

From Fry to Freedom: Tracing the Odyssey of Sockeye Salmon in the Okanagan Basin

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Faced with perilous decline due to overfishing, hydro dams, habitat degradation, and impassable dams, the scwin (Sockeye Salmon) population in the mid-1990s plummeted below 5,000. A collaborative visionary reintroduction program kł cpalk stim 'cause to come back' marked the beginning of a long-term effort toward the ultimate goal of restoring Sockeye Salmon in the Okanagan Basin.

1999

ONA and CCT initiated research funded by BPA to assess Sockeye reintroduction feasibility

2003

- 1. 3-year tu?cin (Skaha Lake) risk assessment and feasibility studies
- 2. Low risk identified
- 3. Implemented Experimental Reintroduction Plan for Sockeye in Skaha Lake

2004

Pilot year of hatchery (Shuswap) production: released 352,500 fry

2005

Year 1 of hatchery/experimental production: released 1,205,500 fry into sq'awsitkw (the Okanagan River)

2009

CRITFC and **ONA** installed PIT array 'OKC' upstream of *nk'mip* (Osoyoos Lake)

2011

First return of adult Sockeye to Skaha Lake

2012

Year 1 of out-migrating Sockeye Salmon Smolt PIT Tag program

2014

1. Establishment of kł cp'əlk' stim' Hatchery in Penticton, BC 2. 2-year Skaha Lake Dam fish passage monitoring: PIT, video, acoustic tag, flow

2016

ONA conducted purse seine trials in Skaha and Osoyoos lakes

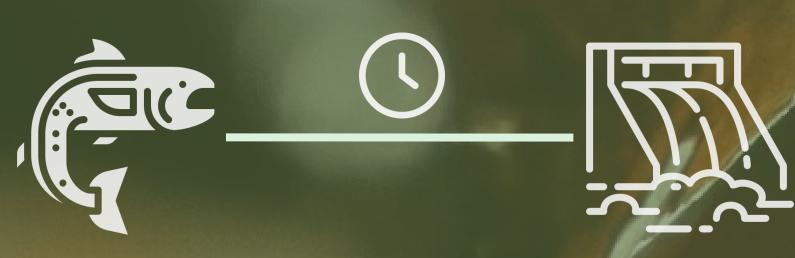
2018

PIT array 'OKP' operating in the Okanagan River

2023

- 1. Initiated Year 1 of kł cp'əlk' stim' Hatchery PIT tagged Sockeye fry release in *kłusxnitk*^w (Okanagan Lake)
- 2. Installed PIT array downstream of Okanagan Lake Dam and in the fish ladder

Objectives



Comparative Survival Studies

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limiting factors

Too too too

Methods



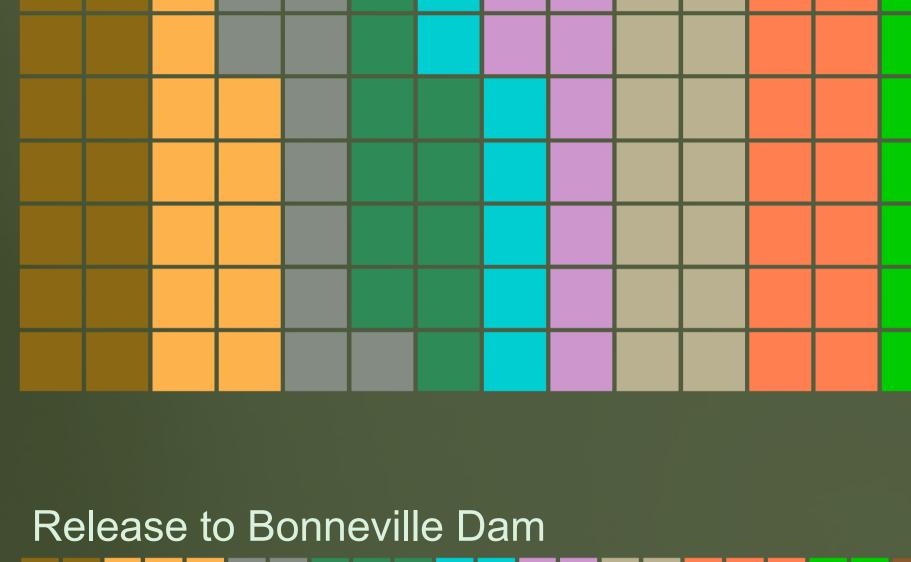








- Counter-clockwise from left: 1. Fyke net 2. Rotary screw trap 3. Broodbag and whoosh release
- 4. Tagging crew 5. Purse seine



Results and Discussion

Release to Rocky Reach Dam



- Survival from release to Rocky Reach Dam is comparatively higher than those to Bonneville Dam
- From release to Rocky Reach Dam, in recent years, shorter travel time leads to higher survival rates
- Smolt out-migration occurs between late April and mid May
- Improve Comparative Survival Studies with larger samples and continuous annual sampling



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