

January 5, 2000

TO: Pacific Northwest Region Anadromous Fish Hatchery Managers

FROM: Stephen Smith, Chief – Hatcheries & Inland Fisheries  
Sustainable Fisheries Division – National Marine Fisheries Service

SUBJECT: Hatchery and Genetic Management Plan (HGMP) Template:  
Purpose, Applications, and Instructions.

Attached is the final version of the Hatchery and Genetic Management Plan (HGMP) template for use in Washington, Oregon, and Idaho. The primary purpose of the HGMP is to provide a single, comprehensive source of information regarding anadromous salmonid hatchery programs. The National Marine Fisheries Service (NMFS) will use this information in its Endangered Species Act (ESA) processes to assess impacts on listed anadromous fish. In certain situations, the information provided in an HGMP will be used to consider issuance of section 10 take permits. On a broader scale, though, NMFS anticipates using the HGMP to evaluate take associated with hatchery operations pursuant to its recently proposed section 4(d) rules that would allow limitation of take prohibitions for hatcheries with approved HGMPs. This template is provided now to acquaint fish hatchery managers with its contents, and to help prepare managers for the completion of HGMPs in the coming months as the 4(d) rules proposed for recently listed “threatened” populations are finalized.

An additional, important purpose of the Plans is the creation of a source for comprehensive hatchery program information for use in regional fish production and management planning by federal, state, and tribal managers. In the Columbia Basin, we expect the Plans to facilitate funding and scientific reviews of hatchery programs. The attached template is intended to assist in developing HGMPs in a standardized manner for the above purposes.

### **HGMP Use for ESA Evaluations and Approvals**

NMFS is currently preparing eight regional Biological Opinions (BiOp) on federally-funded hatchery programs for anadromous fish throughout Washington, Oregon, and Idaho. For most of these BiOps, HGMPs (based on an earlier draft template) have been submitted. From these, the BiOps will be prepared. NMFS anticipates these BiOps will be finalized in late March and be effective for two years.

Meanwhile, NMFS has proposed two 4(d) rules that apply the ESA's take prohibitions to 14 salmon and steelhead Evolutionarily Significant Units (these regulations were published in the Federal Register on December 30, 1999 for steelhead and on January 3, 2000 for chinook, sockeye, and chum salmon). Pursuant to these proposed regulations, HGMPs that are submitted to NMFS, publically reviewed, and approved by NMFS based on the standards within the 4(d) rules, can be subject to limited take prohibitions. These rules, if finalized as proposed would avoid the necessity to seek future section 10 permits for hatcheries and also minimize the section 7 consultation process for federally funded programs. The proposed 4(d) rules also propose flexibilities for hatchery operations that support conservation of listed species, that otherwise would not have been allowable under previous guidelines for issuance of section 10 permits. HGMPs submitted for the process proposed in the 4(d) rules must utilize this final template.

### **HGMP Completion Guidelines**

#### ***General Instructions:***

As stated above, NMFS will evaluate each HGMP for ESA purposes on the basis of standards (contained in upcoming 4(d) rules) that are designed to minimize take and promote conservation of the listed species that may be affected by the hatchery program. The completed HGMP must therefore indicate anticipated take levels, and specific management measures that minimize take of listed species and protect listed ESUs. The following instructions for completing the HGMP for a hatchery program will help ensure that sufficient information is provided for the evaluation of the effects of the hatchery program on listed salmonid populations.

#### ***Guidelines for Completing HGMP Sections:***

A) The information included should be the best scientific and commercial information available, as it will help determine if hatchery programs are likely to meet their goals and ESA obligations. Scientific and policy documents that should be used as references to guide completion of HGMP sections regarding hatchery operations and effects include: *Proposed Rule Governing Take of Seven Threatened Evolutionarily Significant Units (ESUs) of West Coast Salmonids: Oregon Coast Coho; Puget Sound, Lower Columbia and Upper Willamette Chinook; Hood Canal Summer-run and Columbia River Chum; and Ozette Lake Sockeye*; *Proposed Rule Governing Take of Threatened Snake River, Central California Coast, South/Central California Coast, Lower Columbia River, Central Valley California, Middle Columbia River, and Upper Willamette River Evolutionarily Significant Units (ESUs) of West Coast Steelhead*; ESU-wide hatchery plans directed at programs affecting ESA-listed populations; the Northwest Power Planning Council's (NPPC) *Artificial Production Review* (NPPC document 99-15); Washington Department of Fish and Wildlife's *Hatchery Evaluation, Interactions, and Utilization* documents; and NMFS' draft paper, *Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units*. The NPPC *Artificial Production Review* provides preliminary, draft examples of "Performance Standards" and "Performance Indicators" that may be considered for hatchery programs in responding to Sections 1.9 and 1.10 of the template. As these performance measures are improved, NMFS will make updated versions available on its web-site to guide completion of Section 1.9 and 1.10.

B) This template is designed to provide a thorough description of each hatchery operation,

including the facilities used, methods employed to propagate and release fish, and measures of performance. However, for hatcheries outside of the Columbia Basin, where the primary focus of hatchery evaluations will be compliance with ESA protective provisions, details regarding hatchery program activities that are not likely to affect listed fish populations are optional. *Hatchery programs located outside of the Columbia Basin that are **not** involved in the artificial propagation or research of ESA-listed salmonid populations therefore do not have to complete Sections 8 (“Mating”), 9 (“Incubation and Rearing”) and 12 (“Research”) of the HGMP template [although managers are encouraged to do so].*

C) Included in the template are several sections that address the status of listed stocks, anticipated impacts to listed fish, harvest integration issues, and research. These latter sections of the template should be completed with the assistance of staff within your organization who are familiar with stock status, hatchery fish ecological and genetic effects, and harvest management issues. NMFS’ Sustainable Fisheries Division staff can also provide assistance in completing these sections of the plan (see Instruction I). A “Definitions” page for terms used in the HGMP template is appended to assist in responding to certain sections (Attachment 1).

D) If your ESU has an ESU-wide hatchery plan or regional salmonid recovery plan approved by the Co-managers and NMFS (e.g. those pending in Puget Sound), the strategies, standards, and guidelines in the ESU hatchery plan should be followed. Any inconsistencies with ESU-wide or regional plan standards and guidelines must be explained and justified. Information taken directly from ESU-wide or regional plans may be used to provide information requested.

E) If the hatchery fish population addressed in this template is collected as broodstock at another location, and/or will be transferred to another hatchery or facility for rearing, list all hatcheries and facilities which will handle the population from spawning through adult return, and describe the role of each. (See Section 1.5)

F) Complete one template for each hatchery fish species program or hatchery stock (e.g. separate HGMPs for steelhead and fall chinook produced at the same hatchery. The separate HGMPs should include satellite facilities used to collect, propagate, and release each species).

G) Under the broad definition of ESA, “take” of listed species will include hatchery activities that lead to harassment, behavioral modification, capture, handling, tagging, bio-sampling, rearing, release, competition, predation, disease transfer, adverse genetic effects, injury, or mortality of listed fish. When “take” of a listed species is expected in the hatchery operation, the ESA requires that a numerical estimate be quantified as best as possible. To meet this objective, a “take table” is appended to the HGMP that, when completed for each hatchery program, will provide a uniform means to report estimated take levels (see Table 1).

H) Where indicated, cite hatchery databases used to provide information in the plan. When feasible, include electronic links to referenced data bases. Also cite relevant reports that describe the hatchery operation and impacts on the listed species or its critical habitat (see Section 13). Examples include any Environmental Impact Statements, Environmental Assessments, Biological Assessments, or other analysis or plans that provide pertinent background information

to facilitate evaluation of the HGMP. Where appropriate, use these citations to provide additional support of critical information entered into this HGMP.

I) This template is provided in an electronic form for ease of completion. The template is downloadable from the NMFS Northwest Region web-site ([www.nwr.noaa.gov](http://www.nwr.noaa.gov)) or available on a computer disk upon request. The template headings and queries are in **bold** type. To enter information/responses, use non-bold 12 point font size. All template text in italics is intended to provide guidance on the information needed in a particular section and can be deleted once completed.

J) Completed HGMPs should be submitted to NMFS Sustainable Fisheries Division staff identified below in Table A, dependent upon the location of the hatchery program (by listed salmonid ESUs or regional basin). These individuals may also be contacted to provide assistance for the completion of the HGMP prior to submittal. Managers should provide both an electronic version (via email) and a hard copy of the document. The HGMPs will be initially reviewed for completeness, and the applicant may be contacted if additional information or clarification of responses provided is needed. When the initial NMFS review has been completed, the HGMP will then be up-loaded on a designated NMFS web-site with other completed HGMPs for public review and access. These up-loaded, completed HGMPs will be used by NMFS as the basis for evaluating the effects of the program on ESA-listed fish. Mechanisms for annual updating of the HGMPs will be described in subsequent NMFS transmittals.

K) Pursuant to NMFS' proposed 4(d) rules, co-managers may submit HGMPs for consideration of limitations of take prohibitions. Under this proposed process, NMFS will first ensure draft HGMPs are complete per instructions. Draft HGMPs will then be available at the web-site for at least 30-day public review, following notification in the Federal Register. Approved, final HGMPs will then be maintained on the web-site pending any future amendment.

**Table A. NMFS contacts for HGMPs by region or listed salmonid ESU.**

<b>NMFS Contact</b>	<b>Region or ESU</b>	<b>Email Address / Phone #</b>	<b>Mailing Address</b>
<b>Derek Poon</b>	Puget Sound Chinook	<a href="mailto:derek.poon@noaa.gov">derek.poon@noaa.gov</a> (206.526-6550)	7600 Sand Point Way NE, BIN C15700 Seattle, WA 98115-0070
<b>Tim Tynan</b>	HC Summer Chum Lake Ozette Sockeye	<a href="mailto:tim.tynan@noaa.gov">tim.tynan@noaa.gov</a> (360.753-9579)	510 Desmond Dr. SE, Suite 103 Lacey, WA 98503
<b>Rick Westerhof</b>	Upper Columbia Region	<a href="mailto:rick.westerhof@noaa.gov">rick.westerhof@noaa.gov</a> <a href="mailto:ovrick.westerhof@noaa.gov">ovrick.westerhof@noaa.gov</a> (503.230-5409)	525 N.E. Oregon St., Suite 510 Portland, OR 97232-2737
<b>Lance Kruzic</b>	Oregon Coast Region Willamette River ESUs	<a href="mailto:lance.kuzic@noaa.gov">lance.kuzic@noaa.gov</a> (503.231-2178)	525 N.E. Oregon St., Suite 510 Portland, OR 97232-2737
<b>Robert Bayley</b>	Mitchell Act Programs	<a href="mailto:robert.bayley@noaa.gov">robert.bayley@noaa.gov</a> (503.230-5432)	525 N.E. Oregon St., Suite 510 Portland, OR 97232-2737
<b>Rich Turner</b>	Lower Columbia Region Mid-Columbia Region	<a href="mailto:rich.turner@noaa.gov">rich.turner@noaa.gov</a> (503.736-4737)	525 N.E. Oregon St., Suite 510 Portland, OR 97232-2737
<b>Herb Pollard</b>	Snake River Region	<a href="mailto:herb.pollard@noaa.gov">herb.pollard@noaa.gov</a> (208.378-5614)	1387 S. Vinnell Way, Suite 377 Boise, ID 83709