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April 2, 2003

MEMORANDUM

TO: Council Members

FROM: Bruce Suzumoto

SUBJECT: Funding for completion of phases II and III of the Hatchery and Genetics Management Plan process.

Issue

Bonneville and NOAA Fisheries are requesting Council approval for funding of agency and tribal participation in Phase II and III of the (Hatchery and Genetics Management Plan) HGMP process (project no. 2003-005-00). Total request for the project is $805,600.

Background

The 2000 Federal Columbia River Power System Biological Opinion includes a provision (RPA 169) that requires action agencies to develop HGMPs for anadromous salmon hatchery programs in the Columbia River Basin. HGMPs are documents NOAA Fisheries uses to detail specific hatchery data and information and ensure that artificial production programs meet Endangered Species Act, mitigation, tribal trust, and other legally mandated responsibilities. To produce final HGMPs, a process has been developed that involves collaborative participation of the state, tribal, and federal agencies operating anadromous artificial production programs. This process has three phases. Phase I is the collection and organization of information about existing artificial propagation programs and is being undertaken in cooperation with the Council's Artificial Production Review and Evaluation (APRE) process. To maximize efficiency and ensure the two processes are complementary, it was decided that the APRE process would collect hatchery data and information for use in both the APRE and HGMP processes. The intent was to produce a single, consistent set of hatchery information that could be used for both processes. Using the data collected, the APRE process will produce both APRE evaluations and draft Phase I HGMPs for Columbia Basin anadromous hatchery programs.

Phase I HGMPs will feed into the collaborative Phase II/III steps of the process. Phase II involves a series of workshops centered on producing HGMPs for specific hatchery programs within provinces or groups of sub-basins. These workshops will involve deliberations among the parties affected by particular artificial production programs, including but not necessarily limited to the states, tribes, and federal agencies. Phase II HGMPs will incorporate the collaborators' discussions

for each program or facility, and include hatchery reforms that could benefit listed fish and/or better achieve non-ESA objectives. When tentative agreement is reached on a Phase II HGMP, it will be set aside (parked) until all HGMPs relevant to the ESU(s) affected by the program are completed.

Phase III HGMPs will emerge as a result of NOAA Fisheries' analyses of artificial production from an Evolutionarily Significant Unit (ESU) perspective, i.e., taking into account the cumulative effect of all artificial production programs defined in Phase II HGMPs and considering the other factors that affect a listed ESU. Additionally, Phase III HGMPs will incorporate input received from other forums, such as sub-basin planning, recovery planning, public comment periods and/or US v Oregon. Completed and approved Phase III HGMPs will outline the ESA-related responsibilities of hatchery operators and those additional actions (reforms), if any, that might benefit listed fish.

In both Phases II and III of the HGMP process, recommendations emerging from the APRE process will be expressly considered by the collaborators developing the HGMPs. The HGMPs will note explicitly which APRE recommendations have been adopted and, for those that are not, the reasoning. These steps will help ensure that the HGMP and APRE processes are appropriately integrated.

A neutral "Process Manager" contracted by BPA to will be oversee deliberations, keep the process moving along according to schedule, and generally manage the process toward its completion. Coordination, scheduling and setting agendas will be accomplished by state or federal entities (facility operators) or a separate communication contractor. Project/contract oversight will be the responsibility of BPA or an oversight contractor that will administer the contracts.

Discussion

Final NOAA Fisheries approved HGMPs for anadromous hatchery programs in the Columbia Basin will form the basis for ESA required hatchery reforms under the 2000 FCRPS Biological Opinion. Completion of the HGMP process is important to ensure that basin hatcheries can obtain ESA coverage while meeting their other legal mandates and operational objectives. Likewise it is anticipated that the HGMP process will remain closely linked to the regional subbasin planning process, technical recovery teams and harvest management plans. Therefore HGMPs may also serve as an effective hatchery management/implementation tool that incorporates future subbasin and basinwide goals and objectives.

The HGMP and the Council's APRE process have been well coordinated and are anticipated to work together cooperatively in the future. The APRE hatchery program benefit/risk analysis and reform recommendations will be considered during the collaborative HGMP Phase II and III process. APRE findings and reports should help focus discussions on which hatchery programs need to be changed as well as identify programs with lesser risk. We anticipate that any changes to hatchery production programs as a result of HGMP collaborations will be incorporated into the existing regional hatchery database created by the APRE for future use by both processes.

At this time it is difficult to estimate how much involvement the participating agencies and tribes will require during Phases II and III of the HGMP process. The cost estimates for agency and tribal participation in the process are preliminary. The amount of agency and tribal participation will be dependent on whether hatchery reform actions are necessary and the difficulty of coming to an agreement on appropriate actions. Many hatchery programs may not need greater discussion because their operations do not pose substantial risks and can maintain current operations. In these cases Phase I HGMPs could move quickly through the process. Other programs will require greater discussions and deliberations and will slower through the HGMP process. It may be possible to

highlight the more difficult or contentious hatchery programs and allocate agency and tribal involvement accordingly.

Likewise, while all collaborators will participate is parts of the HGMP process, their participation effort and role in drafting the HGMPs will likely not be the same. Those managers that operate the hatchery facilities will have primary responsibility for drafting documents for their respective programs, and thus will be required to participate with a greater level of effort than non-operators.

Since agency and tribal participation in the process is the highest cost of the project further thought and work on this issue is needed. Also, a clearer definition on the overall project management structure and responsibilities is important. A more detailed work breakdown and cost analysis would be useful to obtain this information.

Funding for this process is time sensitive. NOAA Fisheries and Bonneville intends to have much of the Phase II and III HGMP process complete by the end of September 2003 to meet Biological Opinion deadlines. Presently, it has not yet been identified which sources of funds will be used to pay for this project.

Recommendation

The staff recognizes the importance of the HGMP process in satisfying 2000 FCRPS Biological Opinion requirements and its potential use in helping to implement basinwide hatchery reforms. The staff also recognizes that funding is needed immediately to keep the process moving forward. Therefore the staff recommends that the Council approve placeholder funding for this project in an amount not to exceed $805,600 with the provisos that Bonneville funding sources for this project be clearly identified and that a more detailed estimate of agency and tribal participation and management costs be completed at a later date.

SCOPE OF WORK

PROJECT TITLE: **Hatchery and Genetics Management Plan**

PROJECT NUMBER: **2003-005-00**

CONTRACT: **State and Tribal Participation for Phase II & III HGMPs (see list below – contracts for Phase I HGMP may be extended or new contracts may be written)**

CONTRACT PERIOD: **1 December 2002 to 30 September 2003 (Pre-award costs may be justified where applicable)**

Contractors

IDFG	**Idaho Department of Fish and Game**
ODFW	**Oregon Department of Fish and Game**
WDFW	**Washington Department of Fish and Game**
CCT	**Confederated Colville Tribes**
CTWSR	**Confederated Tribes of the Warm Springs Reservation**
CTUIR	**Confederated Tribes of the Umatilla Indian Reservation**
NPT	**Nez Perce Tribe**
SBT	**Shoshone Bannock Tribes**
YN	**Yakama Nation**
USFWS	**United States Fish and Wildlife Service**

Rick Applegate (under a separate BPA-direct contract as a Process Manager for Phases II&III)

Contractors

State Major Facility Operators (will be responsible for collaboration and document drafting)

Contract number: new contract (or contract revision)
Organization: **IDFG**
Technical Lead: Sharon Kiefer
Email
Ph # (208)
Address
Boise, ID
Admin. Lead: Steve Barton
Ph # (208)
Address

Contract number: new contract (or contract revision)
Organization: **ODFW**
Technical Lead: George Nandor
Email
Ph # (503) 872-5252
Address P.O. Box 59
Portland, OR 97207

Admin. Lead: Annette Dabishinsky
Email
(503) 872-5252 x5406
Address P.O. Box 59
Portland, OR 97207

Contract number: new contract (or contract revision)
Organization: **WDFW**
Technical Lead: Darrell Mills
Email
Ph # **(**360) 902-2657
Address
Olympia**,** WA

Admin. Lead: Ted Nelson
Ph # (360)
Address 600 Capitol Way N
Olympia, WA 98501-2438

Tribal Principal (will be responsible for collaboration)

Contract number: new contract
Organization: **CCT**
Technical Lead: Joe Peone
Email
Ph # (509)
Address

Admin. Lead:
Ph #
Address

Contract number: new contract
Organization: **CTUIR**
Technical Lead: Gary James/Brian Zimmerman
Email
Ph # (541)
Address

Admin. Lead:
Ph #
Address

Contract number: new contract
Organization: **CTWSR**
Technical Lead: Bob Spateholts
Email
Ph # (541)
Address

Admin. Lead:
Ph #
Address

Contract number: new contract
Organization: **NPT**
Technical Lead: Dave Johnson/Becky Ashe
Email
Ph # (208)
Address

Admin. Lead:
Ph #
Address

Contract number: new contract
Organization: **SBT**
Technical Lead: Keith Kutchins
Email
Ph # (208)
Address

Admin. Lead:
Ph #
Address

Tribal Major Facility Operators (will be responsible for document drafting for Cle Elum Hatchery and collaboration)

Contract number: new contract
Organization: **YN**
Technical Lead: Steve Parker/ Lynn Hatcher/Tom Scribner

Email
Ph # (509)
Address

Admin. Lead:
Ph #
Address

Federal Facility Operators (will be responsible for collaboration and document drafting)

Contract number: new contract
Organization: **USFWS**
Technical Lead:

Email
Ph # (208)
Address

Admin. Lead:
Ph #
Address

Notes:

1/ **A BPA Process Manager** is funded under a separate contract by BPA to facilitate the collaborative process

2/ **NOAA Fisheries** will be a collaborator, but is not funded by BPA for these activities.

3/ **Lower Snake River Compensation Plan HGMPs** will be covered under the USFWS/BPA direct funding agreement S

Background

General

The purpose of this contract is to support the process developed to implement Action 169 of the National Marine Fisheries Service (NOAA Fisheries) December, 2000 Biological Opinion on the Federal Columbia River Power System (FCRPS). This process involves and supports the collaborative participation of the state, tribal, and federal agencies operating artificial production programs for anadromous salmon and steelhead. The objective of the process is the development of Hatchery and Genetic Management Plans (HGMPs) for artificial production programs (hatcheries) in the Columbia River Basin that can be approved by NOAA Fisheries under the Endangered Species Act (ESA). An HGMP is a detailed plan that describes how an artificial production program for a given species at a given facility (or facilities) will be conducted for a particular period of time. The Hatchery and Genetic Management Plan (HGMP) format was developed by NOAA Fisheries in collaboration with states, federal agencies, and Tribes to provide a standardized format for presenting this information. The FCRPS Biological Opinion calls for completion of HGMPs for each of the artificial production programs by the three year check-in (30 Sep 2003).

The HGMP process. The HGMP process has three phases, described in greater detail below. The initial Phase was undertaken in cooperation with the Northwest Power and Conservation Council (Council) Artificial Production Review and Evaluation (APRE) process, a largely concurrent process now underway in the Basin. Though both processes seek to implement hatchery reforms, the APRE and HGMP processes differ in scope, approach, and specific outcomes. For example, the APRE includes non-anadromous fish, and utilizes the services of consultants engaged by the Council to analyze existing programs, recommend reforms, interact with an Artificial Production Advisory Committee, and prepare a report that will go to the Congress and the region. The HGMP process addresses only anadromous salmon and steelhead programs, is designed to achieve both ESA coverage and identify FCRPS offsite mitigation opportunities, and relies on the active participation of state, tribal, federal and other entities operating or comanaging artificial production programs to identify hatchery reforms specifically relevant to program effects on ESA species.

To maximize efficiency and ensure the two processes are complementary, NOAA Fisheries and Council staff have coordinated the information and data-gathering phase to assure a consistent database for use in both the APRE and HGMP processes. To assist this overall effort, the Council retained the same consultant for both APRE and HGMPs, Mobrand and Associates, to help gather and organize the massive amount of information involved. The consultants designed a questionnaire to elicit comprehensive information from hatchery operators about their programs, developed an electronic database and associated software, conducted a series of multi-subbasin workshops with hatchery operators to obtain their data and information, and entered it into the database. It is intended that the database and software will be available for future deliberations on artificial production as well. The last step in the in-common data gathering phase of the APRE/HGMP process will be largely finished upon completion of several subregional workshops, dubbed "exit interviews," currently planned to occur in April 2003. Those sessions, organized around groups of subbasins, are designed to verify that the database is accurate and complete.

The three phases of the HGMP process. As noted above, the joint APRE/HGMP data gathering effort was designed to feed into NOAA Fisheries' HGMP process, which has three distinct phases. It starts with Phase I HGMPs, which can be generated from the database described above (in fact, in some cases draft HGMPs were the source of the data that were entered into the database). Phase I HGMPs largely reflect current programs, including applicable US v Oregon production agreements and other existing

conservation, mitigation, and production programs. For some programs currently lacking ESA coverage, the Phase I HGMPs will be used in ESA consultations between the relevant hatchery program owner/operators and NOAA Fisheries. These consultations are intended to result in ESA coverage on at least an interim basis while the longer-term HGMPs are being developed in the collaborative Phase II and Phase III steps.

The Phase I HGMPs also will feed into the collaborative Phase II and III steps of the process. Phase II involves a series of workshops centered around specific HGMPs in an area (provinces or groups of sub-basins). These workshops will involve deliberations among the parties affected by particular artificial production programs, including but not necessarily limited to the states, tribes, and federal agencies, collectively referred to herein as the HGMP "collaborators." The deliberations, which will be overseen by a neutral "Process Manager" engaged and funded by the Bonneville Power Administration (BPA) to organize the sessions, keep the process moving along according to schedule, and generally manage the process toward its desired outcome. Phase II involves a series of workshops, centered around specific HGMPs, involving deliberations among the parties affected by particular artificial production programs, including but not necessarily limited to the states, tribes, and federal agencies. Phase II HGMPs will reflect the collaborators' discussions on a program or facility basis, and include any reforms that may be identified incorporate the collaborators' discussions for each program or facility, and include hatchery reforms that could benefit listed fish and/or better achieve non-ESA objectives. When tentative agreement is reached on a Phase II HGMP, it will be set aside ("parked") until all HGMPs relevant to the ESU(s) affected by the program are completed.

Phase II focuses on specific HGMPs, and is designed especially to identify and reconcile potential hatchery reforms and/or new measures that could benefit listed fish. When agreement is reached on a Phase II HGMP, it will be set aside (parked) until all HGMPs relevant to the ESU(s) affected by the program are completed. For proposed actions where the collaborators are unable to reconcile differences between them, a number of possibilities exist for reconciling those differences; these are described in greater detail below.

Phase III HGMPs are intended to encompass When all Phase II HGMPs that impact a listed Evolutionarily Significant Unit (ESU) are completed, and any input received from other forums such as sub-basin planning, recovery planning, the APRE and/or US v Oregon included as appropriate, NOAA Fisheries' analyses of the artificial production from an Evolutionarily Significant Unit (ESU) perspective, will analyze impacts from an ESU perspective, i.e., taking into account the effects of all artificial production programs defined in Phase II HGMPs and considering the other factors that affect a listed ESU. Specific steps will be taken to link the HGMP process with other relevant processes, as illustrated in the attached flowchart, to ensure that Phase II HGMPs appropriately reflect agreed recommendations emerging from these various forums. Following this review by NOAA Fisheries, the HGMP collaborators will strive to reach agreement on modifications of the HGMPs to address any ESA concerns raised by NOAA Fisheries. Lacking agreement among the collaborators, the owner/operator of the facility in question will consult with NOAA Fisheries to address the issue. Additionally, Phase III HGMPs are intended to reflect any input received through linkages with sub-basin planning, recovery planning, any applicable public comment periods, and/or US v Oregon. Not necessarily all Phase II HGMPs will require revision due to NOAA Fisheries' ESU-wide analysis; in these cases Phase II HGMPs will become Phase III HGMPs with little or no substantive revision. Additionally, and importantly from an FCRPS perspective, the completed and approved HGMPs will demarcate the ESA-related responsibilities of hatchery operators and those additional actions (reforms), if any, that might benefit listed fish and therefore . Those additional actions would then be eligible for FCRPS off-site mitigation funding from BPA through the Council's rolling provincial review process.

In both Phases II and III of the HGMP process, any submitted products of the recommendations emerging from the APRE process will be expressly considered by those the collaborators developing HGMPs. The HGMPs will note explicitly which APRE recommendations have been adopted and, for those which that are not adopted, will indicate briefly why the recommendations were modified or not adopted. These steps will help ensure that the HGMP and APRE processes have the opportunity to incorporate the insights and hatchery reforms proposed in both efforts.

Scope/Integration/Schedule

All artificial production facilities in subbasins of the Columbia Basin that contain anadromous salmonids are to be addressed in this manner (Figure 1. List of probable HGMPs). Accordingly, this contract supports participation by the relevant state, tribal, and federal participants in the collaborative Phase II/III process (Figure 2. List of potential participants/leads). The timing of the process in each of the provinces/sub-regions will necessarily vary as circumstances dictate, but should be well underway in all areas by late spring and early summer 2003. Some subbasins with more highly developed plans from other processes (e.g., subbasin planning, public utility district conservation plans) may rapidly arrive at Phase II and III HGMPs but these will be in the minority. The current target is for completion of NMFS-reviewable HGMPs by September 30 2003.

Goal: Develop HGMPs for anadromous salmon and steelhead artificial production programs per Action 169 of the FCRPS Biological Opinion and other regional processes.

1. Develop HGMPs for each existing artificial production program, including reforms designed to reduce deleterious effects of artificial production on listed fish or otherwise contribute better to meeting the goals and objectives of the program/facility.
2. Coordinate the HGMP process with concurrent regional processes (e.g., subbasin planning, APRE, US v OR), including consideration of recommendations from those processes.
3. Submit Phase III HGMPs including reforms for ESA approval by NOAA Fisheries.

Objective 1: Produce Phase II HGMPs. Collaborators supported by this contract will participate in the HGMP process generally, and at least those sessions of the collaborative HGMP process that affect their respective comanagement interests. They will seek to reach agreement among the parties on an HGMP-by-HGMP basis, including any reforms as may be recommended by APRE or otherwise indicated. In addition, the collaborators who own or operate a program accept primarily responsibility for preparing initial drafts of HGMPs for the deliberations (using Phase I HGMPs as the point of departure), and any new or alternative sections of HGMPs for their respective programs as required to reflect discussions and/or agreements reached in the collaborative sessions.

Task 1.1 Schedule a meeting to transition from joint APRE/HGMP Phase I to Phase II HGMP process.

Collectively, Tasks A-F will be termed "Negotiation"

Task A Set/distribute meeting schedules.

Task B Distribute and receive documents necessary for deliberations.

Task C Provide central communication hub for Process Manager, tribes, states, NOAA, BPA and the public.

Task D Facilitate HGMP meetings. With contentious programs, this will be the assignment of the Process Manager. In other cases it is the lead entity (facility operator).

Task E Participate in meetings.

Task 1.2 Schedule overall HGMPs meetings defined by how individual HGMPs cluster under an ESU.
Task 1.3 Negotiation for Phase II
Task 1.4 Write Phase II HGMPs

Objective 2: Interact and coordinate with the subbasin planning and recovery planning processes.

A. Although overseen by the Process Manager, primary responsibility for providing drafts resulting from Objective 1 to subbasin planners and recovery planners (e.g., TRTs) resides in the owner/operators of the programs. Subbasin planners and TRT members may attend HGMP sessions and provide advice and recommendations on issues related to HGMPs in their areas, particularly in regards to whether the hatchery program under consideration comports with the emerging subbasin and recovery plans. Artificial Production Proposals that emerge from these other planning processes can be incorporated at a later time, as approved HGMPs are not "cast in stone;" (i.e., they may be modified if and when appropriate information becomes available).

B. Collaborators will explicitly consider and incorporate, where appropriate, any advice and/or recommendations of subbasin and recovery planners, the APRE process, or other relevant sources as it affects HGMPs under development. Collaborators will explain their reasoning for rejecting any specific recommendations.

Task 2.1 Provide central communication hub between TRT/ subbasin planners and Process Manager, tribes, states, NOAA, BPA and the public

2.1.1 Distribute Phase II HGMP's to TRT/subbasin planners and invite TRT/subbasin planner participation.
2.1.2 Collate and distribute TRT/subbasin planner comments

Task 2.2 Re-Negotiate HGMPs if required.
Task 2.3 Rewrite Phase II HGMPs in response to TRT/subbasin planner collaboration (including responses to recommendations)

Objective 3: Producing Reviewable Phase III HGMPs
When all Phase II HGMPs that impact a listed ESU are completed, NOAA Fisheries will analyze the aggregate program from an ESU perspective.

Following NOAA Fisheries' review of Phase II HGMPs from an ESU-wide perspective, the collaborators will strive to reach agreement on modifications of the HGMPs to address NOAA Fisheries' concerns. Lacking such agreement, the owner/operator of the facility in question will consult with NOAA Fisheries to address the issue. Unreconciled disputes among collaborators may be brought to US v OR for possible resolution, where appropriate.

The final product of the foregoing will constitute a reviewable HGMP. It will include an explicit demarcation of the ESA obligation of the hatchery operators and additional reforms that might benefit listed fish and therefore be eligible for FCRPS funding,

Task 3.1 Review cluster of HGMPs relevant for a specific ESU **(NOAA)**.
Task 3.2 Reach comanagement consensus in response to view of NOAA review. This may include the full repertoire of Tasks A-E, or a subset, depending upon the complexity and repercussions of the outcome of the NOAA review.

Deliverables

1. Schedule for HGMP formation

2. Phase II HGMPs

3. Reviewable Phase III HGMPs

General Schedule

The schedule for developing the various phases of individual HGMPs will vary depending on a variety of factors, including the number of programs affecting an ESU and the difficulty in resolving differences in how comanagers would use and manage individual hatchery programs in the future.
The "general" timeline is provided below:

Schedule "transition" from Phase I to II	early April
Contracting	April 2003
HGMP Schedule	April 2003
Initial area or program specific HGMP meetings	May – June 2003
Phase II HGMPs	July 2003
Reviewable Phase III HGMPs	September 2003

Schedule /Responsibilities **1/**

Tasks	Descriptor	Responsibility	Ap	Ma	Ju	Ju	Au	Se	**/4**
	Contracting		X						
1.1	Schedule "transition" meeting	Facility operator/CC **2/**	X						
1.2	Schedule "cluster" meetings	Facility operator/CC	X						
1.3	Negotiation for Phase I	Facility operator/CC							
A	Set/distribute meeting	Facility operator/CC	X						
B	Circulate documents	Facility operator/CC		X	X	X			
C	Provide communication	Facility operator/CC		X	X	X			
D	Facilitate HGMP meetings	Facility operator/PM **3/**		X	X	X			
E	Participate in meetings	Collaborators		X	X	X			
1.4	Write Phase II HGMPs	Facility operator		X	X	X			
2.1	Provide central communication	Facility operator/CC	X	X	X	X	X	X	
2.2	Re-Negotiate if required	Collaborators				X	X	X	
2.3	Rewrite Phase II HGMPs	Facility operator				X	X	X	
3.1	Review cluster of HGMPs	NOAA					X	X	X
3.2	Reach comanagement consensus	Collaborators					X	X	X

/1 General Contract/Project management may be under BPA direct contracting or another contractor (e.g., Council)
/2 Communications Contractor (CC) may be used to facilitate the collaborative process
/3 BPA Process Manager as required
/4 October and beyond

Budget

Placeholder budget is available for review

Comanager Budget Notes

While all collaborators will participate in parts of the HGMP process, their participation effort and role in drafting the HGMPs will likely not be the same. Those managers that operate the hatchery facilities will have primary responsibility for drafting documents for their respective programs, and thus will be required to participate with a greater level of effort than non-operators. For example, one would expect more effort will be required from the USFWS, WDFW, ODFW, IDFG, than from CCT, CTWSR, SBT, CTUIR, NPT and, as the former group operates a large number of facilities. NOAA Fisheries is expected to participate in the process, but is not funded for these efforts by BPA.

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Contract Management - BPA or other

1. Review/negotiate budgets and SOWs
   (one joint SOW with tasks assigned to specific entities?)
2. Write contracts
3. Track budgets/invoicing
4. Track deliverables (+ document tracking in an out)
5. Arrange for contract closeout

Table 1

Columbia Basin Programs HGMP and ESA Status **Drafted** **1/17/2003**
Grouped by Agency/Facility

Agency	Program	Subbasin	NPPC Province	Operational Funding	Stock
IDFG	Eagle Spring Chinook	Boise	Middle Snake	BPA	WF Yankee F.,EF Salmon, Lemhi
IDFG	Magic Valley Summer Steelhead	U. Middle Snake	Middle Snake	LSRCP	Dworshak/Pahsimeroi/Oxbow
IDFG	Clearwater Spring Chinook	Clearwater	Mtn Snake	LSRCP	Dworshak
IDFG	Clearwater Summer Steelhead	Clearwater	Mtn Snake	LSRCP	Dworshak 'B's
IDFG	McCall Summer Chinook	Salmon	Mtn Snake	LSRCP	South Fk. Salmon R.
IDFG	Sawtooth Sockeye	Salmon	Mtn Snake	BPA	Redfish Lake
IDFG	Sawtooth Spring Chinook	Salmon	Mtn Snake	LSRCP	Sawtooth
IDFG	Sawtooth Summer Steelhead	Salmon	Mtn Snake	LSRCP	Sawtooth/Pahsimeroi
ODFW	Catherine Creek Spring Chinook	Grand Ronde	Blue Mtn	LSRCP/BPA	Catherine Creek
ODFW	Lookingglass Creek Spring Chinook	Grand Ronde	Blue Mtn	LSRCP	Lookingglass (Rapid River)
ODFW	Lostine R Spring Chinook	Grand Ronde	Blue Mtn	LSRCP/BPA	Lostine R.
ODFW	Upper Grande Ronde Spring Chinook	Grand Ronde	Blue Mtn	LSRCP/BPA	Upper Grande Ronde
ODFW	Wallowa Summer steelhead	Grand Ronde	Blue Mtn	LSRCP	Wallowa
ODFW	Imnaha R Spring Chinook	Imnaha	Blue Mtn	LSRCP	Imnaha
ODFW	Imnaha R Summer Steelhead	Imnaha	Blue Mtn	LSRCP	Imnaha
ODFW	Big Creek Hatchery Fall Chinook	Columbia Estuary	Estuary	Mitchell Act/NMFS	Big Creek Tule
ODFW	Big Creek Hatchery Coho	Columbia Estuary	Estuary	Mitchell Act/NMFS	Big Creek
ODFW	Big Creek/Klaskanine Hatchery Winter Steelhead	Columbia Estuary	Estuary	Mitchell Act/NMFS	Big Creek Winter Steelhead
ODFW	Gnat Creek Hatchery Winter Steelhead	Columbia Estuary	Estuary	ODFW	Big Creek
ODFW	Gnat Creek Hatchery(CEDC) Spring Chinook	Columbia Estuary	Estuary	BPA	Willamette
ODFW	Select Area Brights(Rogue Fall Chinook)	Columbia Estuary	Estuary	BPA	Rogue
ODFW	CEDC Coho	Columbia Estuary	Esturary	BPA/CEDC	Coho (South Fork Hatchery)
ODFW	Hood River Spring Chinook	Hood	Gorge	BPA	Hatchery and Wild
ODFW	Hood River Summer Steelhead	Hood	Gorge	BPA	Natural Summer
ODFW	Hood River Winter Steelhead	Hood	Gorge	BPA	Natural Winter
ODFW	Clackamas River Late Winter Steelhead	Clackamas	Lower Col.	Mitchell Act/NMFS	Late Winter Natural
ODFW	Clackamas River Summer Steelhead	Clackamas	Lower Col.	Mitchell Act/NMFS	Skamania stock summer
ODFW	Clackamas River Spring Chinook	Clackamas	Lower Col.	NMFS/PGE,etc.	?
ODFW	Bonneville/Cascade/Oxbow Hatchery Coho	Lower Columbia	Lower Col.	NMFS	Tanner Creek
ODFW	Sandy River Coho	Sandy	Lower Col.	Mitchell Act/NMFS	Sandy River

Agency	Program	Subbasin	NPPC Province	Operational Funding	Stock
ODFW	Sandy River Late Winter Steelhead	Sandy	Lower Col.	Mitchell Act/NMFS	Sandy River Wild
ODFW	Sandy River Summer Steelhead	Sandy	Lower Col.	Mitchell Act/NMFS	Sandy River
ODFW	Sandy River Spring Chinook	Sandy	Lower Col.	NMFS/PGE,etc.	Sandy River Wild
ODFW	Deschutes River Spring Chinook	Deschutes	Plateau	PGE	Spring Chinook (Round Butte)
ODFW	Deschutes River Steelhead (Round Butte)	Deschutes	Plateau	PGE	Deschutes Wild
ODFW	Umatilla River Coho	Umatilla	Plateau	NMFS	Umatilla
ODFW	Umatilla River Fall Chinook	Umatilla	Plateau	BPA	URB
ODFW	Umatilla River Spring Chinook	Umatilla	Plateau	BPA	Umatilla
ODFW	Umatilla River Summer Steelhead	Umatilla	Plateau	BPA	Umatilla
Tribal	Mid-Columbia Coho (Methow)	Methow	Cascade	BPA	Local and L. Col.
Tribal	Okanogan Spring Chinook	Okanogan	Cascade	BPA	Carson (Winthrop)
Tribal	Mid-Columbia Coho (Wenatchee)	Wenatchee	Cascade	BPA	Local and L. Col.
Tribal	NP Coho	Clearwater	Mtn Snake	BIA/BPA	Local and L. Col.
Tribal	NPTH Fall Chinook	Clearwater	Mtn Snake	BPA	Snake River/Lyons Ferry
Tribal	NPTH Spring Chinook	Clearwater	Mtn Snake	BPA	Dworshak
Tribal	Yakima River Coho	Yakima	Plateau	BPA	Yakima River stock & others
Tribal	Yakima River Fall Chinook	Yakima	Plateau	BPA	Yakima River stock
Tribal	Yakima River Fall Chinook	Yakima	Plateau	BPA	Marion Drain stock
Tribal	Yakima River Spring Chinook	Yakima	Plateau	BPA	Yakima River stock
USFWS	Spring Creek NFH Fall Chinook	Columbia Gorge	Gorge	Mitchell Act/NMFS	Spring Creek Tule
USFWS	Little White Salmon NFH Coho	Little White Salmon	Gorge	Mitchell Act/NMFS	Early
USFWS	Little White Salmon NFH Spring Chinook	Little White Salmon	Gorge	Mitchell Act/NMFS	Carson
USFWS	Carson NFH Spring Chinook	Wind	Gorge	Mitchell Act/NMFS	Carson
USFWS	Eagle Creek NFH Coho	Clackamas	Lower Col.	Mitchell Act/NMFS	Early
USFWS	Eagle Creek NFH Winter Steelhead	Clackamas	Lower Col.	Mitchell Act/NMFS	Winter Steelhead
USFWS	Hagerman NFH Summer Steelhead	U. Middle Snake	Middle Snake	LSRCP	Dworshak 'B's
USFWS	Hagerman NFH Summer Steelhead	U. Middle Snake	Middle Snake	LSRCP	Sawtooth/Pahsimeroi
USFWS	Dworshak NFH Spring Chinook	Clearwater	Mtn Snake	LSRCP	Dworshak
WDFW	Cottonwood Pond Summer Steelhead	Grand Ronde	Blue Mtn	LSRCP	Wallowa
WDFW	Deep River Net Pen Coho	Columbia Estuary	Estuary	BPA	Grays River
WDFW	Deep River Net Pen Spring Chinook	Columbia Estuary	Estuary	BPA	Cowlitz
WDFW	Sea Resources Chum Salmon	Columbia Estuary	Estuary	WDFW	Grays River
WDFW	Steamboat Slough Net Pen Coho	Columbia Estuary	Estuary	BPA	Grays River
WDFW	Elochoman Fall Chinook	Elochoman	Estuary	Mitchell Act/NMFS	Elochoman Tule
WDFW	Elochoman Type N Coho	Elochoman	Estuary	Mitchell Act/NMFS	Elochoman Tule

Agency	Program	Subbasin	NPPC Province	Operational Funding	Stock
WDFW	Elochoman Type S Coho	Elochoman	Estuary	Mitchell Act/NMFS	Elochoman Tule
WDFW	Elochoman Wild Winter Steelhead	Elochoman	Estuary	Mitchell Act/NMFS	Elochoman
WDFW	Elochoman Winter Steelhead	Elochoman	Estuary	Mitchell Act/NMFS	Beaver Cr.
WDFW	Grays River Coho	Grays	Estuary	BPA	Grays River
WDFW	Grays River Winter Steelhead	Grays	Estuary	Mitchell Act/NMFS	Beaver Cr.
WDFW	Drano Lk. Summer Steelhead	Columbia Gorge	Gorge	Mitchell Act/NMFS	Skamania
WDFW	Klickitat Fall Chinook	Klickitat	Gorge	Mitchell Act/NMFS	URB
WDFW	Klickitat Spring Chinook	Klickitat	Gorge	Mitchell Act/NMFS	Klickitat
WDFW	Klickitat Summer Steelhead	Klickitat	Gorge	Mitchell Act/NMFS	Skamania
WDFW	Klickitat Type N Coho	Klickitat	Gorge	Mitchell Act/NMFS	Lewis/Washougal
WDFW	Big White Salmon Summer Steelhead	White Salmon	Gorge	Mitchell Act/NMFS	Skamania stock summer
WDFW	White Salmon R. Winter Steelhead	White Salmon	Gorge	Mitchell Act/NMFS	Skamania
WDFW	North Toutle Fall Chinook	Cowlitz	Lower Col.	Mitchell Act/NMFS	North Toutle
WDFW	North Toutle Spring Chinook	Cowlitz	Lower Col.	Mitchell Act/NMFS	Cowlitz
WDFW	North Toutle Summer Steelhead	Cowlitz	Lower Col.	Mitchell Act/NMFS	Beaver Cr./Skamania
WDFW	North Toutle Type S Coho	Cowlitz	Lower Col.	Mitchell Act/NMFS	North Toutle
WDFW	Kalama Fall Chinook	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama Tule
WDFW	Kalama Spring Chinook	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama
WDFW	Kalama Summer Steelhead	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama
WDFW	Kalama Type N Coho	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama
WDFW	Kalama Type S Coho	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama/LCR
WDFW	Kalama Wild Summer Steelhead	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama
WDFW	Kalama Wild Winter Steelhead	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama
WDFW	Kalama Winter Steelhead	Kalama	Lower Col.	Mitchell Act/NMFS	Kalama
WDFW	EF Lewis R. Summer Steelhead	Lewis	Lower Col.	Mitchell Act/NMFS	Lewis
WDFW	EF Lewis R. Winter Steelhead	Lewis	Lower Col.	Mitchell Act/NMFS	Lewis
WDFW	Coweeman Pond Winter Steelhead	Lower Columbia	Lower Col.	Mitchell Act/NMFS	Beaver Cr.
WDFW	Klineline Ponds Winter Steelhead	Lower Columbia	Lower Col.	Mitchell Act/NMFS	Beaver Cr./Skamania
WDFW	Salmon Creek Winter Steelhead	Lower Columbia	Lower Col.	Mitchell Act/NMFS	Skamania
WDFW	Skamania Summer Steelhead	Washougal	Lower Col.	Mitchell Act/NMFS	South Santiam
WDFW	Skamania Winter Steelhead	Washougal	Lower Col.	Mitchell Act/NMFS	Skamania
WDFW	Washougal Chum	Washougal	Lower Col.	Mitchell Act/NMFS	Duncan Cr.
WDFW	Washougal Fall Chinook	Washougal	Lower Col.	Mitchell Act/NMFS	Washougal Tule
WDFW	Washougal Type N Coho	Washougal	Lower Col.	Mitchell Act/NMFS	Washougal
WDFW	Ringold Fall Chinook	Lower Middle	Plateau	Mitchell Act/NMFS	URB

Agency	Program	Subbasin	NPPC Province	Operational Funding	Stock
WDFW	Ringold Summer Steelhead	Lower Middle Columbia	Plateau	Mitchell Act/NMFS	Wells
WDFW	Lyons Ferry Fall Chinook	Lower Snake	Plateau	LSRCP	Snake River
WDFW	Lyons Ferry Summer Steelhead	Lower Snake	Plateau	LSRCP	Lyons Ferry
WDFW	Tucannon Spring Chinook	Lower Snake	Plateau	LSRCP	Tucannon
WDFW	Tucannon Summer Steelhead	Lower Snake	Plateau	LSRCP	Tucannon
WDFW	Touchet Summer Steelhead	Walla Walla	Plateau	LSRCP	Touchet
WDFW	Walla Walla Summer Steelhead	Walla Walla	Plateau	LSRCP	Lyons Ferry

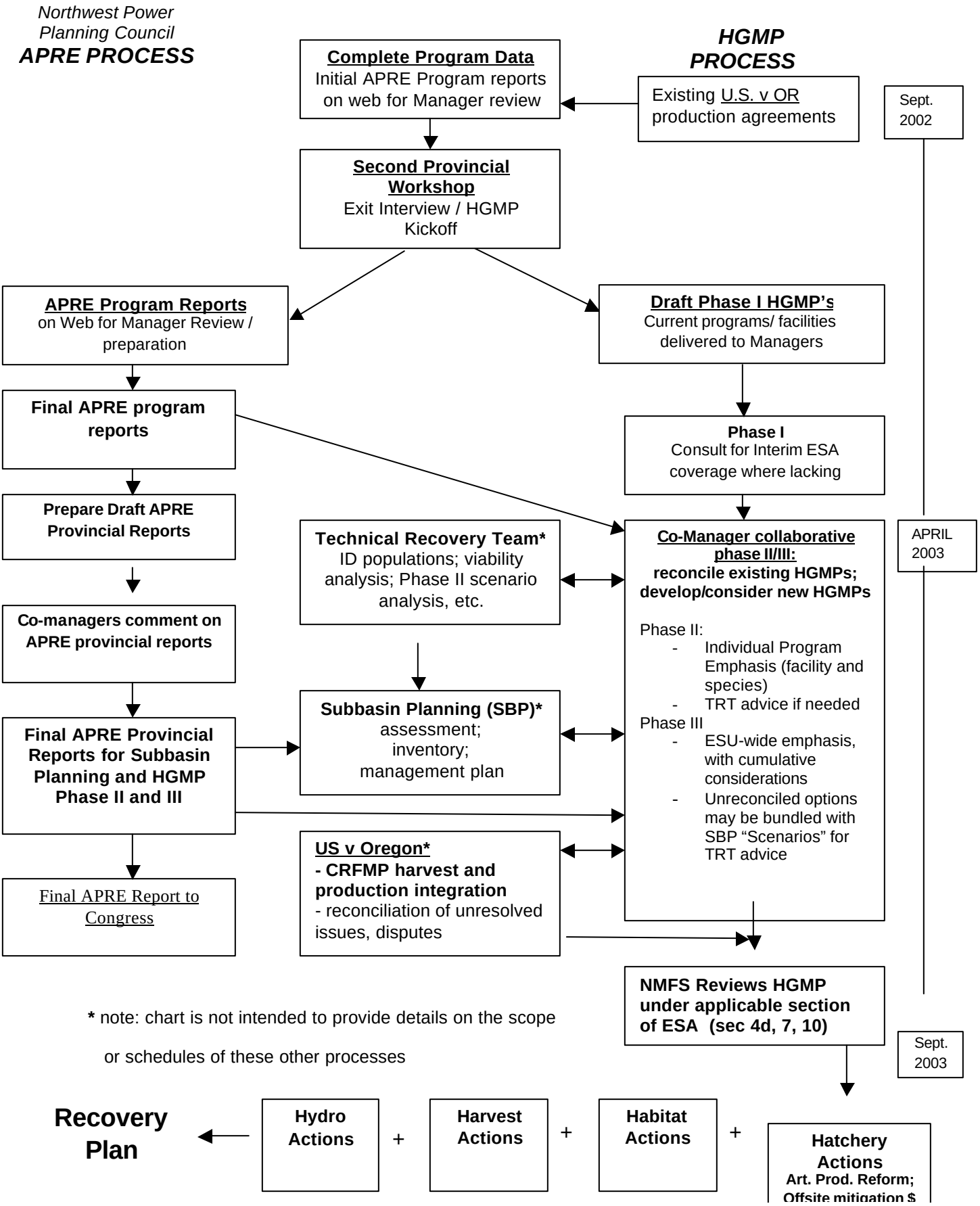
Table 2

Phase II and III Likely Participants

Steve Parker	YN	Tim Roth	USFWS
Lynn Hatcher	YN	Doug Olson	USFWS
Tom Scribner	YN	David Carie	USFWS
Gary James	CTUIR	Kris Petersen	NMFS
Brian Zimmerman	CTUIR	Allyson Ouzts	NMFS
Bob Spateholts	CTWSR	Herb Pollard	NMFS
Becky Ashe	NPT	Debbie Martin	NMFS
Dave Johnson	NPT	Rich Turner	NMFS
Keith Kutchins	SBT	Lance Kruzic	NMFS
Joe Peone	CCT	Bob Foster	NMFS
George Nandor	ODFW	Rick Klinge	DC PUD
Bill Tweit	WDFW	Chuck Peven	CC PUD
Darrell Mills	WDFW	Stuart Hammond	GC PUD
Andy Appleby	WDFW	Paul Abbott	IPC
Sharon Kiefer	IDFG		

Figure 3

COLUMBIA RIVER BASIN HGMP PROCESS
Combined Phase APRE/ HGMP
Draft 3/21/03



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The Hatchery and Genetic Management Plan (HGMP) Process

And

Integration with Subbasin Planning, TRT/Recovery Planning, and US v OR

This document and the attached flowchart provide a brief overview of the process for developing Hatchery and Genetic Management Plans (HGMPs) for artificial production programs (hatcheries) in the Columbia River Basin. This process has been developed to implement Action 169 of the National Marine Fisheries Service (NOAA Fisheries) December, 2000 Biological Opinion (BiOp) on the Federal Columbia River Power System (FCRPS). In addition, because this effort overlaps with a number of concurrent and interrelated processes underway in the Basin, it also describes linkages between the HGMP process and those other processes.

Artificial Production and HGMPs. Artificial production is not a goal in itself. Rather, it is a strategy for achieving fishery and resource objectives, and often involves trade-offs between risks and benefits. The risks include various types of deleterious effects on natural populations, including genetic, ecological, and management effects. The benefits may include greater numbers of fish for harvest, reduction in extinction risk due to demographic boost of listed fish, and other potential uses for recovery purposes (e.g., reintroduction into restored habitat; safety net projects). An HGMP is simply a detailed plan that describes how an artificial production program for a given species at a given facility (or facilities) will be operated for a given period of time. Thus, a good HGMP represents a reasoned "solution" between risks and benefits, informed by the best available science.

HGMPs, the Columbia River Basin, and the Endangered Species Act (ESA). Due to the pervasive presence of salmon and steelhead listed under the ESA in the Columbia River Basin, and because artificial production programs affect these listed fish, operators of those programs must consult with NOAA Fisheries and obtain approval under the ESA for their operation. There are a number of different approval mechanisms provided under the ESA – sections 4(d), 7, and 10 – but HGMPs are now utilized to focus the required consultations irrespective of which mechanism applies. And, in all cases, approval of an HGMP by NOAA Fisheries means that the programs have been found to be in compliance with the substantive requirements of the ESA. However, HGMPs are not envisioned to be permanent or unchanging plans. It is expected that they will be subject to modification over time based on new information and insights, including proposals and recommendations provided by the Artificial Production Review and Evaluation, Subbasin Planning, US v Oregon proceedings and other sources.

HGMPs and Hatchery Reform. As noted above, operators of hatchery programs in the Columbia Basin need ESA approval for their programs due to the impacts of those programs on listed fish. They are responsible for operating their programs in compliance with the ESA. Obtaining ESA approval in many cases will require that previous practices be modified to address ESA. These modifications, a subset of a larger class of activities known generally as "hatchery reforms," include operational and facility changes designed to reduce risks posed to listed fish by hatchery production, or otherwise to contribute to the conservation and recovery of listed salmon and steelhead. The larger class of hatchery reforms also includes hatchery modifications intended to better define and achieve production and harvest objectives that are not necessarily related to ESA.

The FCRPS Biological Opinion and Hatchery Reform. The FCRPS Action Agencies share an interest in hatchery reform with hatchery owner/operators. Both desire to reduce the deleterious impacts of artificial production programs on listed fish and contribute to their recovery. In particular, the Action Agencies' interests stem from their need to find "offsite mitigation" survival improvements for listed fish affected by the FCRPS. Toward this end, Action 169 of the Reasonable and Prudent Alternative in the BiOp requires them to fund the development of HGMPs for all Columbia Basin hatchery programs by the 3-year check-in scheduled for late 2003. The underlying intent is to join the common interest of hatchery operators and the FCRPS Action Agencies in identifying hatchery reforms and accelerating their implementation to benefit listed fish, thereby contributing to better achievement of artificial production objectives for the Columbia Basin while contributing to offsite performance standards prescribed in the FCRPS BiOp. For this reason, the FCRPS Action Agencies will be prepared to fund implementation of certain hatchery reforms identified in approved HGMPs.

Hatchery Reform and Congress. The reform of some hatchery programs is warranted irrespective of any particular ESA consideration, for example to reflect improved hatchery practices. When they do not translate into benefits to ESA listed fish, such non-ESA reforms may have to be justified according to their relevance to achieving the Council's Fish and Wildlife Program objectives or other mitigation objectives, rather than their value as off-site mitigation under the FCRPS BiOp. In these cases, funding from sources other than FCRPS Action Agencies may be required. Hatchery reforms at Mitchell Act facilities, which are authorized and funded by Congress for mitigation purposes, may particularly depend on Congressional appropriations due to "in-lieu" constraints on funding of such Federal programs by the Action Agencies.

The APRE and HGMP processes. The HGMP process has three phases, described in greater detail below. The initial phase was undertaken in cooperation with the Northwest Power and Conservation Council (Council) Artificial Production Review and Evaluation (APRE) process, a largely concurrent process now underway in the Basin. Though both seek to implement hatchery reform, the APRE and HGMP processes differ in scope, approach, and specific outcomes. For example, the APRE includes non-anadromous fish, and utilizes the services of consultants engaged by the Council to analyze existing programs, recommend reforms, interact with an Artificial Production Advisory Committee representing Columbia Basin fishery managers, and prepare a report that will go to the Council and the region. The HGMP process addresses only anadromous salmon and steelhead programs, is designed to achieve both ESA coverage and identify FCRPS offsite mitigation opportunities, and relies on the active participation of state, tribal, federal and other entities operating or affected by artificial production programs to identify hatchery reforms.

To maximize efficiency and ensure the two processes are complementary, NOAA Fisheries and Council staff have coordinated the information and data-gathering phase to assure a consistent database for use in both the APRE and HGMP processes. To assist this overall effort, the Council retained a consultant, Mobrand and Associates, to help gather and organize the massive amount of information involved. The consultants designed a questionnaire to elicit comprehensive information from hatchery operators about their programs, developed an electronic database and associated software, conducted a series of multi-subbasin workshops with hatchery operators to obtain their data and information, and entered it into the database. It is intended that the database and software will be available for future deliberations on artificial production as well. The last step in the in-common data-gathering phase of the APRE/HGMP process will be largely finished upon completion of several subregional workshops, dubbed "exit interviews," currently planned to occur in April 2003. Those

sessions, organized around groups of subbasins, are designed to verify that the database is accurate and complete.

The three phases of the HGMP process. As noted above, the joint APRE/HGMP data-gathering effort was designed to feed into NOAA Fisheries' HGMP process, which has three distinct phases. It starts with Phase I HGMPs, which can be generated from the database described above (in fact, in some cases draft HGMPs were the source of the data that were entered into the database). Phase I HGMPs largely reflect current programs, including applicable US v Oregon production agreements and other existing conservation, mitigation, and production programs. For some programs currently lacking ESA coverage, the Phase I HGMPs will be used in ESA consultations between the relevant hatchery program owner/operators and NOAA Fisheries. These consultations are intended to result in ESA coverage on at least an interim basis while the longer-term HGMPs are being developed in the collaborative Phase II and Phase III steps.

The Phase I HGMPs also will feed into the collaborative Phase II and III steps of the process. Phase II involves a series of workshops centered on specific HGMPs in an area (provinces or groups of sub-basins). These workshops will involve deliberations among the parties affected by particular artificial production programs, including but not necessarily limited to the states, tribes, and federal agencies, collectively referred to herein as the HGMP "collaborators." The deliberations will be overseen by a neutral "Process Manager" engaged and funded by the Bonneville Power Administration (BPA) to keep the process moving along according to schedule, and generally manage the process toward itscompletion. Phase II HGMPs will incorporate the collaborators' discussions for each program or facility, and include hatchery reforms that could benefit listed fish and/or better achieve non-ESA objectives. When tentative agreement is reached on a Phase II HGMP, it will be set aside ("parked") until all HGMPs relevant to the ESU(s) affected by the program are completed. For proposed actions where the collaborators are unable to reconcile differences between them, a number of possibilities exist for reconciling those differences; these are described in greater detail below.

When all Phase II HGMPs that impact a listed Evolutionarily Significant Unit (ESU) are completed, and any input received from other forums such as sub-basin planning, recovery planning, the APRE and/or US v Oregon included as appropriate, NOAA Fisheries will analyze impacts from an ESU perspective, i.e., taking into account the effects of all artificial production programs defined in Phase II HGMPs and considering the other factors that affect a listed ESU. Specific steps will be taken to link the HGMP process with other relevant processes, as illustrated in the attached flowchart, to ensure that Phase II HGMPs appropriately reflect agreed recommendations emerging from these various forums. Following this review by NOAA Fisheries, the HGMP collaborators will strive to reach agreement on modifications of the HGMPs to address any ESA concerns raised by NOAA Fisheries. Lacking agreement among the collaborators, the owner/operator of the facility in question will consult with NOAA Fisheries to address the issue. Not necessarily all Phase II HGMPs will require revision due to NOAA Fisheries' ESU-wide analysis; in these cases Phase II HGMPs will become Phase III HGMPs with little or no substantive revision. Completed and approved HGMPs will demarcate the ESA-related responsibilities of hatchery operators and those additional reforms, if any, that might benefit listed fish and therefore be eligible for FCRPS off-site mitigation funding from BPA through the Council's rolling provincial review process.

In both Phases II and III of the HGMP process, recommendations emerging from the APRE process will be expressly considered by the collaborators developing HGMPs. The HGMPs will note explicitly which APRE recommendations have been adopted and, for those that are not adopted, will indicate briefly why the recommendations were modified or not adopted. These steps will help

ensure that the HGMP and APRE processes have the opportunity to incorporate the insights and hatchery reforms proposed in both efforts.

Linkage between HGMP process and Subbasin Planning. As noted above, the HGMP process is designed primarily to deal with existing hatchery programs and potential reforms to those programs. At the same time, the region is heavily engaged in a broad-scale subbasin planning initiative designed, among other purposes, to provide the building blocks of recovery plans for listed fish and better inform choices among alternative recovery actions. Subbasin planning may well involve consideration of alternative ideas on how to utilize artificial production to achieve subbasin objectives and local harvest goals. The HGMP process does not preclude any outcome of subbasin planning. Subbasin planning efforts should consider both within-basin and out-of-basin harvest opportunities and commitments, as the purposes of some hatchery programs may not be entirely reflected in a subbasin plan. Many hatchery programs were founded and continue to exist to provide benefits both within and outside the subbasin in which the program operates, often as mitigation for the effects of various development activities. Fishery benefits may extend to downriver and ocean harvest arenas and the harvest objectives for these activities may continue to be valid in many cases.

The anticipated time frames for subbasin planning and the HGMP process pose significant coordination challenges. Procedurally, it will be important to establish protocols to ensure appropriate communication linkages between the HGMP process and the applicable lead entities in each subbasin planning area. Coordination between subbasin planning and the HGMP process will likely occur in four important ways. First, subbasin planners at the watershed level will be afforded the opportunity to report periodically the status of their planning effort and any useful information to those developing individual HGMPs in the affected area. Second, HGMP participants will be afforded the opportunity to update subbasin planners at the watershed level on the progress and status of individual HGMPs. Third, the HGMP process will interact periodically with the state-level subbasin planning effort by briefing and exchanging information with the state coordinators and/or Governor's offices as appropriate. Fourth, during Phase III of the HGMP process, the HGMP coordinators will interact with those who are integrating the subbasin plans at the Province and Basin-wide level. These four steps should ensure that HGMPs and subbasin planning develop in a mutually reinforcing manner. Throughout the processes, subbasin planners will be encouraged to attend HGMP working sessions at appropriate times to familiarize themselves with artificial production issues and offer their perspectives.

More substantively, the existence of subbasin planning groups may provide an opportunity for affecting choices among alternative uses of artificial production identified in the HGMP process. For example, if a given subbasin is far enough along in its planning to have identified broad options for recovery, a linkage with the HGMP process may help both processes achieve their objectives. Particularly when Phase II HGMP discussions result in unreconciled differences among collaborators, Phase II options could be logically coupled with specific habitat options identified in the subbasin planning process to create "recovery scenarios" that could be presented to subbasin planners, the Technical Recovery Teams, and/or the HGMP process.

Or, in the circumstance where subbasin planning is not yet far enough along to help reconcile alternative artificial production uses, HGMP collaborators could choose to address the question on an interim basis pending further progress in the development of the pertinent subbasin plan(s). In all cases, as mentioned previously, it must be clear that the existence of an approved HGMP never precludes the possibility of new uses and/or approaches involving artificial production; existing HGMPs can always be modified or replaced, or new ones considered, to implement emerging subbasin plans.

Linkage between HGMP process and Technical Recovery Team (TRT). There are several ways the HGMP process can link with the TRT/recovery planning process. First, TRT products, particularly their population delineations and factors of decline analyses that will affect choices among various artificial production options, will inform the participants in the HGMP process. In addition, when disagreements emerge among collaborators regarding a specific HGMP, alternatives could be presented to TRTs for their technical advice on a particular issue. If such advice leads to agreement, the applicable HGMP could be completed and set aside (parked) until all HGMPs relevant to an ESU are completed. If not, TRTs could provide technical review of alternative hatchery production scenarios being considered by comanagers. Depending on the status of subbasin planning, alternative artificial production uses could be logically coupled with alternative habitat approaches, creating contrasting recovery scenarios for analysis and advice by the TRTs, consistent with the overall approach to recovery planning.

Linkage between the HGMP process and *US v Oregon*. As noted above, the Phase I HGMPs largely reflect current hatchery programs, including many production agreements developed in US v Oregon. In addition, it is quite possible that a number of artificial production issues will emerge that, despite the subbasin planning and TRT linkages described above, prove unresolvable in the HGMP forum. Depending on the parties in dispute, some of these disputed issues may lend themselves to resolution in the US v Oregon process. Whether or not a specific dispute exists, it will be critical to maintain ongoing dialogue between the HGMP and US v Oregon processes. This should not prove particularly difficult due to the substantial overlap in participants in these two processes and largely concurrent effort in US v Oregon to develop a new Columbia River Fish Management Plan.

COLUMBIA RIVER BASIN HGMP PROCESS
Combined Phase APRE/ HGMP
Draft 3/21/03

Northwest Power Planning Council
APRE PROCESS

HGMP PROCESS

Complete Program Data
Initial APRE Program reports on web for Manager review

Existing U.S. v OR production agreements

Sept. 2002

Second Provincial Workshop
Exit Interview / HGMP Kickoff

APRE Program Reports
on Web for Manager Review / preparation

Draft Phase I HGMP's
Current programs/ facilities delivered to Managers

Final APRE program reports

Phase I
Consult for Interim ESA coverage where lacking

Prepare Draft APRE Provincial Reports

Technical Recovery Team*
ID populations; viability analysis; Phase II scenario analysis, etc.

Co-Manager collaborative phase II/III:
reconcile existing HGMPs; develop/consider new HGMPs

Phase II:
- Individual Program Emphasis (facility and species)
- TRT advice if needed

Phase III
- ESU-wide emphasis, with cumulative considerations
- Unreconciled options may be bundled with SBP "Scenarios" for TRT advice

APRIL 2003

Co-managers comment on APRE provincial reports

Subbasin Planning (SBP)*
assessment; inventory; management plan

Final APRE Provincial Reports for Subbasin Planning and HGMP Phase II and III

US v Oregon*
- CRFMP harvest and production integration
- reconciliation of unresolved issues, disputes

Final APRE Report to Congress

NMFS Reviews HGMP under applicable section of ESA (sec 4d, 7, 10)

Sept. 2003

Recovery Plan ← **Hydro Actions** + **Harvest Actions** + **Habitat Actions** + **Hatchery Actions** (Art. Prod. Reform; Offsite mitigation $)

***** note: chart is not intended to provide details on the scope or schedules of these other processes

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Project **Non-LSRCP HGMPs** (Lower Snake River Compensation Plan HGPs will be covered under the MOU with USFWS)
BPA Project number **2003-005-00**
Overall Contract periods **Sep 2002 Sep 2003**

Process Manager	USFWS	ODFW	WDFW	IDFG	WST	CTUIR	NPT	SBT	CCT	YN	NPPC	Sub Contract Coor and manage projects	Sub ContractB Data consolidation /organizatio	Project Manage. /Commun.	Direct Contract Manag.	Contract manage. Indirect (at 5%)	Total
Phase I																	
	(Overlapping timeframe and personnel with APRE)																
	$43,796	$31,976	#######	$9,262	$0	$0	$0	$0	$0	$0	$21,175	$167,614	$12,032	NA	NA	NA	$440,119
																BPA Accrual Estimate for Phase I (20 Feb 2003)	$462,000
Phase II/III																	
Scenario A -States serve as Coordinators/BPA as Contract/Project Manager																	
	$132,400	**$250,000**	**$106,000**	**$250,000**	**$2,000**	**$7,000**	**$42,000**	**$34,000**	**$28,000**	**$42,000**	**$44,000**						**$937,400**
Scenario B -Separate Contracted Coordination/Project Manager -----BPA as Contract Management														**(12% reductions for states if another entity coordinated)**			
	$132,400	**$221,225**	**$93,799**	**$221,225**	**$1,770**	**$7,000**	**$42,000**	**$34,000**	**$28,000**	**$42,000**	**$44,000**			**$70,000**	**NA**	**NA**	**$937,419**
																	(rounded)
Scenario C -Separate Contracted Coordination/Project Manager and Separate Contract Management														**(additional 7 % reduction to state/tribal contracts)**			
	$132,400	**$206,823**	**$87,693**	**$206,823**	**$1,655**	**$6,544**	**$39,266**	**$31,787**	**$26,177**	**$39,266**	**$41,136**			**$70,000**	**$10,000**	**$37,858**	**$937,428**
																	(rounded)
																BPA Accrual Estimate for Phase II/III (20 Feb 2003)	**$938,000**
																less Process Manager	**$132,400**
																Total	**$805,600**