

3-2-02.01

Steelhead Stream Classification

- *Effective Date:* December 13, 2005

This Policy Replaces:

None.

Staff, Organizations Directly Affected (including but not limited to):

Ministry of Water, Land and Air Protection
Ministry of Sustainable Resource Management
Ministry of Agriculture, Food and Fisheries
Freshwater Fisheries Society of British Columbia
Fisheries and Oceans Canada
Contract/volunteer hatchery operators
Angling and guiding organizations
First Nations.

POLICY STATEMENT

Purpose: The use of hatchery steelhead (*Oncorhynchus mykiss*) and/or retention of wild steelhead can provide angling benefits, but may also impose risks to wild stocks. The overall purpose of this policy is to manage the risks in order to maintain healthy, self-sustaining wild steelhead stocks.

It is the Policy of the Ministry:

1. That all streams containing steelhead will be classified as:
 - (a) wild; or
 - (b) hatchery-augmented.
2. Streams will be classified as wild unless specifically designated as hatchery-augmented.
3. That streams designated “wild” will be managed to maintain and protect the abundance, distribution and genetic diversity of indigenous steelhead stocks in the province while providing angling opportunities when stock abundance permits.
4. That streams designated “hatchery-augmented” will be managed to maintain or develop new angling opportunities while minimizing risks to wild indigenous steelhead.

5. In no cases will hatchery-augmentation be considered as a substitute for habitat protection and restoration.

Reasons for Policy

1. To maintain the genetic diversity, general health, and long-term viability of wild indigenous steelhead stocks.
2. To recognize the risks of hatchery augmentation and to acknowledge the lack of scientific evidence to support the use of traditional hatchery practices to recover “at-risk” steelhead stocks.
3. To allow for the maintenance and development new steelhead angling opportunities in the province in appropriate locations.
4. To provide standard designations to support development of consistent management plans for steelhead stocks in the province.
5. To ensure that decisions with respect to the use of hatchery-augmentation are science based and consistently applied throughout the province through a structured decision making process.
6. To facilitate understanding and support for steelhead conservation, management and recovery strategies.

Definitions:

"Wild" steelhead streams — streams in which steelhead stocks and steelhead angling opportunities are sustained only by naturally produced indigenous fish. The historic stocking of hatchery fish does not preclude a wild designation if there is reasonable expectation that the indigenous stock remains intact or can be recovered.

"Hatchery-augmented" steelhead streams — streams in which marked artificially propagated steelhead are released *for the purpose of creating angling opportunities*. Propagated steelhead includes progeny resulting from projects where eggs are taken from adults, fertilized and incubated in a facility of any kind. They also include trapping fry, parr or smolts and raising them for subsequent release or use as captive brood stock.

"Viable wild stock" — for steelhead will be determined on a stream-by- stream basis using the best available science and stock and habitat information.

Wild stock status is expressed relative to the estimated existing capacity of each individual watershed to produce naturally spawning steelhead as follows:

"Routine Management Zone" (RMZ) — stocks at least 30% of habitat capacity;

"Conservation Concern Zone" (CC) — stocks are 10% to 30% of habitat capacity;

"Extreme Conservation Zone" (ECC) — stocks less than 10% of habitat capacity;

"Special Concern" (SC) — stocks are not well documented but believed to be very low.

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• *Effective Date: December 13, 2005*

A.) Classification of Steelhead Streams

- The Ministry will classify provincial streams containing steelhead as "wild" or "hatchery-augmented" to meet steelhead conservation and management objectives.
- The objective is to maintain healthy, self-sustaining wild steelhead populations in British Columbia and, as such, the default classification will be "wild". Criteria for classifying a stream as "hatchery-augmented" include:
 1. Systems which have been historically augmented and where continued augmentation is not considered to pose a risk to extant wild stocks or;
 2. Systems where a wild stock has been depleted or otherwise impacted to the point that recovery is not considered possible or;
 3. Systems where a steelhead population never existed and potential impacts to other native species have been evaluated and are considered acceptable.

In all cases there must be a reasonable expectation of creating a viable angling opportunity in a cost-effective manner.

- Initial classifications and proposed subsequent changes will be developed regionally and must be reviewed technically by the Ministry's Anadromous Fisheries Committee before forwarding to the Environmental Stewardship Division Management Committee (DMC) for a final decision.
- Requested changes to the designation of a steelhead stream will be directed to the accountable regional manager who will prepare an evaluation that includes management objectives, potential consequences and their likelihood and, performance indicators.
- A schedule of hatchery-augmented streams will be established and updated as required.

B.) Management of Designated Steelhead Streams

The Ministry will manage designated provincial steelhead streams as follows:

"Wild" steelhead streams¹

- No hatchery augmentation will be permitted.
- Angling regulations are to be enacted that prohibit retention of wild steelhead to conserve wild fish, provide higher catch rates and simplify management.
- Angling regulations are to be enacted to minimize catch and release impacts.
- Management priorities should be identified and implemented to maintain stock abundance in the "Routine Management Status". When the stock status of wild steelhead populations are declining towards or have declined to "Conservation Concern" levels or

lower, management prescriptions designed to recover stocks to the “Routine Management Status” should be developed.

- Management prescriptions should focus first and foremost on restoring stock abundance through improved stock management and/or habitat protection, habitat improvement that mimics natural habitat or enrichment of natural habitat.
- Where the requirement for a Recovery Plan (under the Accord for the Protection of Species at Risk or the *Species at Risk Act*) is identified for a steelhead stock or stock group, then it will be undertaken according to provincial policy and procedures. The use of conservation fish culture¹ designed to conserve within-stock genetic diversity is an acceptable short-term option (one generation) if it is part of a provincially approved recovery plan.
- Adult brood stock, smolts or parr may not be taken from wild steelhead streams for hatchery augmentation on other systems unless:
 1. a risk assessment has been prepared by the proponent and approved by the Anadromous Fisheries Committee as an exception to the general practice of not transplanting steelhead between watersheds;
 2. the status of the wild donor stock is in the Routine Management Status and
 3. approval is obtained from the Federal/Provincial Introductions and Transfer Committee.
- Non-government partners and public involvement groups should be encouraged to undertake projects which promote wild stock recovery through, habitat protection and restoration or enrichment of natural habitat.

"Hatchery-augmented" streams

- All hatchery-augmented fish must be marked with at least an adipose fin clip and regulations enacted that will limit catch and release impacts on wild steelhead as much as possible, and only permit retention by angling on marked hatchery-augmented fish.
- Hatchery programs must be evaluated annually to confirm predicted program objectives and outcomes are being achieved for the augmented and neighbouring streams. Hatchery programs, which are not meeting predicted objectives and outcomes, will be adjusted or discontinued.
- Hatchery augmentation, must follow current best practices for steelhead culture as established by the Freshwater Fisheries Society of BC and the Ministry of Land, Water and Air Protection.

a) Where an indigenous population is extant in a stream that has been or will be hatchery augmented to create a retention fishery for marked steelhead:

- A management prescription must be prepared that is designed to maintain indigenous populations and their habitats.
- The management prescription must consider the consequences identified during the classification process and establish practices to minimize any potentially negative impacts on indigenous steelhead stocks.

- This risk will be considered acceptable where there are or expected to be significant angling benefits and the augmentation program is not expected to impact the overall health of wild-indigenous steelhead populations.
- Management priorities should be identified and implemented to maintain the abundance of unmarked wild –indigenous steelhead populations in the “Routine Management status”. When the stock status of wild steelhead populations are declining towards or have declined to “Conservation Concern” levels or lower, management prescriptions designed to recover stocks to the "Routine Management Status" should be developed.
- Management prescriptions should focus first and foremost on restoring stock abundance through improved management and/or habitat protection, habitat improvement that mimics natural habitat or enrichment of natural habitat.
- Unmarked steelhead adults from the same stream should be used for brood stock when sufficient wild stock are available and comprise the majority of annual spawning escapements.
- Hatchery steelhead releases must be at locations and times where they will have minimum impact on wild fish.

b) Where a wild population of steelhead has never existed, been extirpated, or is not sufficiently abundant to meet the accepted definition of a viable stock, a new population of steelhead may be considered for introduction through hatchery augmentation to create a steelhead angling opportunity.

- A management prescription must be prepared that considers consequences identified during the classification process and establishes practices to minimize any potentially negative impacts.
- Marked steelhead brood stock from the closest available stream, which is part of the same stock grouping, is the preferred source for hatchery augmentation. Progeny from captive brood programs may be used for this purpose.

Management prescriptions will be developed regionally and reviewed technically by the Anadromous Fisheries Committee. They will be submitted to the Environmental Stewardship Division Management Committee (DMC) for a final decision. A structured decision making process will be followed where required.

The Ministry will use measurable criteria, standards and guidelines, including monitoring and evaluation requirements, to implement the Steelhead Stream Classification Policy and Procedure.

The Steelhead Stream Classification Policy and Procedure will be reviewed within five years by the DMC and modified where appropriate based on experience and changing conditions.

¹ Conservation Fish Culture is a specialized and experimental form of hatchery intervention designed to prevent the extinction of a population or species while the root causes of population decline are ascertained and addressed. The primarily focus of conservation fish culture is to protect the natural genetic integrity of the population. Such a program requires a carefully designed breeding plan and release strategy to mimic what would happen in the wild. These

programs are planned to be “temporary”, usually lasting for one generation. A conservation fish culture program differs significantly from the traditional production hatchery program where the main objective is to provide for angling opportunities.