progress report received from 2000 research grantees. The Scientific Group decided it is the responsibility of each small group to present to their researchers questions raised by the progress report reviews. This will allow the researchers to be prepared to address these questions at the February research review meeting. Lisa Seeb reported that preparations for that meeting are going well and presented a draft agenda. Lee Blankenship will provide the draft agenda to the principal investigators, presenters and other attendees.

Jim Waldo, Kathy Hopper and Michael Kern updated the Scientific Group on Hatchery Reform Project communication activities. Jim said that it will be important to be able to point to an impressive set of accomplishments in 2001. Kathy said that the panel on hatchery reform that the Scientific Group sponsored at the December 2000 Northwest Fish Culture Conference in Sacramento was very successful. The Scientific Group agreed that it should plan to participate in next year's conference, in Portland. The Scientific Group decided to request that the Washington State Department of Fish and Wildlife (WDFW) and NWIFC host an information session on the Hatchery Reform Project in Olympia in April. Michael and Lars Mobernd are completing revisions to the Scientific Group's *Scientific Framework for the Artificial Propagation of Salmon*

**HSRG Meeting Summary
December 6–8, 2000**

and Steelhead and will make the finalized document available from the Hatchery Reform Project web site.

The Scientific Group discussed and approved the following 2001 work plan and a budget designed to accomplish that work plan.

Task	Jan – April 2001	May – July 2001	Aug – Dec 2001
HSRG Research	—————→		
Conduct Regional Reviews		—————→ Initial regional reviews (South Sound, Stillaguamish / Snohomish River, Lower Straits and Hood Canal)	—————→ Remaining regions
Benefit/Risk Tool	—————→ Task group develop expanded benefit/risk tool	—————→ Field test in initial regions	→ Revise benefit/risk tool if needed
Hatchery Operational Guidelines	—————→ Task group develop draft operational guidelines	—————→ Field test in initial regions	→ Revise guidelines if needed
Monitoring & Evaluation	—————→ Task group develop draft M&E matrix	—————→ Field test in initial regions	→ Revise matrix if needed
Outreach & Communications	—————→ Meetings w/ individual tribes	—————→ Report to Congress	—————→
Funding	—————→ Meet w/ state and federal decision makers to secure 2002 funding		

The Scientific Group agreed to hold its next meeting January 17–19, 2001 in Silverdale. It also scheduled the following monthly meetings, through July 2001:

- February 12–14, NW Science Center in Seattle (research review)
- March 14–16, downtown Seattle
- April 16–18, Olympia
- May 16–18, Olympia (regional review)
- June 13–15, Everett (regional review)
- July 18–20, Hood Canal (regional review)