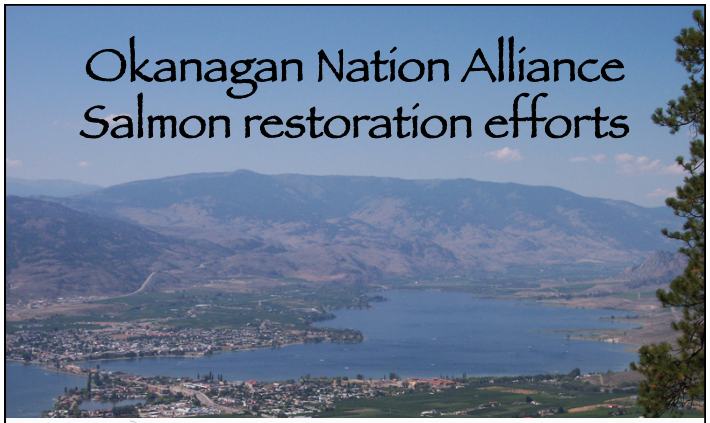
Okanagan Nation Alliance Salmon restoration efforts



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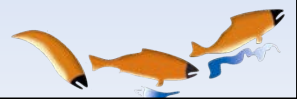
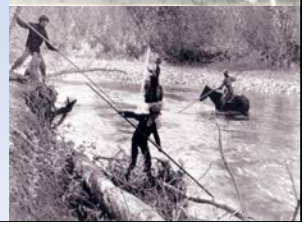
OLWSF
September 2011

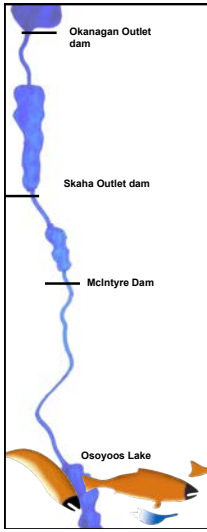
The Past



Osoyoos Lake salmon

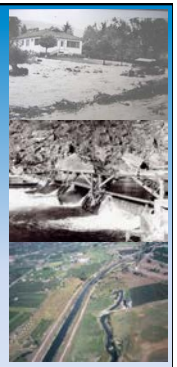
- Sockeye - rebounding
- Chinook – rare
- Steelhead – rare
- Coho – extirpated
- Chum – extirpated
- Kokanee – declined
- Rainbow Trout – declined
- Lamprey- extirpated

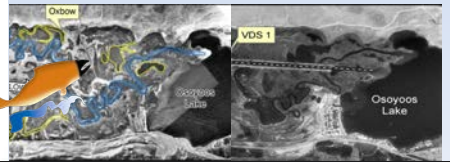




Valley changes

- Dams & channelization
  - irrigation and
  - flood control
- Channel length halved
- Wetland area reduced 88%
- Habitat greatly simplified
- Indigenous fish species diversity reduced



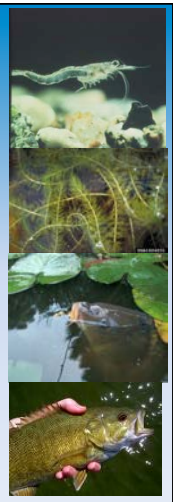


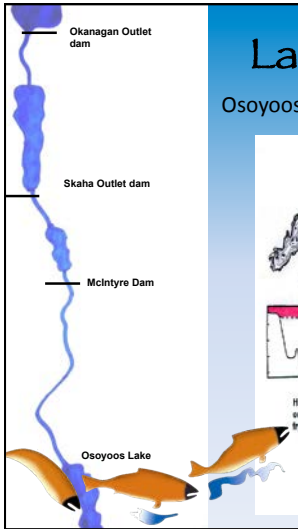
Okanagan River

- Salmon migration blocked at McIntyre Dam
- Hydrograph altered
- Channel length halved
- Wetland area reduced by 88%
- Mean river corridor width reduced by 89%
- Habitat greatly simplified
- Indigenous species diversity reduced

Exotic Species Introductions

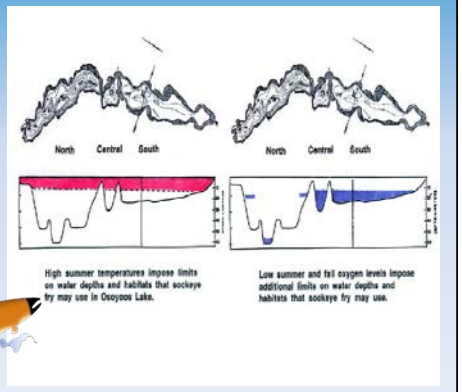
- Lake Whitefish (1894)
- Largemouth bass (1909)
- Lake trout (1909)
- Carp (1915)
- Eastern brook trout (1924)
- Black Bullhead (1941)
- Tench (1941)
- Smallmouth bass (1960s?)
- Yellow Perch (1975)
- Black Crappie –(1985)
- Bluegill (2001)
- Pumpkinseed (???)
- Brown bullhead (???)
- Mysis shrimp (1966)
- Eurasion Milfoil (1972)





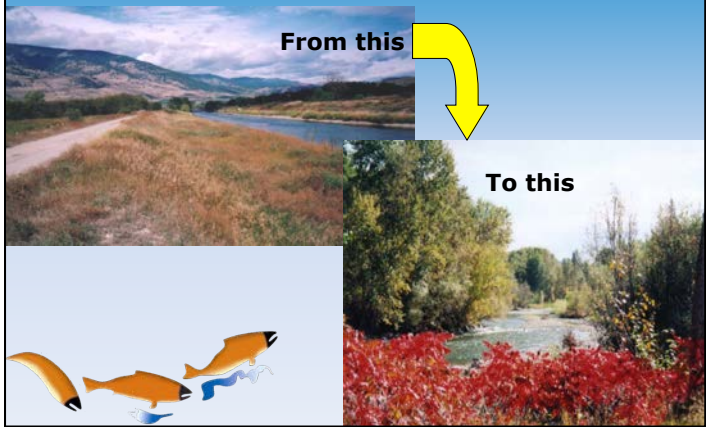
Lake changes

Osoyoos Lake squeeze

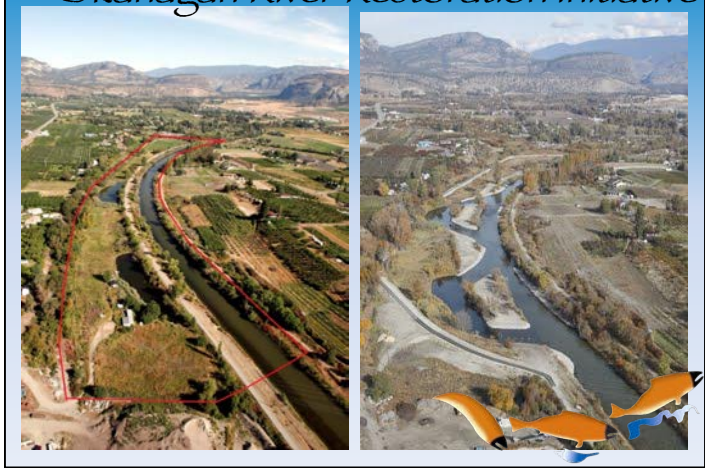


The Present

Okanagan River Restoration Initiative



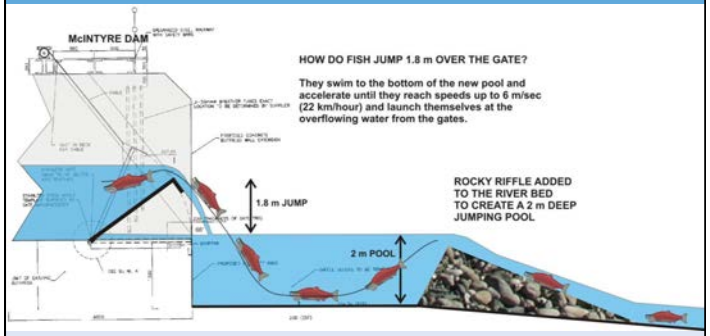
Okanagan River Restoration Initiative



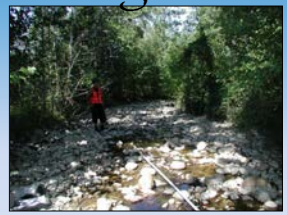
Re-introduction of Sockeye Salmon into Skaha Lake

McIntyre Dam fish passage

McIntyre Dam fish passage



Okanagan Basin Monitoring & Evaluation Program



The program monitors the status and trends in streams and their riparian areas over time.

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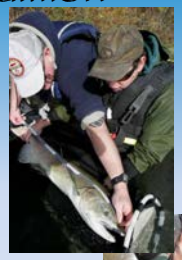
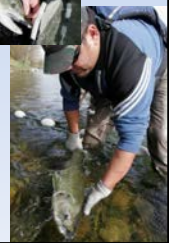
Okanagan Chinook salmon

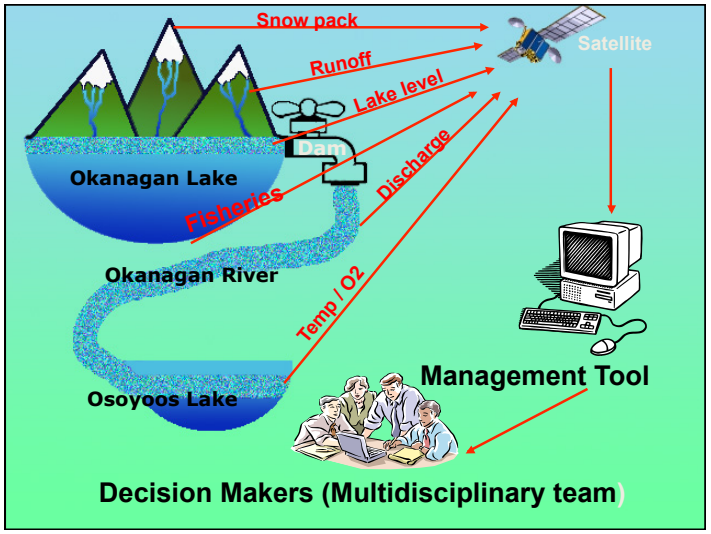
Chinook recovery planning

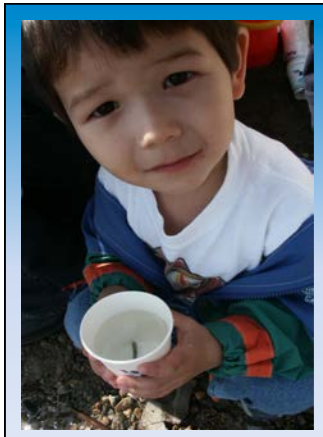




Fish-Water Management Tools

- Okanagan L. kokanee shorespawners affected by lake level
- Okanagan R. sockeye effected by river flows
- Flood control
- Water use





The Future

Future Challenges

- Managing cumulative impacts of human populations on aquatic resources
- Projected population increase
- Climate change expected to alter the volume and timing of water flow
- Maintaining an aquatic stewardship ethic

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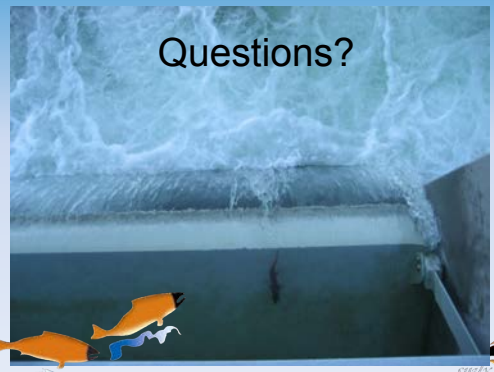

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