

# Okanagan Salmon Community Initiative

Revitalizing the Northern Sonora Desert Fishery



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June 2, 2014*

<http://www.syilx.org/operations/fisheries-and-aquatics/salmon-harvest/>

# Our Direction

## Vision Statement

***building a resilient, responsible, community fishery based on respect, relations, and relevance, for generations.***

# Our Direction

## Mission Statement

- to protect, conserve, enhance, and restore the Okanagan salmon and salmon landscape,
- enhance salmon stewards and educate Okanagan individuals, family, and community user groups towards building a community supported fisheries and meaningful relationships which demonstrates responsible, respectful, and relevant fisheries practices.

# Building Fisher Unity & Stewards



# People of the Salmon

## Syilx: Okanagan Nation

- People have been rooted in the Okanagan-Columbia Basin (+10,000 BP)
- Okanagan Nation has a population of 15,000+.
- ONA Represents 7 Okanagan member communities in Canada and the Colville Confederate Tribe in the US



Photo Credit: Okanagan Nation Alliance, "That Which Gives Us Life", (pp36)

"The *captik'wə* (oral history) tells us that *Senk'lip* (coyote) brought the salmon up the Columbia River to the Okanagan people." Excerpt from *Okanagan Sockeye Select Rack Card*

# *Incorporating Okanagan Values: Tmix<sup>w</sup>*

- *tmixw* is the *nsyilxcən* word that most closely translates as “ecology”. *Tmixw* includes everything alive – the land, water, insects, people, animals, plants, and medicines.
- Underneath all of the *tmixw* is *tmxwulaxw* (*the land*)– the core spirit from which all of creation arises and which unites everything.
- “Everything starts and ends with the land and water. These are the Okanagan teachings and values passed down from generation to generation”





# Okanagan Salmon Trends

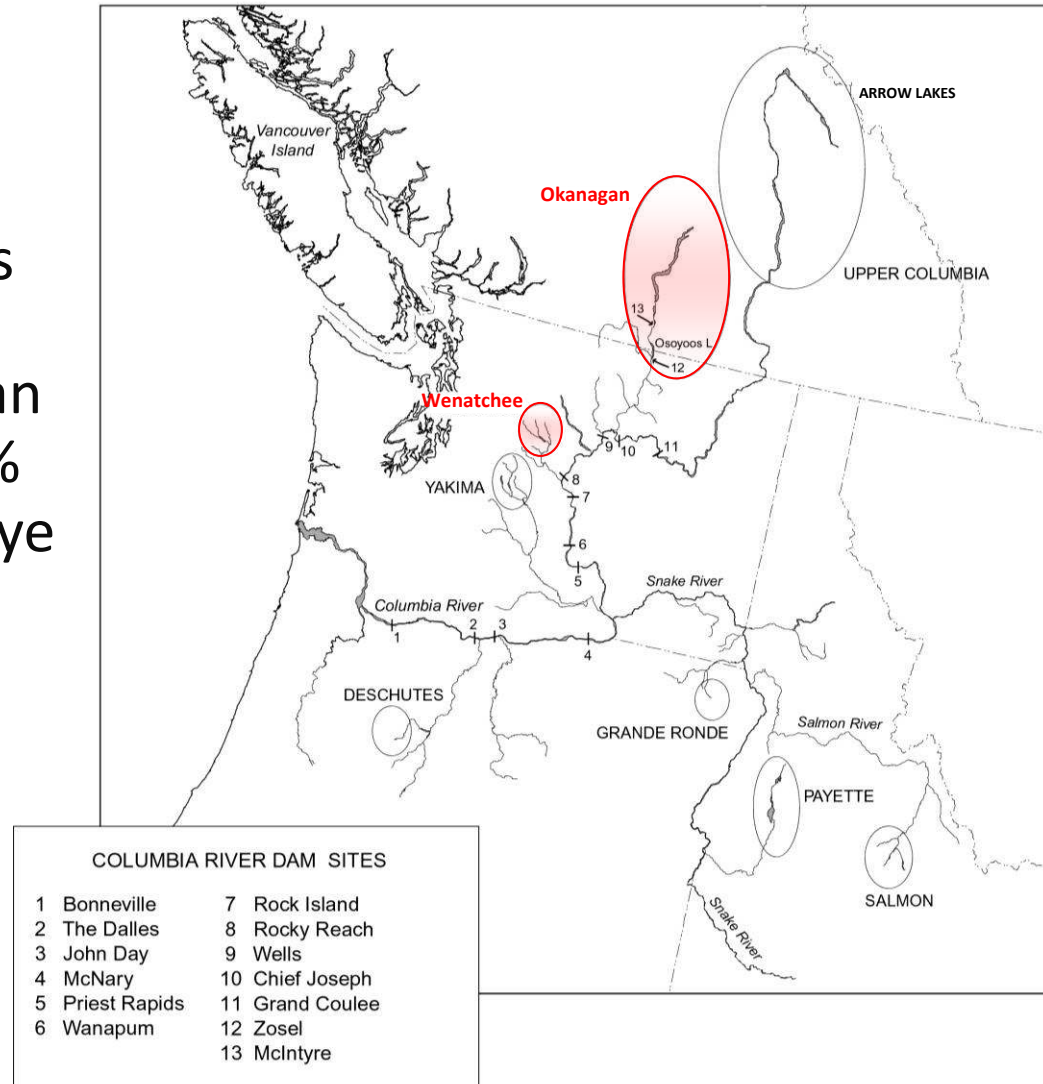
Element	Pre-Contact (1800's)	Industrial Era (1830-1985)	Current Status (1985 to present)
Okanagan Population	75,000 – 100,000	15,000 to 70,000	15,000 (5,000 CAN/10,000 US)
Salmon Abundance	1-6 million	0.2 -1 million	0.005-0.2 million
Salmon Diversity (viable populations)	Five species (Chinook (chief), Sockeye, Steelhead, Coho, Chum)	Sockeye, Chinook	Sockeye
Salmon Distribution	Osoyoos Lake, Skaha Lake, Okanagan Lake	Osoyoos Lake	Osoyoos (Re-intro to Skaha)
Salmon Timing	May to October	July to September	July to September
Fishery Management	Salmon Chief (tribal/kinship)	Canadian/US federal agencies	Joint Management (ONA-DFO, Canada, Pacific Salmon Treaty; US vs Oregon)
Fishing Camps/Sites	Kettle Falls (US; hoop net, dip, gaff) Okanagan River (Weir) Skaha Falls OK Falls (Fish baskets, gaff/dip)	Collapse of fishery by 1960's <i>(loss of food fishery, intertribal trade essential)</i>	Re-vitalize platforms (base of Chief Joe) Okanagan Weir, Osoyoos Lake, Ok Falls trap.

# Background: Okanagan Sockeye

- Okanagan sockeye population is one of two remaining Columbia River stocks
- Since 1990s, Okanagan sockeye made up 85% of all Columbia sockeye

 Columbia River sub-basins historically accessible to sockeye

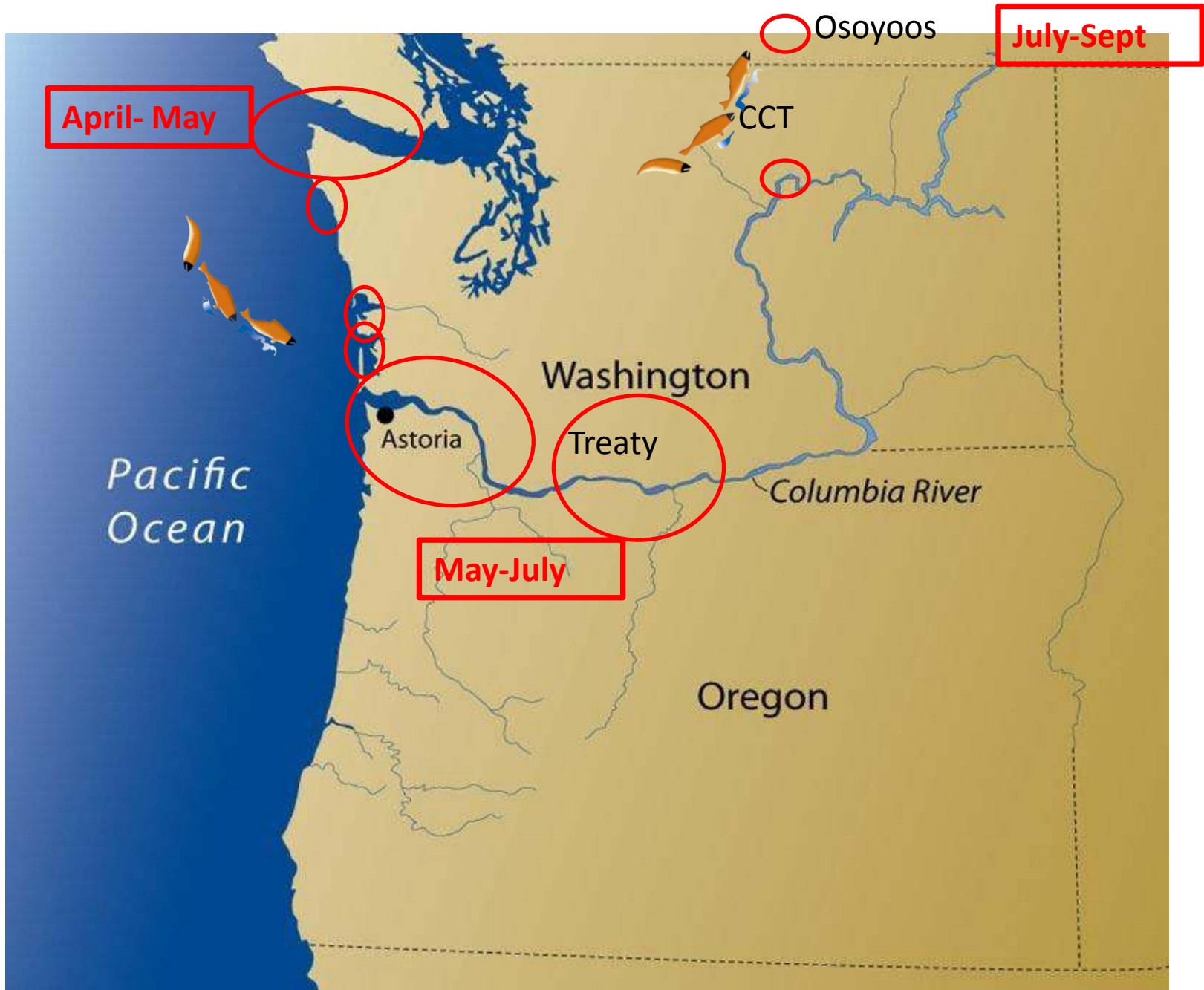
 Columbia River sub-basins with present day viable sockeye populations





# Interim Principles (Charter of Responsible Fishing)

- Protection, welfare, and right of fish and water creatures
- Responsible trade – for E.g. if 10 fish captured then 3 to fishers, 3 to local cutting, 1 to ONA (fisheries habitat), 3 for Trade (Chef/Specialty Food)
- Food security (safety) and distribution, re-building local Okanagan food hub network
- Balance respect with nature and environment (ecosystem fisheries)
- Enhance the cultural, social, and (re) learning values
- Slow down the fishery (i.e., d<sup>®</sup>ip fishery) to match local needs
- Revitalize fishing camps, traditional gears, traditional products
- Seven Generations Valuation (ecosystem and natural capital; \$6 million (annually)).





# Caught, Cut, Packed

Species	Stock Status	J	F	M	A	M	J	J	A	S	O	N	D
Chinook	Endangered												
Sockeye	Viable												
Coho	Extinct												
Steelhead	Threatened												

River migration and spawning  
**Peak spawning**



July

August

September

**Skin**, bluish  
chrome to  
blush rose



**Meat  
Colour**  
(peachy)



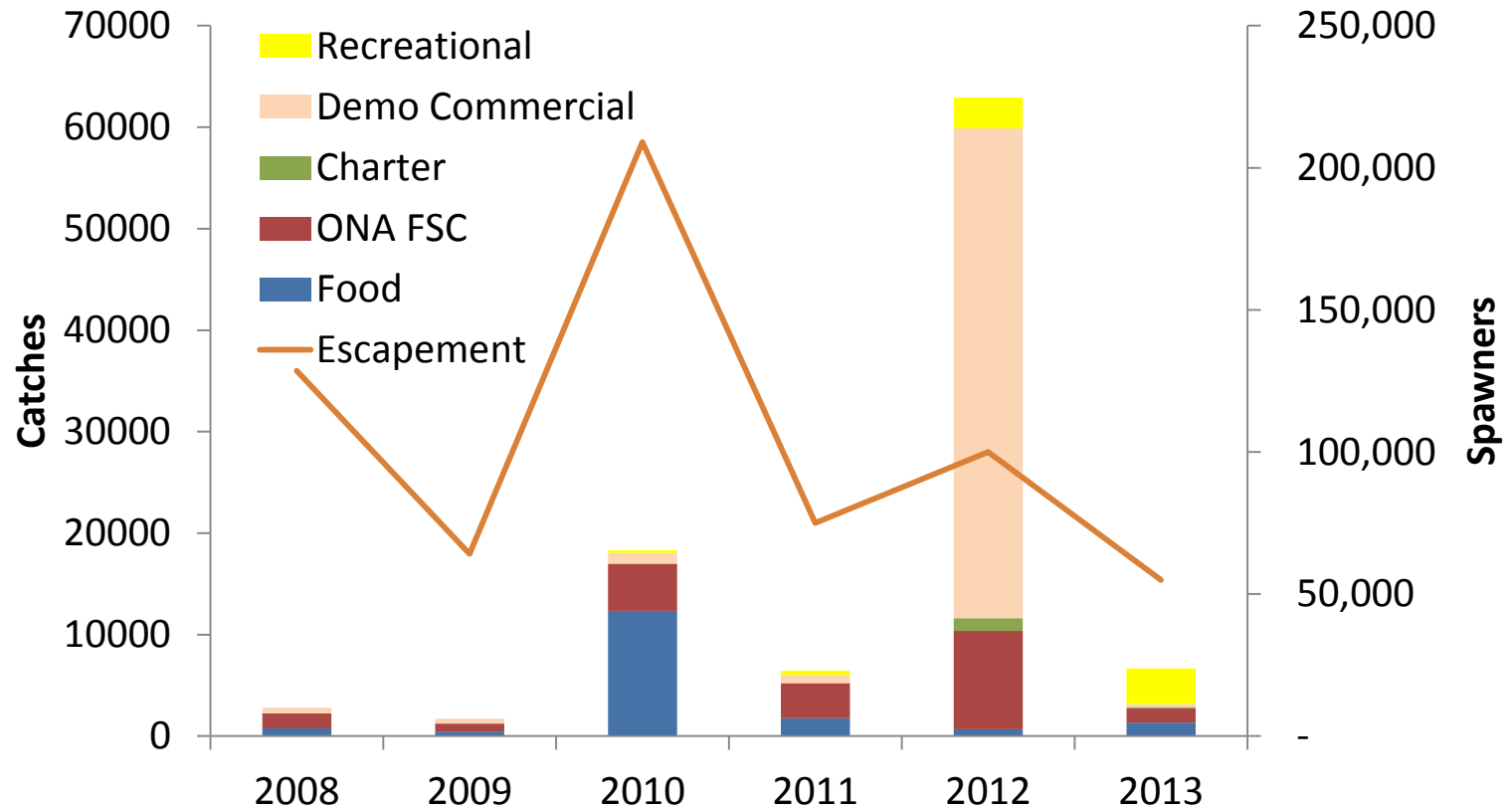
*“Buttery, light, taste, semi-firm  
texture, subtle aroma”*

Grilled salmon = Quail’s Gate Pinot Noir  
 Plank Salmon = Covert Farm’s Pinot Gris  
 Smoke Salmon = Nk’ mip Syrah  
 Roast Salmon = Mission Hill Chardonnay

# Okanagan Sockeye Factoids

- Testing at DFO-UBC in 2011 revealed Okanagan Sockeye protein, lipids, and “healthy” energy content for this long distance travelled salmon was comparable to Chilko Sockeye.
  - considered a high energy protein bar ( 7 MJ /kg Gross Energy, 176 g /kg protein, 70 g / kg ‘healthy’ lipids!
- Testing at UBC in 2011-2013 revealed that of sockeye salmon stocks in the Fraser and the Okanagan, long distance travelled salmon like Okanagan we’re genetically adapted to have a higher density of receptor cells that allowed for adults to pass through higher than normal temperatures and survive to spawn
  - the current thought is in face of climate change and higher water temperatures, the Okanagan sockeye are better adapted to higher water temperatures than other shorter distance travelled salmon stocks like the Harrison/Weaver Stock.

# Canadian Catches 2008-2013

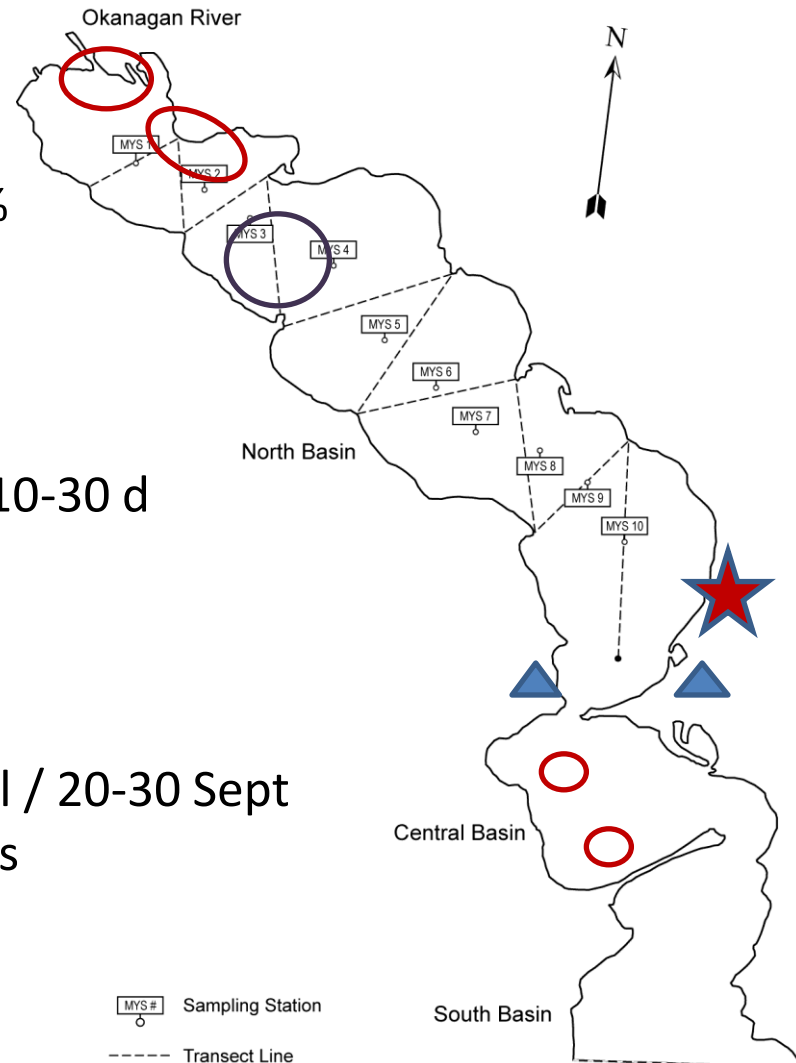


# Objectives 2014/2015

- **Pilot a community support fisheries model using local fishers to land troll caught sockeye in Osoyoos Lake during August, pending in season abundance**
- **Support the 100 mile diet, and Slow Fish program for shore sales at Nkmip (OIB) and value cuts by Codfathers (Kelowna)**
- **Pilot best practices (orientation/survey/audits) with local fishers qualified for artisanal trolling for a warm water salmon fishery (minimal mortality <5%)**
- **Provide outreach materials to educate general public, users, and interest groups on the Okanagan Salmon Community Initiative.**
- **Build an equitable, viable business model**

# Fishing Osoyoos Lake

- ✓ Sockeye target: Osoyoos Lake (2014)
  - ✓ 10,000 - 20,000 fish / 33,000 - 65,000 lbs
  - ✓ Yield: Whole ( $3.3 \pm 0.1$  lbs) HG: 75%, Fillet 47%
  - ✓ Caviar Ikura/Sujiko: 25 August to 30 September
- Osoyoos Lake troll fishery: starting 1 Aug (10-30 d pending adult returns)
  - Osoyoos Lake purse seine (ONA) fishery: 15-31 Aug (5-10 d pending adult returns)
  - Okanagan River (OK Falls fish trap: 15-30 Jul / 20-30 Sept, Food fishery), pending water temperatures



# ONA Proposed Daily Fishing Plan

- offer catch and retain fishing experiences
- to a qualified, designated fisher group (max. 10 vessels per day)
- best practices orientation (pre-season, 2-4 hr session)
- for validation, landing, and distribution to ONA (mothership)
- adhering to standard recreational regulations
- ice, coolers, catch logs provided by ONA
- hail in to mothership (from 6 am +)
- hail out/final landing to mothership (by 1 pm), return coolers, logs
- option to trade back fish, fisher receive ONA fish landing slip/transport form
- fish sales partial proceeds back to fisheries & fish recovery, retailed at Nkmip (Osoyoos) and Codfathers (Kelowna)



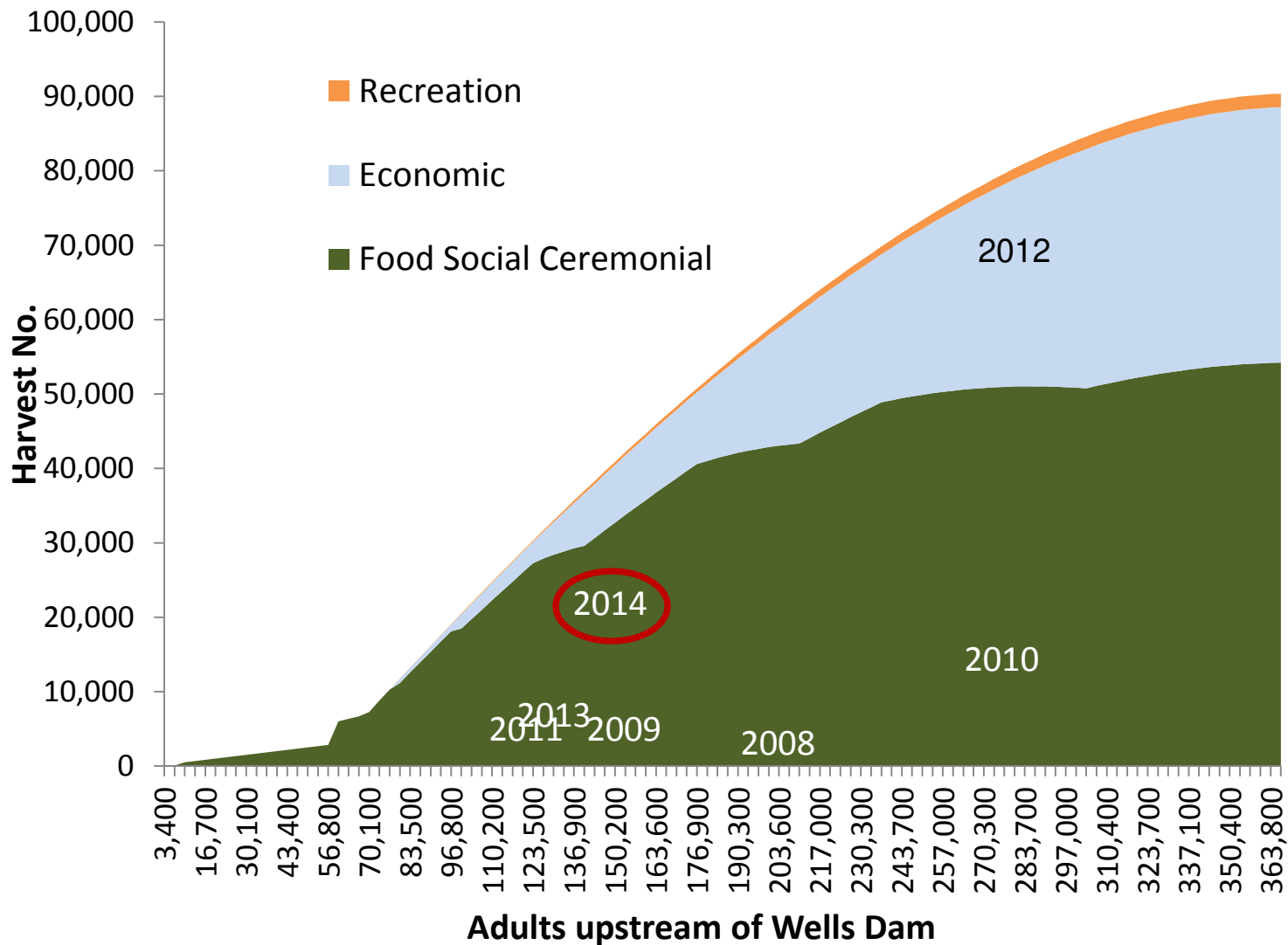
# Program Elements

- Designated fisher cards, non-Okanagan members
- Definition of gifting = preparing fish, payment of fish
- Trainee fishers /Catch observers on board mother vessel
- Develop QR codes tied to fisher



Sockeye 2011 Aug 29

# Allocation







THANK YOU