Endangered Species Act of 1973

NOAA FISHERIES
Northwest Region

Endangered Species Act and Habitat Conservation Plans

January 3, 2024
Bonnie Shorin
Central Puget Sound Branch Chief

Presentation Agenda:

1. ESA overview
2. Riparian area values for salmon
3. “Harm” and Section 10

1. Endangered Species Act of 1973






NOAA FISHERIES

In 1973, Congress found that various species had been "rendered extinct as a consequence of economic growth and development, untempered by adequate concern and conservation." -- ESA Sec 2(a)(1)

NOAA FISHERIES

Purpose of the ESA:

"to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved"

--- ESA Sec 2(b)

NOAA FISHERIES

Policy of the ESA:

"all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act"

--- ESA Sec 2(c)(1)

Mechanisms of the ESA:

- Section 5 = Land Acquisition (Sec's of Commerce and Agriculture may acquire land by purchase or donation or otherwise, to conserve fish, wildlife or plants)

- Section 6 = Cooperation with States (Sec of Commerce shall consult with States before acquiring any land or water or interest therein for the purpose of conserving species)

Mechanisms of the ESA:

- Section 7(a)(1) = all Federal agencies shall…carry out programs for the conservation of threatened and endangered species.

- Section 7(a)(2) = Each Federal agency shall, in consultation with [NMFS or USFWS] ensure that any action authorized, funded, or carried out … is not likely to jeopardize … species, or result in the destruction or adverse modification of habitat determined to be critical of such species.

Mechanisms of the ESA:

- Section 9 = Prohibited Acts
  - Imported listed species
  - Take listed species
  - Possess listed species
  - Sell, offer to sell, or deliver listed species

Mechanisms of the ESA:

- Take = harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

- Harm = an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

Mechanisms of the ESA:

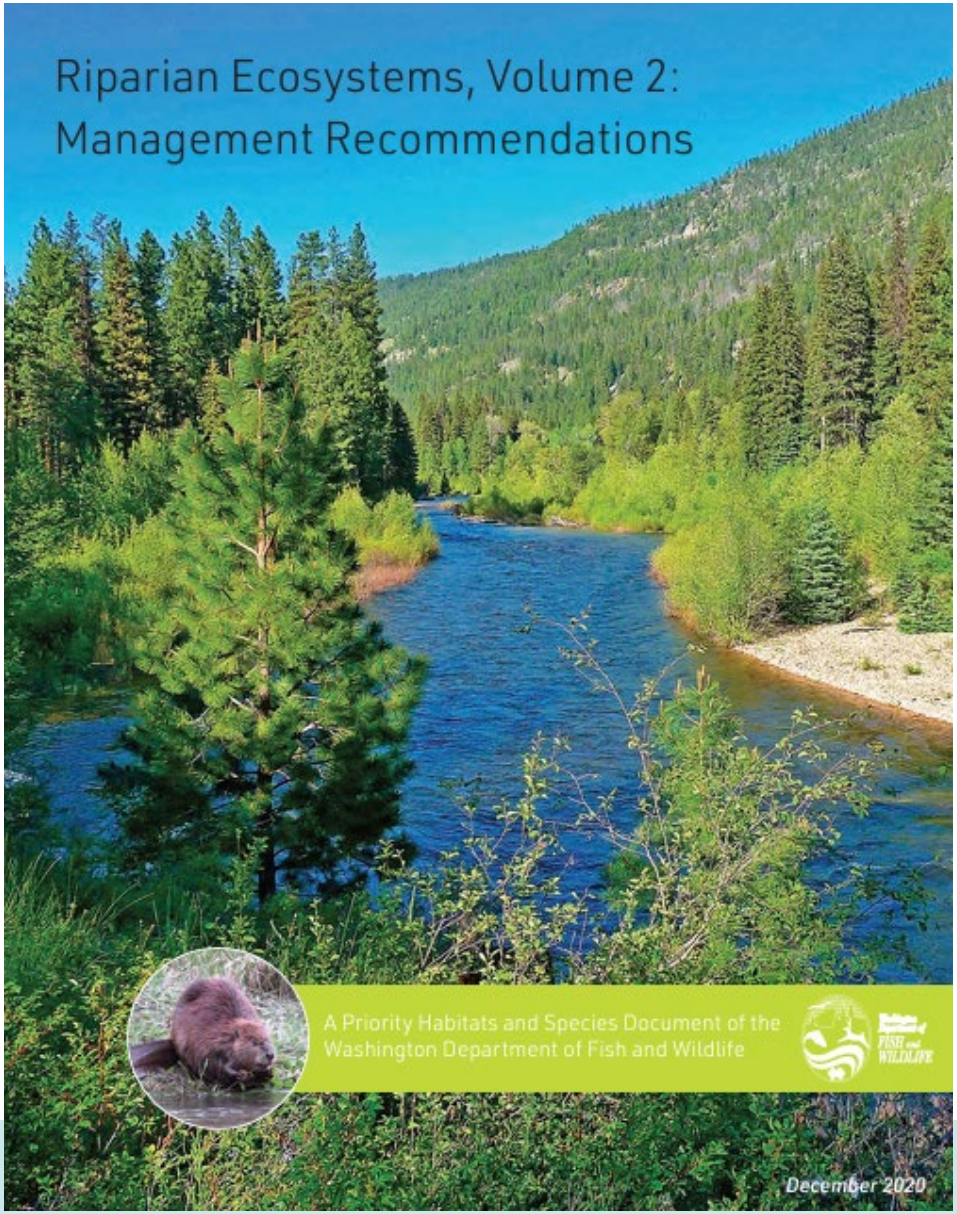
The ESA of 1973 did not have mechanisms for exempting take prohibitions from Federal or non-Federal activities, except for permits to authorize take from scientific research or certain other conservation actions.

Congress in 1982 to added an exemption for incidental take of listed species that would result from non-Federal activities (section 10(a)(1)(B)).

Mechanisms of the ESA:

- Section 10 = Exceptions to section 9
  - Research and Propagation
  - Incidental to otherwise lawful activity So Long As a conservation plan is submitted that
    - Identifies the impact of the take,
    - Minimization and mitigation measures, and funding thereof
    - Alternative considered and rejected
    - Other measures necessary for conservation

2. How are Riparian Areas Important to Salmon?



How are Riparian Areas Important to Salmon?

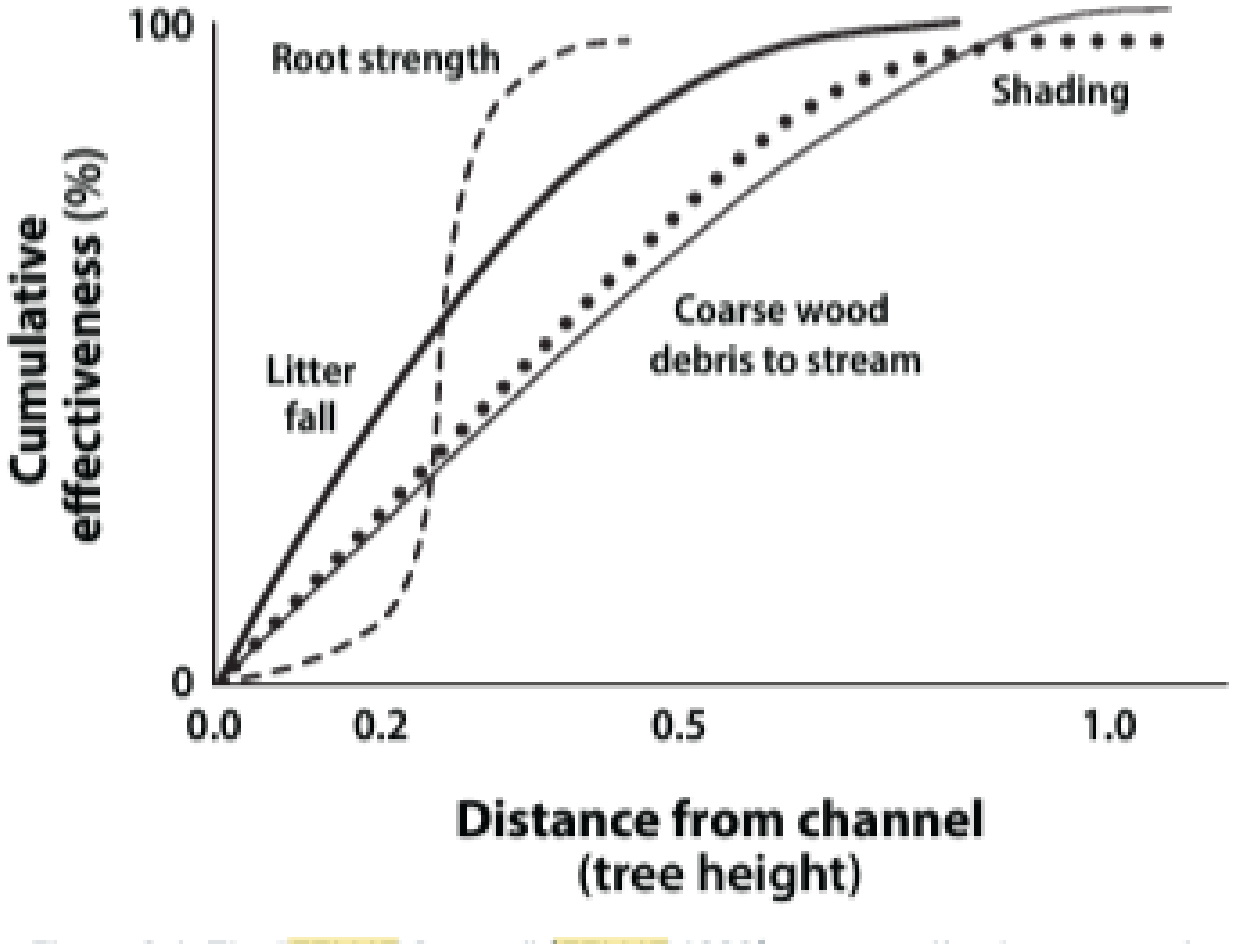
- Areas adjacent to rivers provide many habitat values:
  - Area for habitat forming processes and habitat complexity (braided streams, off channel wetlands, and side channels).
  - Flood Storage = fish refuge from high flows; recharge of cool water to rivers through summer and fall; access to abundant prey.
  - Riparian Vegetation = detrital prey source; thermal protection/ cooler microclimate; water quality protection by moving stormwater water through soils; recruitment of large wood to instream areas.

How are Riparian Areas Important to Salmon?

The Washington Department of Fish and Wildlife distilled riparian functions down to five key ecological functions:

1. bank stability,
2. shade,
3. pollution removal,
4. contributions of detrital nutrients, and
5. recruitment of large woody debris

How are Riparian Areas Important to Salmon?



Forest Ecosystem Management Assessment Team (FEMAT) curve

How are Riparian Areas Important to Salmon?

The model conveys two important points:

(1) four of the five riparian ecosystem functions or processes occur within one 200-year SPTH*; and

(2) the marginal return for each function or process decreases as distance from the stream channel increases.

*site potential tree height = the average maximum height of the tallest dominant trees (200 years or more) for a given site class.

3. HARM and HCPs

- If ecologically intact and functioning riparian areas provide necessary condition for the successful spawning, egg-to-fry survival, rearing of fry, migrating juveniles, and return migration of adult salmonids
- Then it is reasonably inferred that reducing those habitat conditions diminishes survival, growth, development, maturation, and reproduction of those same species.

Harm…

- If reducing those habitat conditions diminishes survival, growth, development, maturation, and reproduction of those same species
- Then what you have is HARM.
- If HARM is occurring on non federal lands, via non federal actions, then no section 7 consultation can occur to evaluate (in a biological opinion) and 'exempt' that take.

…and HCPs

- If HARM is occurring on non federal lands, via non federal actions, and no federal nexus exists to 'exempt' that take, then to receive a comparable exemption
- A conservation plan must be developed that
  - Identifies the impact of the take,
  - Minimizes and mitigates take,
  - Demonstrates reliable funding
  - Presents alternatives to the taking action considered and rejected
  - Includes other measures necessary for conservation

Almost always, these are “Habitat Conservation Plans”

Because, as already described, the mechanisms of take are primarily through habitat degradation, (HARM) rather than the other forms of take i.e., pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting.

HCPs

1) Can take several years to prepare and finalize
2) Are typically valid for 20-50 years
3) Can cover “future listed species”
4) Trigger NEPA
5) Trigger a Biological Opinion (the Service has to consult with itself on its action if approving the Plan and issuing the Section 10 permit)

HCPs

IF our consultation with ourself indicates No Jeopardy and No Adverse Modification of Designated Critical Habitat

1) The Service must also present section 10 Findings and Recommendations
2) Write Permit Terms and Conditions
3) Establish Reporting Requirements
4) And publish Notice of Availability in The Federal Register

HCPs

https://media.fisheries.noaa.gov/2022-03/habitat-conservation-plan-handbook_508.pdf

HABITAT CONSERVATION PLANNING

AND

INCIDENTAL TAKE PERMIT PROCESSING

HANDBOOK

December 21, 2016

U.S. Department of the Interior
Fish and Wildlife Service

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

NOAA FISHERIES

Back to the ESA, Briefly:

The jeopardy standard has 2 parts: Survival and Recovery.

- Survival = not becoming extinct, is a necessary condition for recovery.
- Recovery = restoring species to the point they no longer need the protection of the ESA

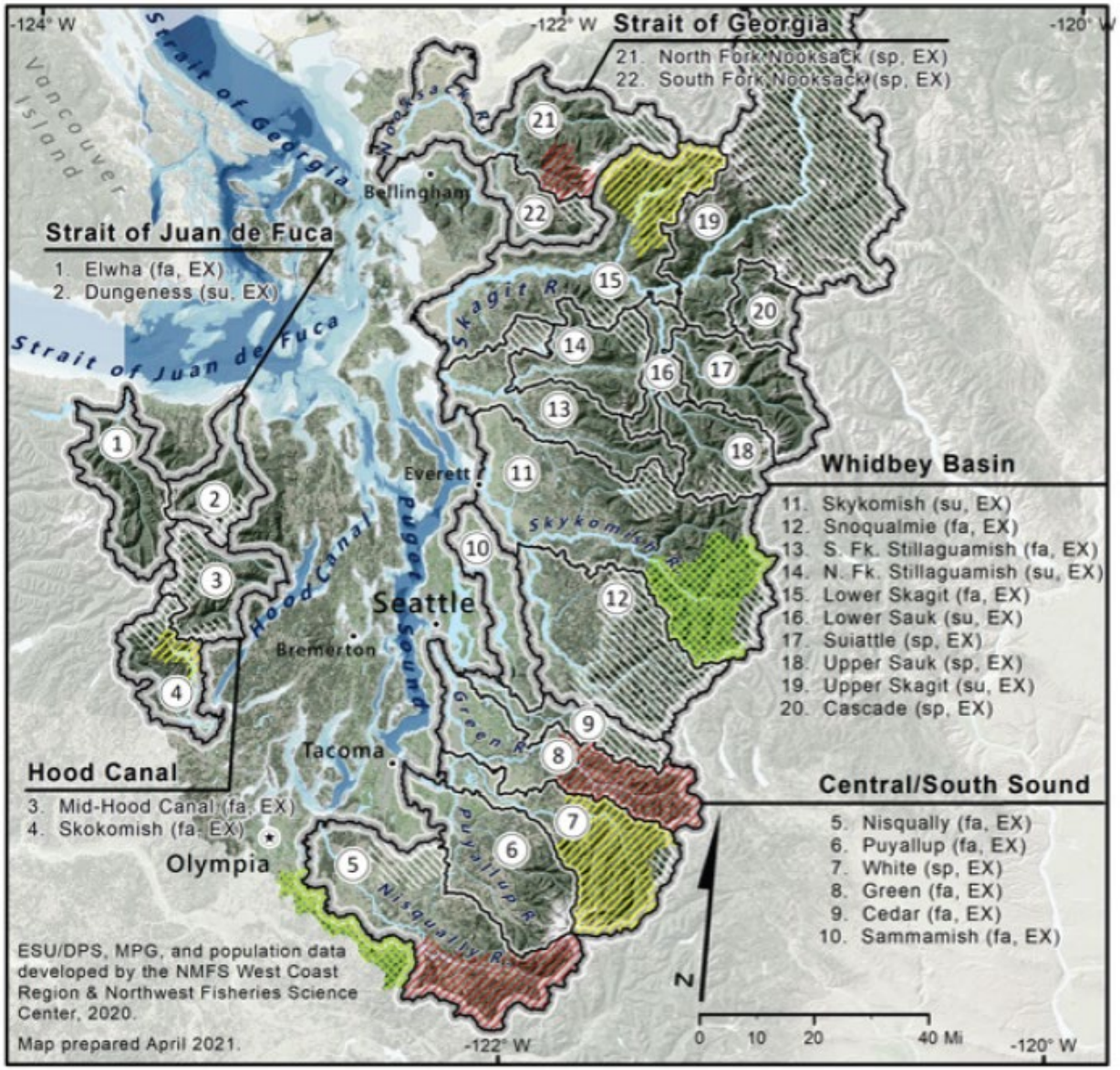
Activities that preclude recovery, but do not hasten extinction, may also be considered Jeopardizing.

Back to the ESA, Briefly:

Congress intended the HCP program to address listed and at-risk species in an ecosystem context, generate long-term commitments to conserve such species, and deliver regulatory assurances to project proponents.

There are 22 populations of PS Chinook, and 32 populations of PS steelhead; there are survival and recovery objectives for each population.

Populations of PS Chinook



Puget Sound Chinook

Oncorhynchus tshawytscha

Major population group

Name

Population

1. Name (run, status)

Access

- intrinsically blocked
- anthropogenically blocked
- trap and haul (historical habitat)
- accessible non-historical habitat

Run

sp = spring
su = summer
fa = fall

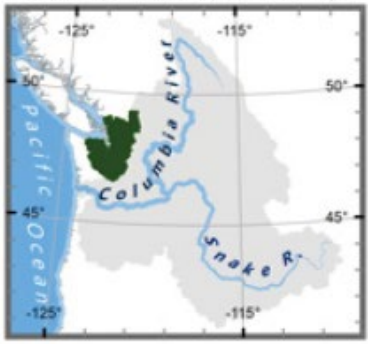
Status

EX = extant
ET = extirpated

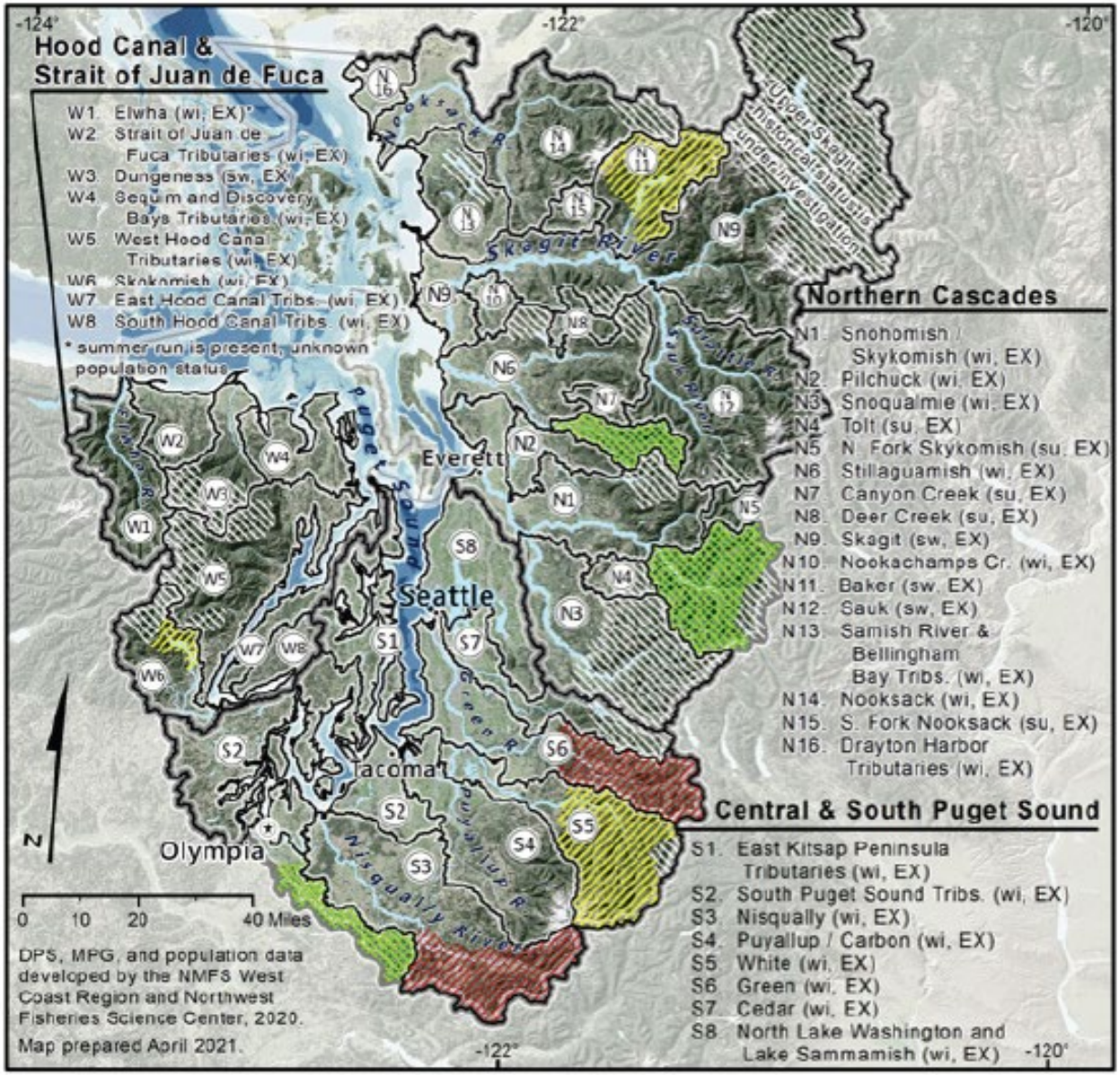
National Marine Fisheries Service

Northwest Fisheries Science Center

These maps are for reference only.



Populations of PS steelhead



Puget Sound Steelhead

Oncorhynchus mykiss

Major population group — Name

Population — A1. Name (run, status)

Access

- intrinsically blocked
- anthropogenically blocked
- trap and haul (historical habitat)
- accessible non-historical habitat

Run

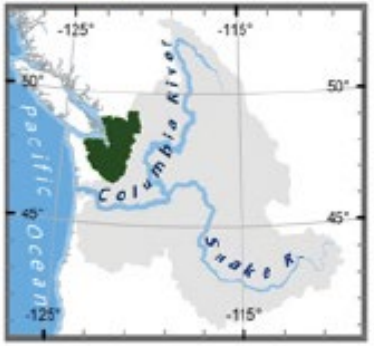
su = summer
sw = summer + winter
wi = winter

Status

EX = extant
ET = extirpated

National Marine Fisheries Service

Northwest Fisheries Science Center




Questions?