WILD STEELHEAD MANAGEMENT ZONES

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Wild Steelhead Management Zones Why do we need them?

- **Genetic interbreeding leading to fitness impacts**
- **Competition for resources with wild fish**

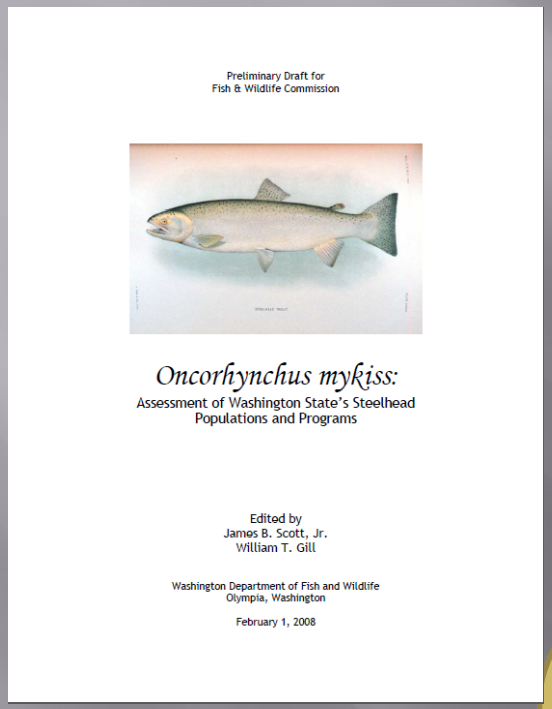
Wild Steelhead Management Zones What are they?

An area where a self-sustaining wild stock (population) is largely protected from the effects of hatchery programs.

Wild Steelhead Management Zones What do they mean?

- **Fisheries can be conducted if wild steelhead management objectives are met, but**
- **No hatchery releases will occur.**

SCIENCE



Preliminary Draft for
Fish & Wildlife Commission

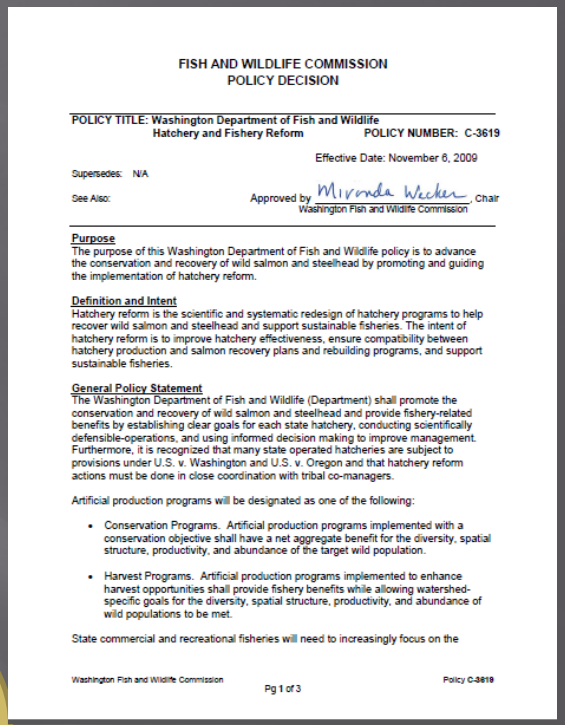
Oncorhynchus mykiss:
Assessment of Washington State's Steelhead Populations and Programs

Edited by
James B. Scott, Jr.
William T. Gill

Washington Department of Fish and Wildlife
Olympia, Washington

February 1, 2008

POLICY



FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Washington Department of Fish and Wildlife Hatchery and Fishery Reform
POLICY NUMBER: C-3619

Effective Date: November 6, 2009

Supersedes: N/A

See Also:

Approved by Miranda Wecker, Chair
Washington Fish and Wildlife Commission

Purpose
The purpose of this Washington Department of Fish and Wildlife policy is to advance the conservation and recovery of wild salmon and steelhead by promoting and guiding the implementation of hatchery reform.

Definition and Intent
Hatchery reform is the scientific and systematic redesign of hatchery programs to help recover wild salmon and steelhead and support sustainable fisheries. The intent of hatchery reform is to improve hatchery effectiveness, ensure compatibility between hatchery production and salmon recovery plans and rebuilding programs, and support sustainable fisheries.

General Policy Statement
The Washington Department of Fish and Wildlife (Department) shall promote the conservation and recovery of wild salmon and steelhead and provide fishery-related benefits by establishing clear goals for each state hatchery, conducting scientifically defensible-operations, and using informed decision making to improve management. Furthermore, it is recognized that many state operated hatcheries are subject to provisions under U.S. v. Washington and U.S. v. Oregon and that hatchery reform actions must be done in close coordination with tribal co-managers.

Artificial production programs will be designated as one of the following:

- Conservation Programs. Artificial production programs implemented with a conservation objective shall have a net aggregate benefit for the diversity, spatial structure, productivity, and abundance of the target wild population.
- Harvest Programs. Artificial production programs implemented to enhance harvest opportunities shall provide fishery benefits while allowing watershed-specific goals for the diversity, spatial structure, productivity, and abundance of wild populations to be met.

State commercial and recreational fisheries will need to increasingly focus on the

Washington Fish and Wildlife Commission
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Policy C-3619

Network of WSMZs

PSHAAC

- **Puget Sound Hatchery Action Advisory Committee (PSHAAC)**
- **11 Members Representing:**
  - Coastal Conservation Association
  - Long Live the Kings
  - Member at Large
  - Puget Sound Anglers
  - Recreational Fishing Alliance
  - Sierra Club
  - Sport Fish Advisor
  - Steelhead Trout Club
  - Wild Fish Conservancy
  - Wild Steelhead Coalition

wdfw.wa.gov/about/advisory/pshaac/

PSHAAC Recommendations

Major Population Group	Wild Steelhead Management Zone
North Cascades	SF Nooksack (Summer)
	Samish (Winter)
	*Skagit/Sauk (Summer/Winter)
	Pilchuck River (Winter)
	NF Skykomish (Summer)
	Tolt (Summer)
Central/South Cascades	White River (Winter)
	Puyallup/Carbon (Winter)
	Nisqually (Winter)
Hood Canal/Strait of Juan de Fuca	*Skokomish (Winter)
	*East/West Hood Canal (Winter)
	Sequim (Winter)
	*Elwha (Winter)

* = after supplementation efforts

WSGB Selection Guidance

Is it abundant and productive?

Preferred	Adequate
Probability of extinction in 20 years < 10%	Probability of extinction in 20 years < 10%
Long term decline < 60%	Short term decline insignificant

WSGB Selection Guidance

Can it sustain itself into the future?

Preferred	Adequate
More than 70% of watershed has existing habitat protection measures	More than 50% of watershed has existing habitat protection measures

WSGB Selection Guidance

Has it been significantly impacted by hatchery programs?

Preferred	Adequate
Proportion effective hatchery contribution or gene flow < 2%	Proportion effective hatchery contribution or gene flow < 5%

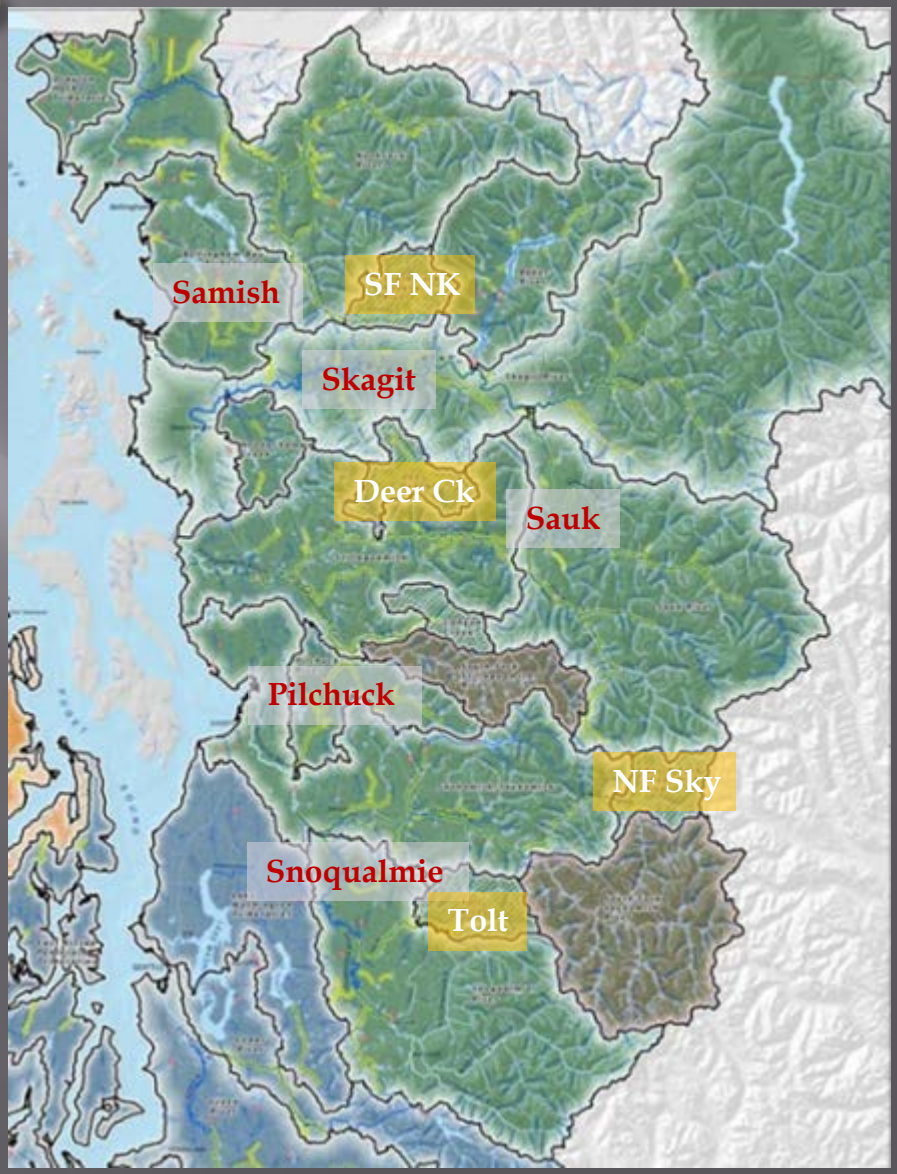
WSGB Selection Guidance

Is there population diversity among the WSGBs?

Preferred	Adequate
All run-timings represented, variety of hydrographic types	All run-timings represented

North Cascades

- SF Nooksack Summers
- Samish Winters
- Sauk Summer/Winters
- Skagit Summer/Winters
- Deer Creek Summers
- Pilchuck Winters
- NF Skykomish Summers
- Snoqualmie Winters
- Tolt Summers



North Cascades

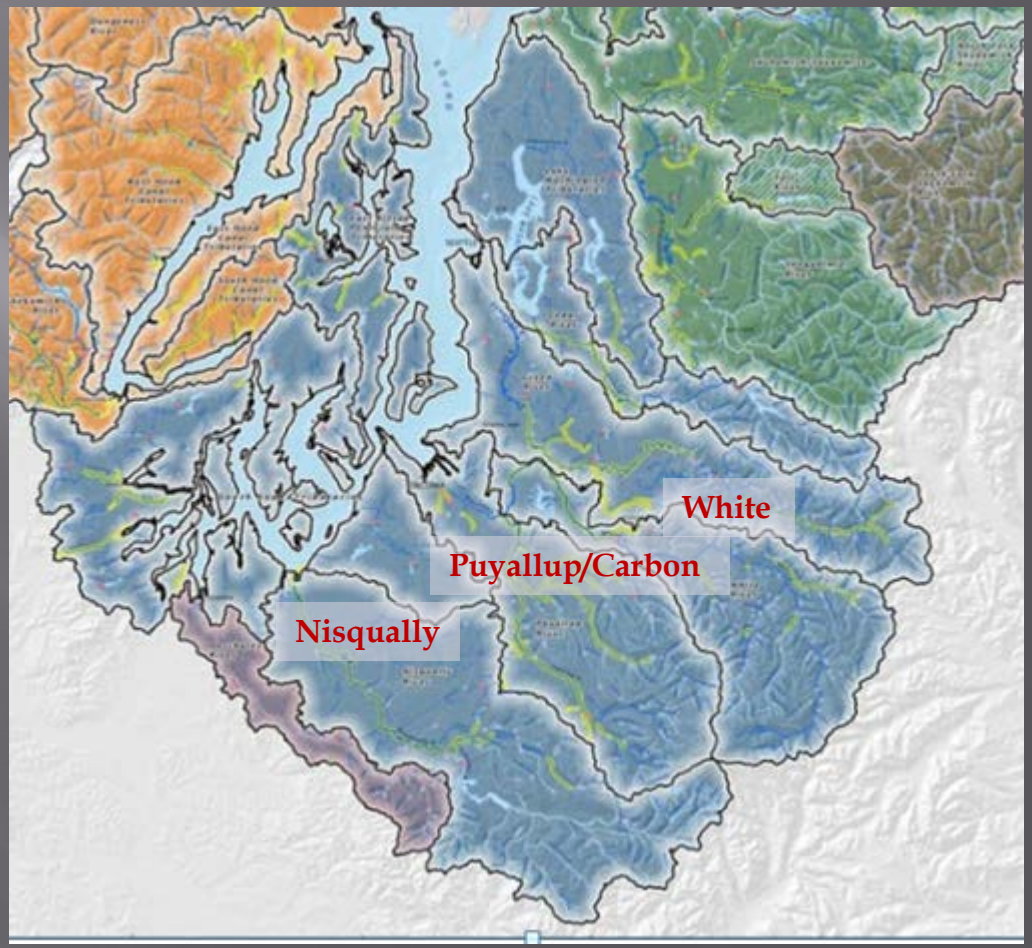
Population	Abundance	Sustainable	Wild Stock
SF Nooksack Summers	No Data	Adequate	Preferred
Samish Winters	Preferred	Poor	Poor
Sauk Summer/Winters	Preferred	Preferred	Adequate
Skagit Summer/Winters		Adequate	Preferred
Deer Creek Summers	No Data	Preferred	Preferred
Pilchuck Winters	Preferred	Poor	Adequate
NF Skykomish Summers	No Data	Preferred	Poor
Snoqualmie Winters	Preferred	Adequate	Poor
Tolt Summers	Poor	Poor	Poor

Central/South Sound

White Winters

Puyallup/Carbon Winters

Nisqually Winters



Central/South Sound

Population	Abundance	Sustainable	Wild Stock
White Winters	Preferred	Adequate	Adequate/1
Puyallup/Carbon Winters	Adequate	Poor	Adequate/1
Nisqually Winters	Adequate	Poor	Adequate/1

/1 No estimates of gene flow, but no hatchery releases in more than 10 years

Hood Canal/Straits

Skokomish Winters

East Hood Canal Winters

West Hood Canal Winters

South Hood Canal Winters

Sequim/Discovery Bay Winters

Strait of Juan de Fuca

Elwha

Hood Canal/Straits

Population	Abundance	Sustainable	Wild Stock
Skokomish Winters	Preferred	Preferred	Adequate/1
East Hood Canal Winters	No Data	Poor	Adequate/1
West Hood Canal Winters	No Data	Preferred	Adequate/2
South Hood Canal Winters	No Data	Poor	Adequate/2
Sequim/Discovery Bay	Poor	Poor	Adequate/1
Strait of Juan de Fuca	No Data	Adequate	Adequate/1
Elwha Winters	No Data	Preferred	Adequate/2

/1 No hatchery releases in more than 10 years
/2 Genetic analyses have shown that the native winter steelhead and early winter steelhead have remained genetically distinct.

Wild Steelhead Management Zones
How many do we need?

- At least one for each major population group
- Spatial/life history diversity

Puget Sound MPGs

- North Cascades
- Central/South PS
- Hood Canal/Straits

How Can I Provide My Input?

By August 13

- **Comment forms or testimony at 3 subsequent public meetings**
  - **July 21 Seattle**
  - **July 27 Mt. Vernon**
  - **July 28 Sequim**

- **Online comments can be submitted at**
  - **http://wdfw.wa.gov/conservation/fisheries/steelhead/gene_bank**

Public comments

- **Submit comments online**

http://wdfw.wa.gov/conservation/fisheries/steelhead/gene_bank