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NORTH CASCADES











# Skagit Salmon Science Series, part #2 Wednesday, May 4, 2022

### **Agenda:**

10:00 am Welcome/Introductions, Tribal Lands Acknowledgement, and Agenda Review

\*John Stein, Chair of SWC Board of Directors

10:10 am Skagit Salmon Science Series

\*Skagit Chinook Salmon Recovery Plan

\*Eric Beamer, Senior Scientist, Skagit River System Cooperative

\*SWC Strategic Approach and Skagit Implementation Structures

\*Richard Brocksmith, Executive Director, Skagit Watershed Council

\*Questions and Answers with panel, including WDFW and Tribes

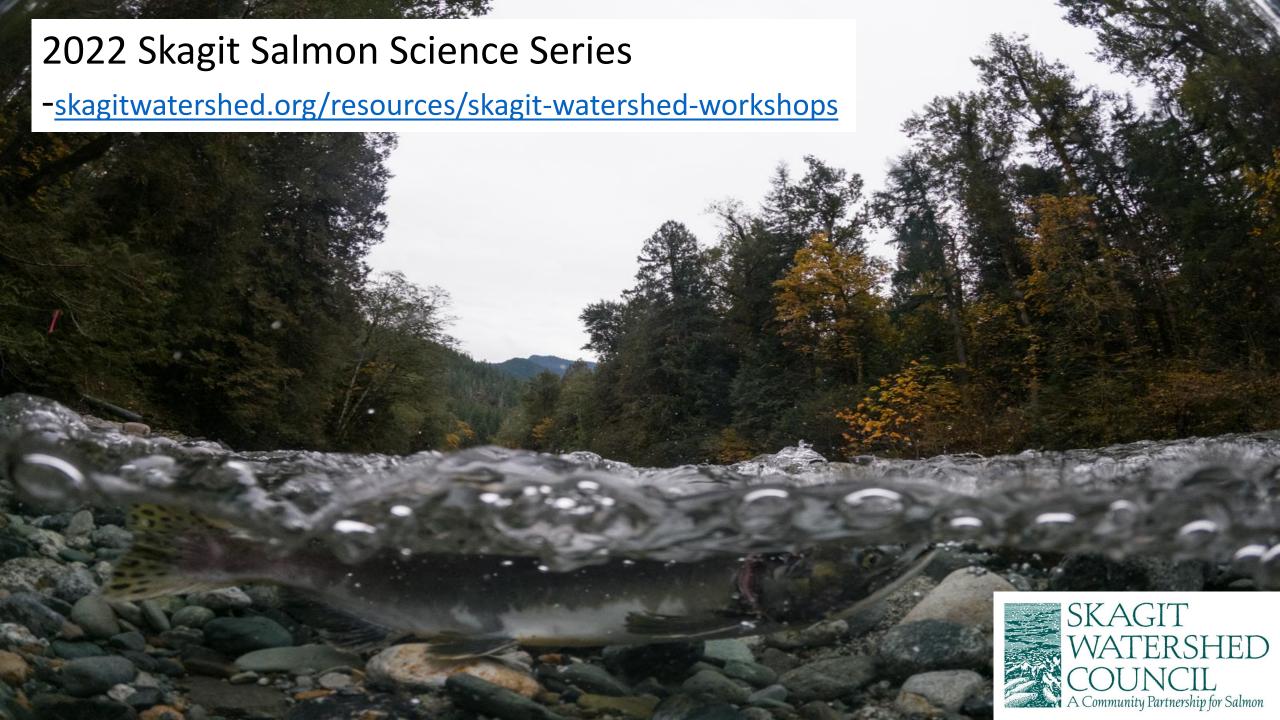
11:50 am Member Announcements and Good of the Order

12:00 pm Adjourn

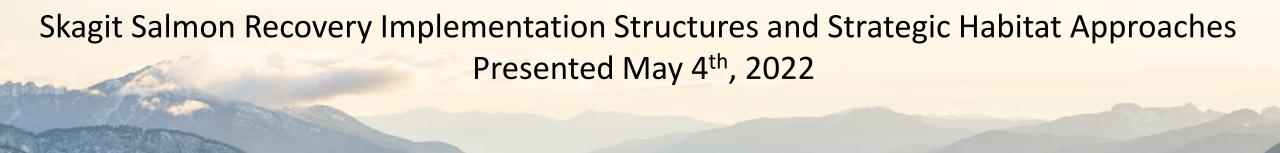
### **Next SWC Council of Members Meetings:**

June 8, 10:00 to Noon by Zoom – Skagit Salmon Science Series, part #3, and 2022 habitat projects September 22, 11:30am to 3:00pm'ish – Annual Lunch and Science Series, part #4









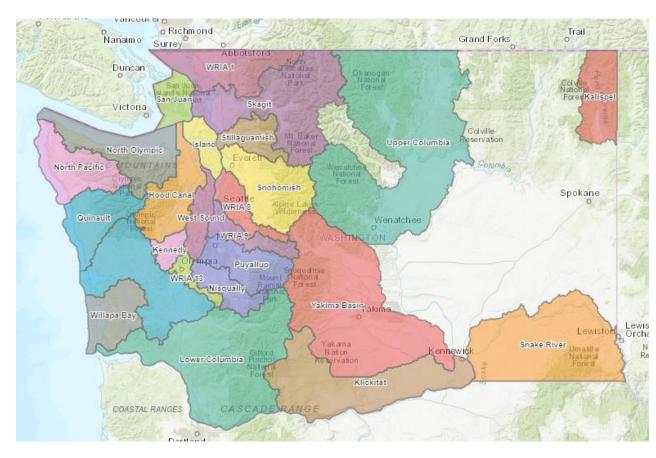
In response to dwindling salmon runs in the '80s & '90s:

- Co-managers, responsible for hatcheries & harvest, reduced catches.
- Locals, with control over habitat, formed the Skagit Watershed Council in 1997.
- WA State passed Salmon Recovery Act, the "Washington Way," in 1998, which led to "lead entities" which led to Tribes and local governments designating SWC as the lead entity.



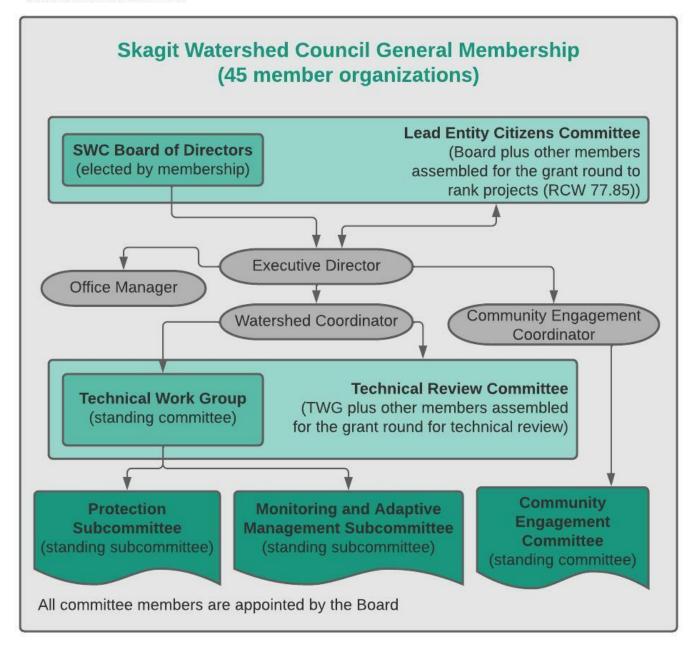
# So, what's a salmon recovery lead entity?

- RCW 77.85
  - Fiscal agent & lead entity coordinator
  - Technical committee
  - Citizen's committee
- Watershed-based groups that develop strategies to restore salmon habitat and support organizations to implement.
- Produces ranked list of projects for smart habitat investments supported by the science & community.



SWC is 1 of 25 lead entities in WA.

#### **Current Structure**



Other Voluntary Habitat Programs, often coordinating with lead entities:

- Voluntary land stewardship
- Estuary programs like ESRP
- Conservation programs like NAWCA
- Passage programs like FFFPP
- Floodplain programs like FbD
- Riparian programs like Ecology's
- Pacific Salmon Treaty & Commission
- Mitigation and mitigation banks

### Salmon Recovery

### Habitat

Harvest

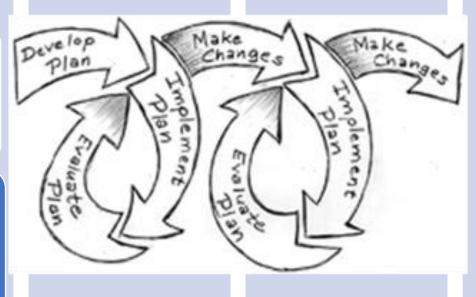
Hatcheries

Hydro



Regulatory

Federal Section 7
Growth Mngmt
Shorelines
Water Quantity
HPAs, etc

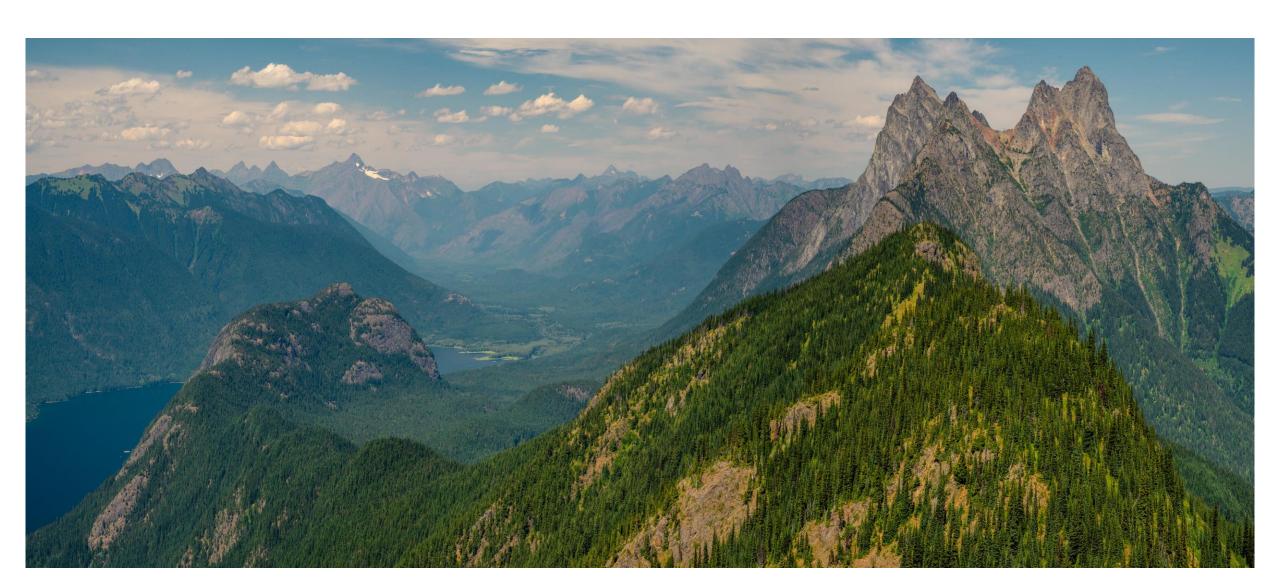


Seattle City Light

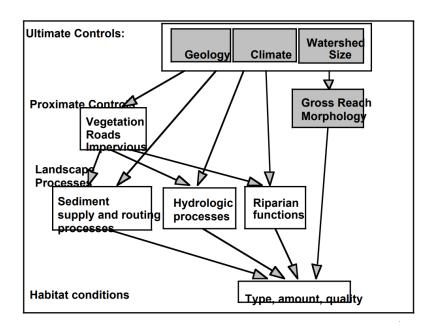
> Puget Sound Energy

All – H Integration

# So, what are our habitat strategies?



### 1998 SWC Habitat Protection and Restoration Strategy



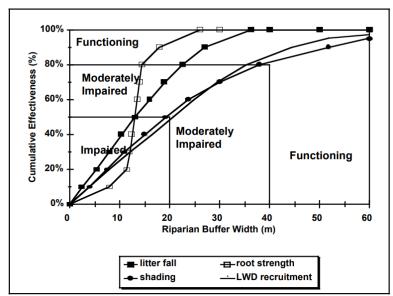


Table A1-1. Designation of generalized habitat type as a function of five to ten lifestages of five different salmonid species.

Reach Level Habitat Type	Chum	Coho	Chinook	Steelhead	Pink	total number of life stages examined	percent of all life stages designated "key" or	Overall Designation for "pristine" habitat
Tributaries Reaches:							"critical"	
pool riffle	kev	key	key	key	key	10	90%	key
forced pool riffle	•	key	key	key	key	10	85%	key
planebed		sec	sec	sec	sec	10	0%	secondary
step-pool/cascade	sec	sec	sec	key	sec	10	15%	secondary
Main River Reaches:								•
main channel	key	sec	key	key	key	10	80%	key
off-channel habitat	key	critica 1	key	sec	sec	10	60%	key
Estuary:								
estuarine emergent marsh	key	sec	critical	sec	sec	5	40%	key
blind channel	key	key	critical	sec	sec	5	60%	key
subsidiary channel	key	key	key	sec	key	5	80%	key
main channel	key	key	key	sec	key	5	80%	key

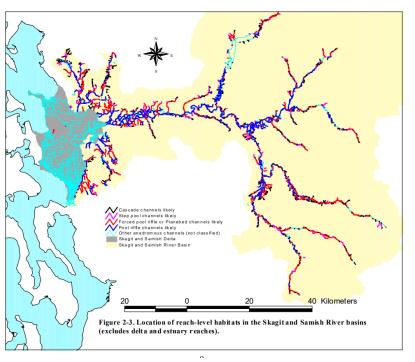
#### Reach level projects

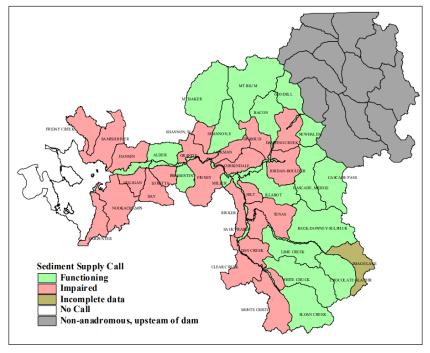
The basic cost-effectiveness equation for reach level projects is:

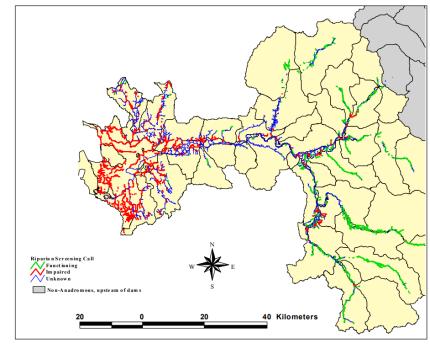
cost-effectiveness = BT/C,

where B is the benefit, T is the time over which the benefit is accrued, and C is the cost<sup>8</sup> of the project.

### 2000 Application of the SWC Habitat Strategy







**Key Habitats** 

Sediment Supply

Functional Riparian Areas

\*\*This multi-species plan directed about \$20M by 2005 through 14 sponsors to 56 voluntary habitat projects.

## 2005 Chinook Recovery Plan Brought Some Change

- The Puget Sound Partnership was formed and became the regional recovery organization with 15 Puget Sound Watersheds working towards recovery together.
- SWC wrote its first Strategic Approach:
  - SWC moved from multi-species to Chinook
  - And only native Chinook (not Samish River)
  - And prioritizing larger floodplains & the estuary supporting multiple chinook stocks

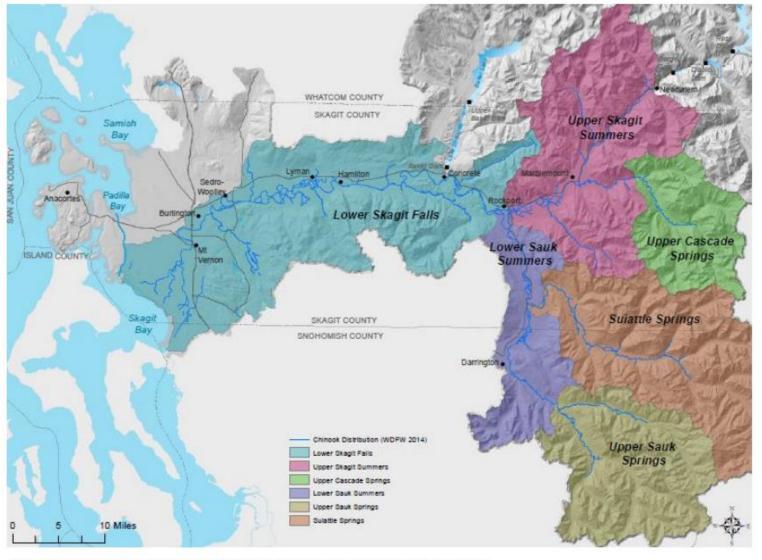
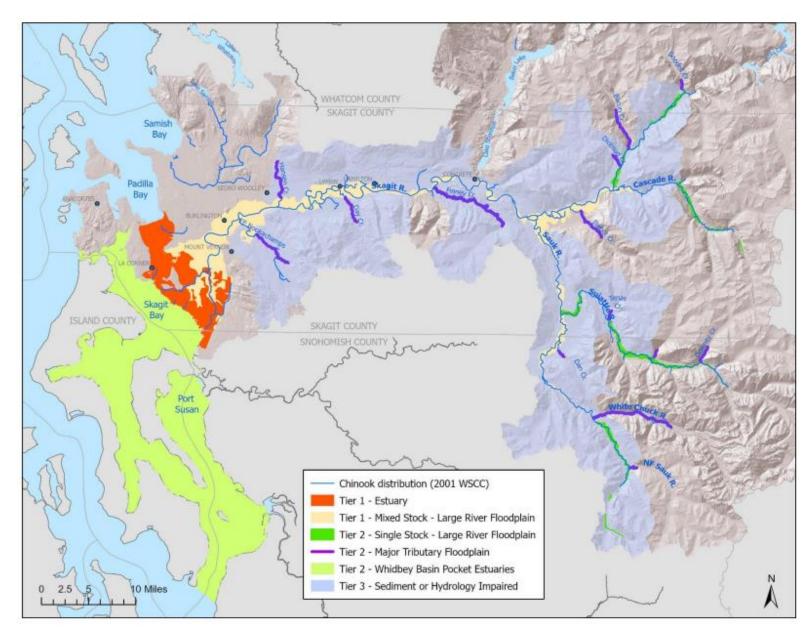


Figure 1. Locations of the six populations of Chinook salmon in the Skagit River basin.

## 2005 to 2022 SWC Strategic Approach

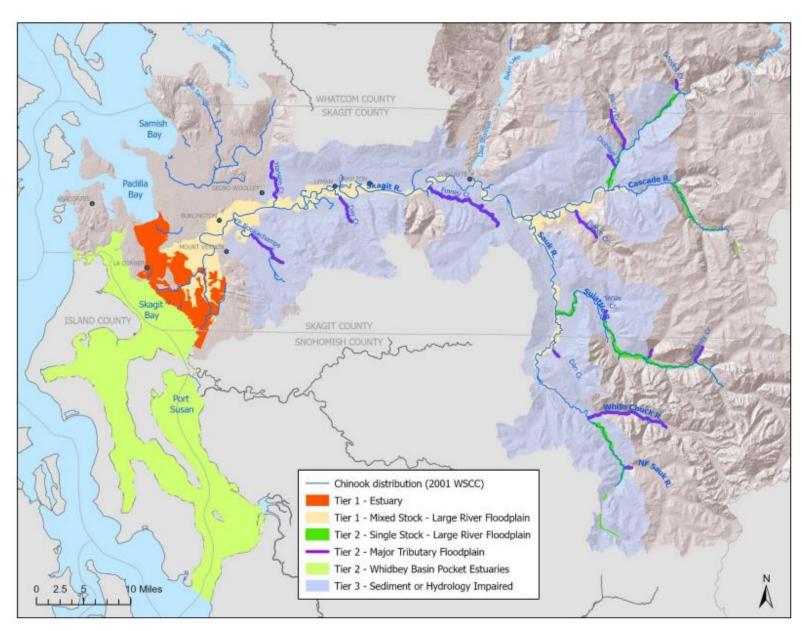
- 1. Kept our guiding principles from 2000
- 2. Tier 1 large floodplains with multiple Chinook stocks equal to estuary
- 3. Tier 2 single Chinook stock floodplains, tributaries, and pocket estuaries
- 4. Priority objectives established by Tier and habitat type



## 2005 to 2022 SWC Strategic Approach

### **Evolution since Skagit Chinook Plan:**

- 1. 14 tribs with rearing habitat vs. 4
- 2. Whidbey Basin pocket estuaries added
- Growing focus on riparian areas as science develops and climate changes
- 4. Watershed-wide acquisition plan (i.e. voluntary protection strategy)
- 5. Reach-level project plans
- 6. Multi-benefit project planning in estuary
- 7. Adaptive management framework for measuring habitat progress



# Latest Lead Entity Updates

- Entering 22<sup>nd</sup> year of funding projects
- 196 projects implemented for ~\$105M
- Major, repeat sponsors include:
  - Skagit County,
  - Tribes,
  - Skagit Fish Enhancement Group,
  - WDFW,
  - Skagit Land Trust,
  - Seattle City Light
- 13 new projects proposed this year for ~\$8.3M; field visits this week!

### 2021 Active and Planned Projects 4-Year Work Plan

Location	Project Name	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estuary, Tier 1	Milltown Island Phase 2									
				<u> </u>						
Estuary, Tier 1	Island Unit-Deepwater Phase 2	previous	phase co	mp leted	in 2020					
Estuary, Her 1										
	Smokehouse Tidal Marsh Restoration									
Estuary, Tier 1										
Estuary, Tier 1	Skagit South Fork Channel Construction	previous phase completed 2020								
Estuary, Tier 1	Swinomish Channel Phase 3 Tidal Marsh	previous phase completed 2019								
Estuary, Tier 1	Monitoring Tidal Marsh Vegetation									
Estuary, Tier 1	Skagit Forks Off-Channel: Britt Slough	previous phase completed 2019								
Estuary, Tier 1	Skagit Forks Delta and Floodplain Restoration	previous phase completed in 2020								
	McGlinn Island Connectivity									
Estuary, Tier 1										
Estuary, Tier 1	IMW Estuary Restoration Monitoring									
Estuary, Tier 1	Skagit HDM Project Preliminary Designs									
Estuary, Tier 1	Telegraph Slough									
Upper Skagit,	Pressentin Park Channel									
Tier 1	Restoration Phase 2 and 3									
Middle Skagit, Tier 1										
	Cedar Grove Culvert									
0 10:										

