

DESHKA RIVER SALMON ASSESSMENT 1974 - PRESENT



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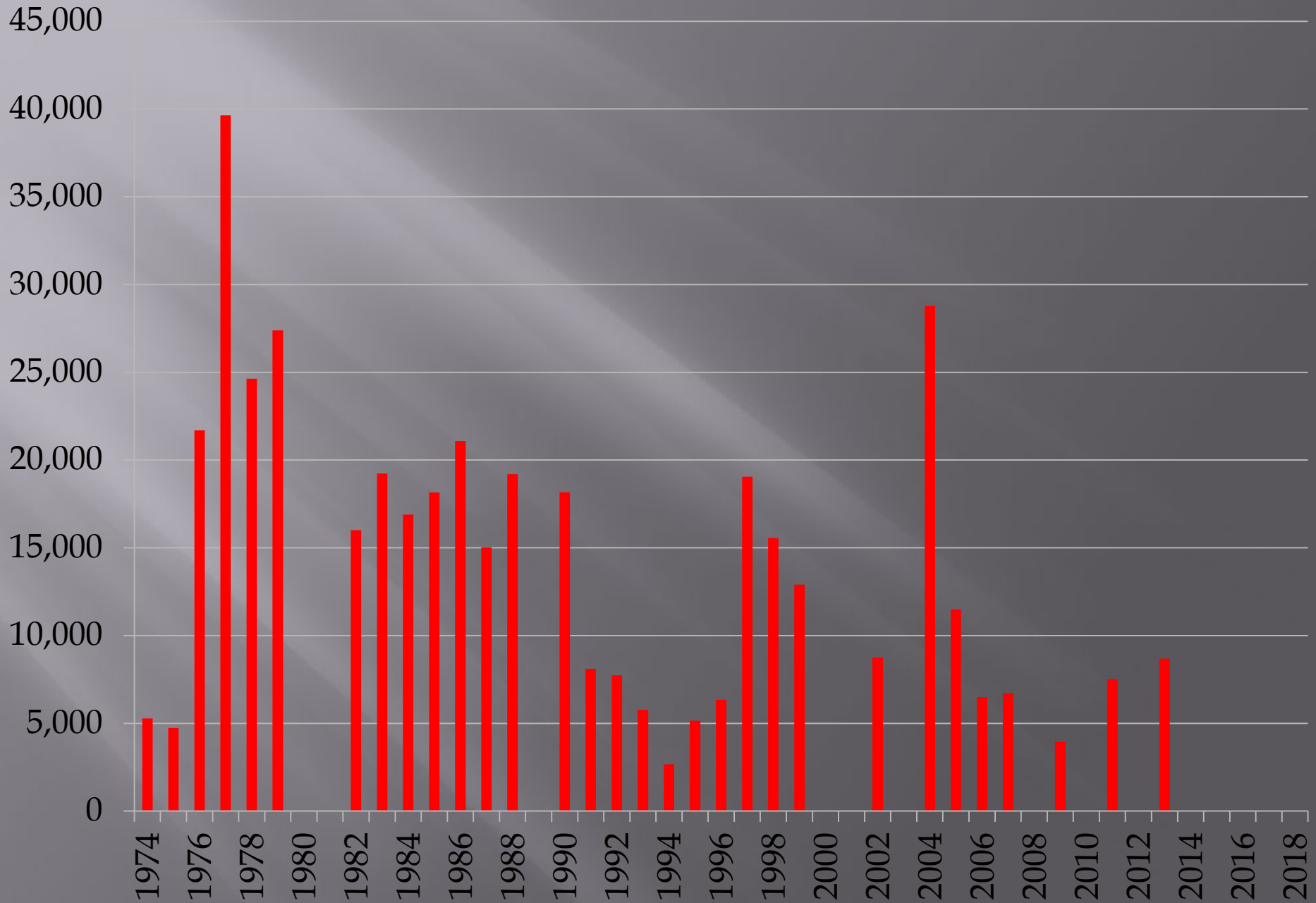
Overview

- ▣ Began assessment projects in the 1970's
- ▣ Aerial Surveys
- ▣ Sport Fishing Effort and Harvest
- ▣ Weir
- ▣ Mark-Recapture Experiments
- ▣ Genetics

Aerial Surveys

- ▣ Conducted most years since 1974
- ▣ Low level helicopter flights
- ▣ Chinook salmon
- ▣ Can vary depending on observer, conditions, pilot, etc.
 - Still makes a great index

Deshka River Aerial Counts-Chinook Salmon



Weir

- ▣ From 1995 - 1996 At RM 17
- ▣ From 1997 - 2018 At RM 6
- ▣ Floating/Resistance Board Weir
- ▣ All Five Species of Pacific Salmon

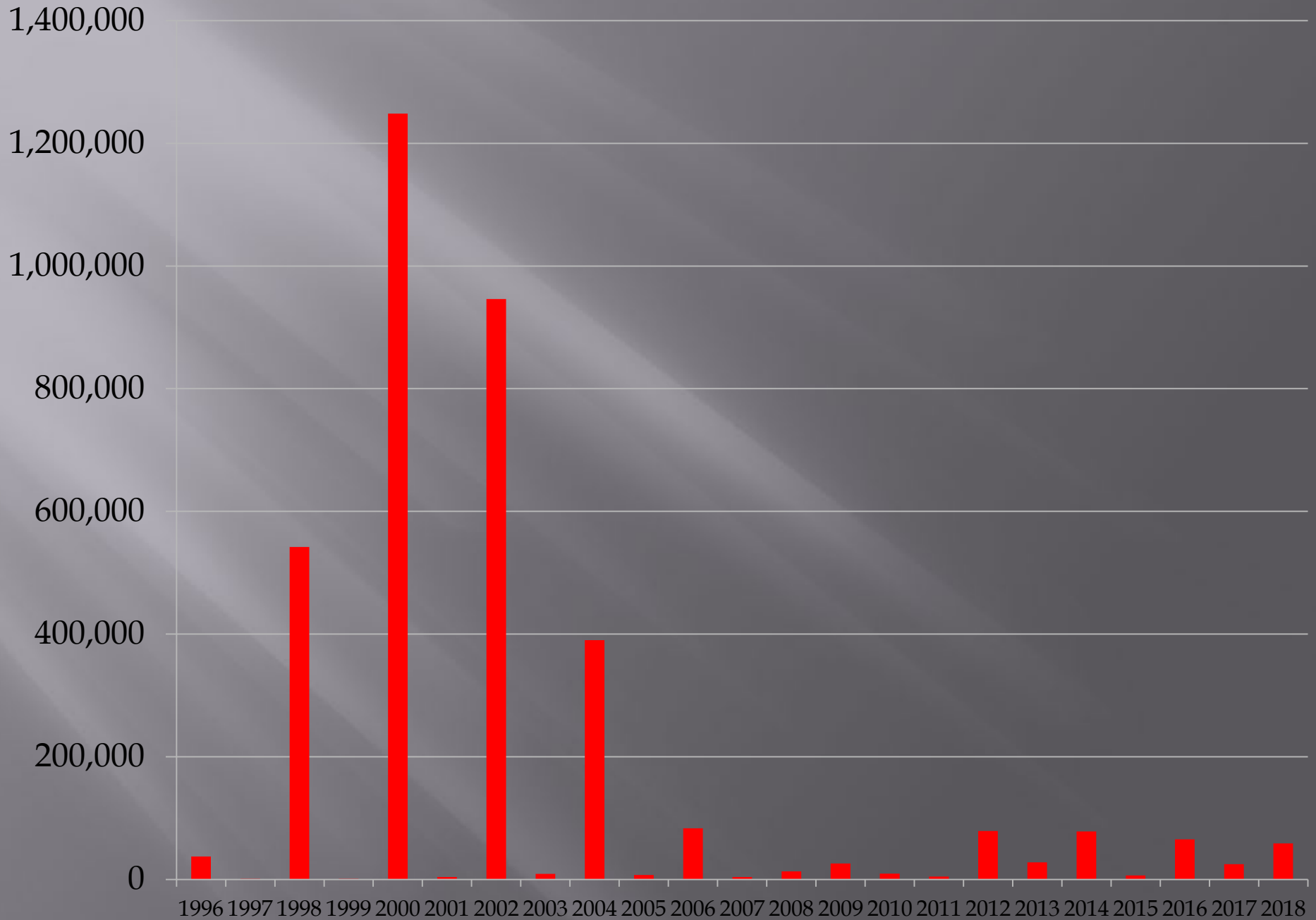




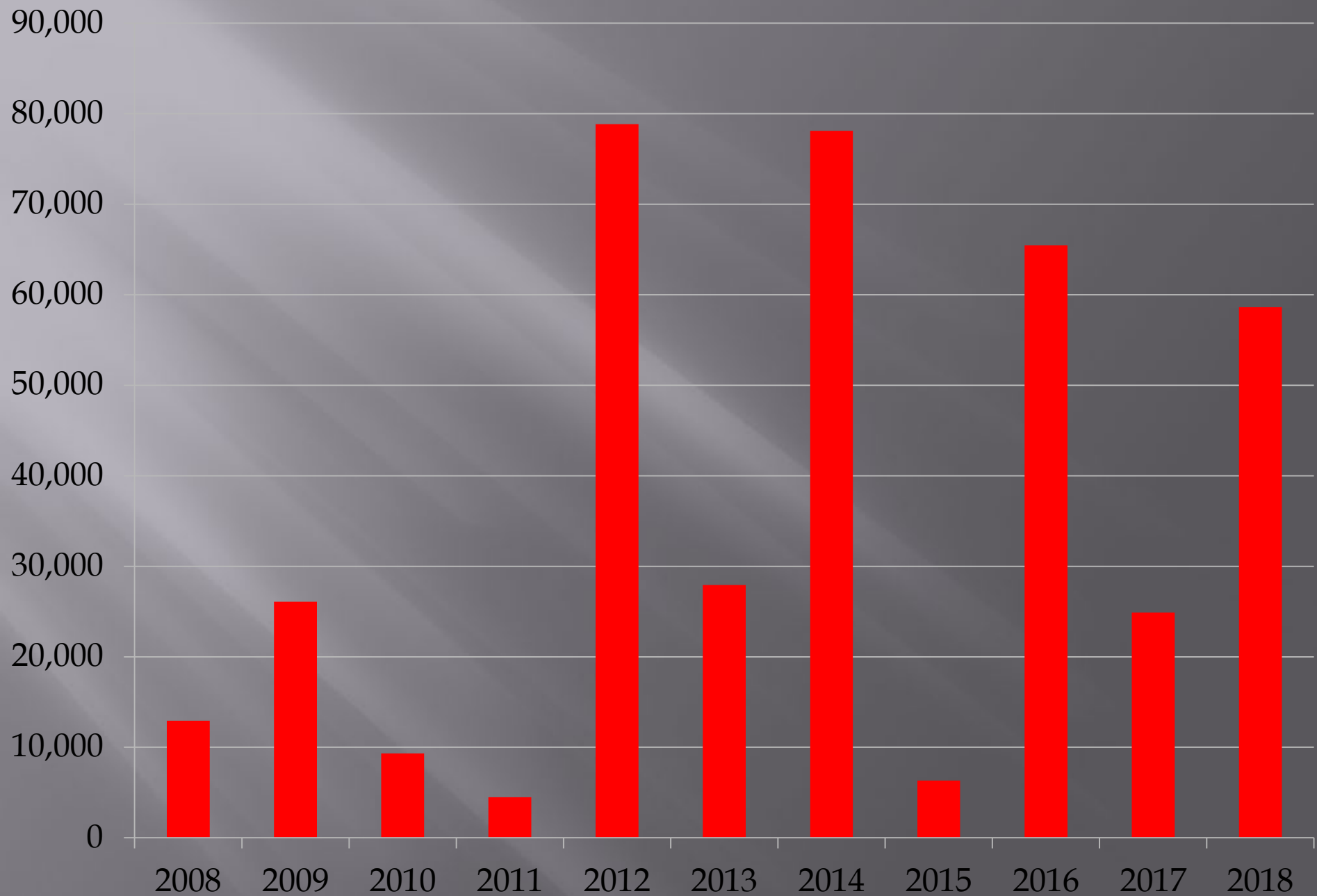
Weirs

- ▣ Management goals
- ▣ Age, Sex, and Length (ASL) data collected on Chinook and coho salmon
- ▣ Physical Data collection
 - Temperature
 - Water Level
- ▣ Appears to be an indicator of what's going on drainage wide
- ▣ Genetics

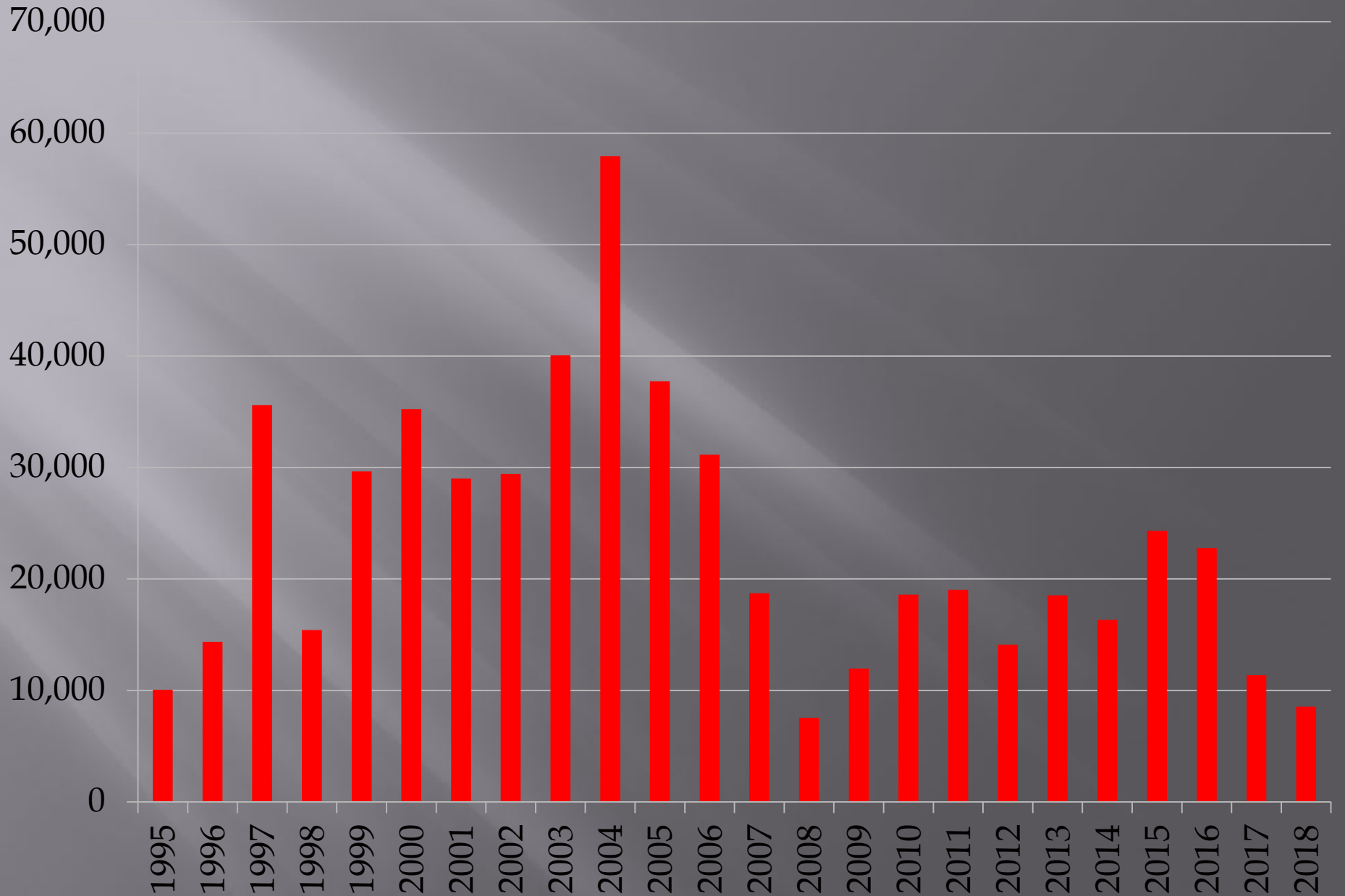
Deshka Weir Count-Pink Salmon (1995-2018)



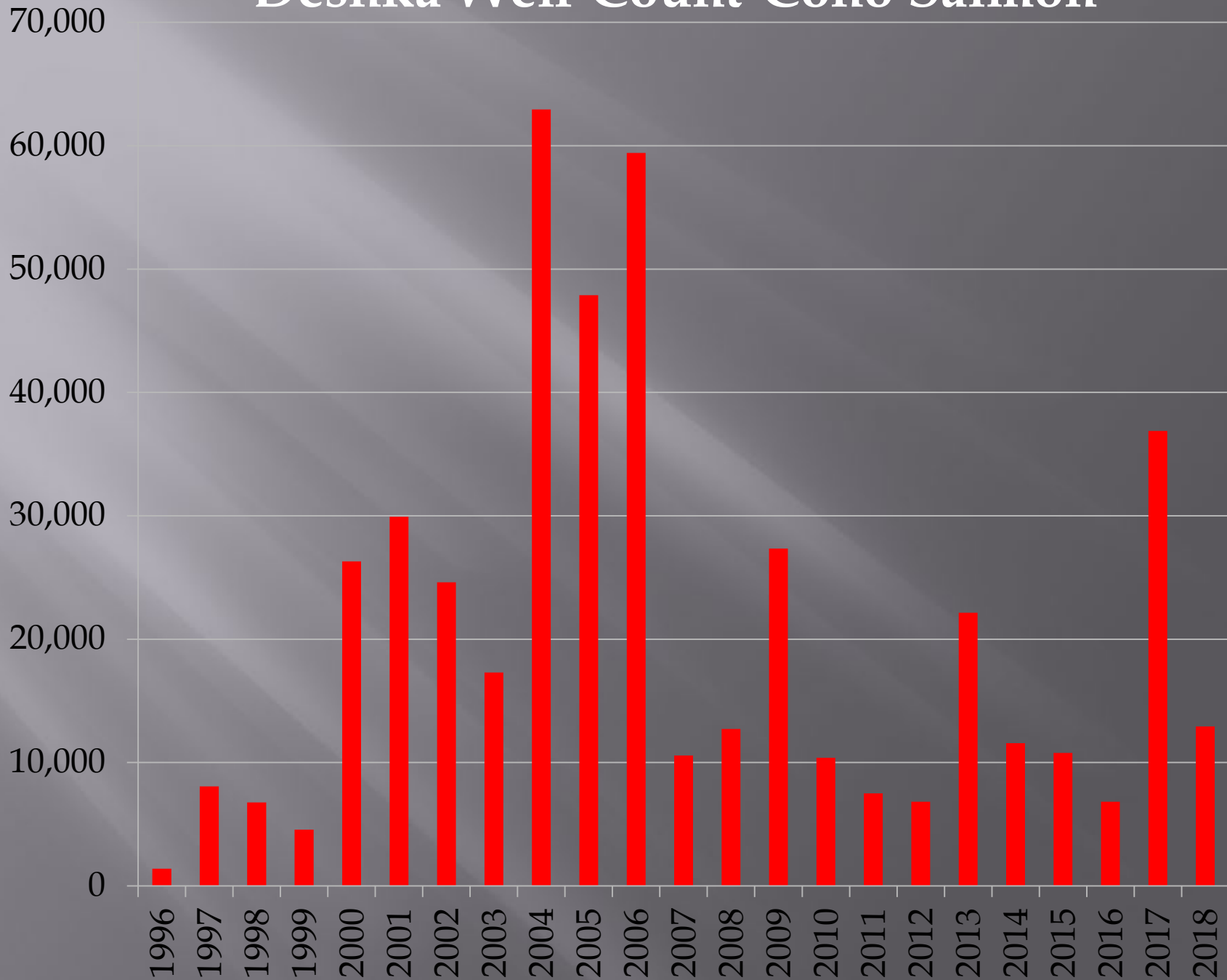
Deshka Weir Count-Pink Salmon (2008-2018)



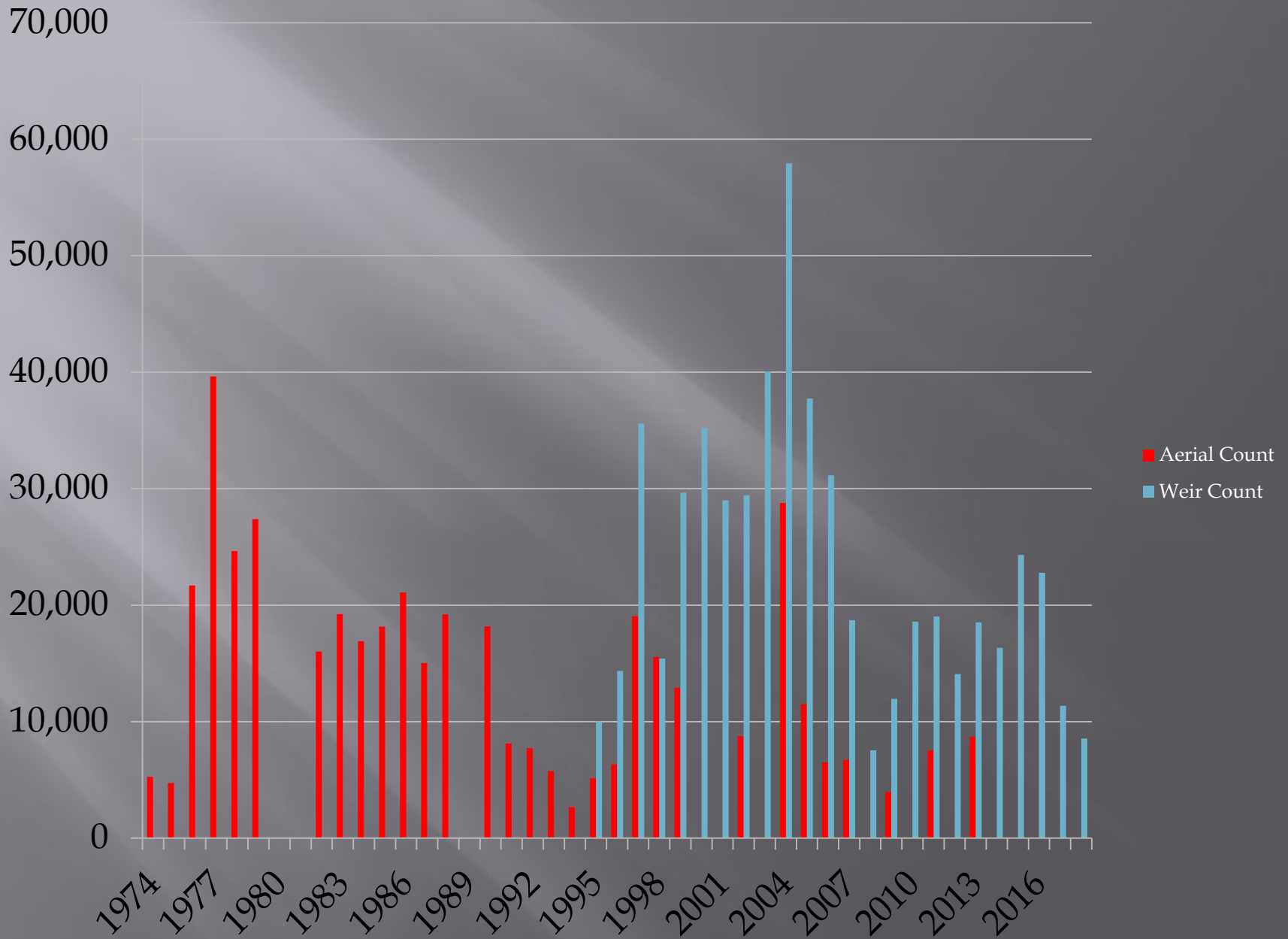
Deshka Weir Count-Chinook Salmon

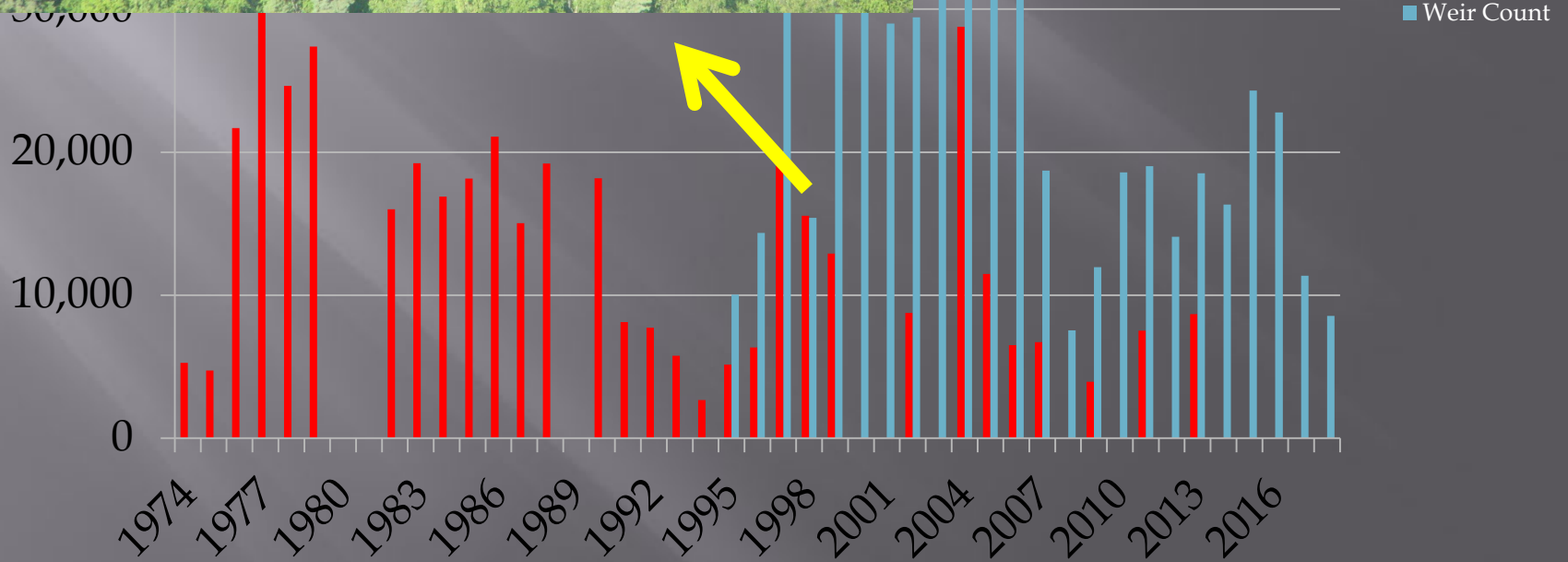


Deshka Weir Count-Coho Salmon



Deshka River-Weir VS Aerial Survey Counts





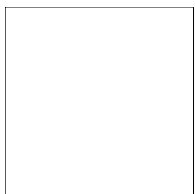
Fishing Effort and Harvest

- ▣ All sport fish species
- ▣ From Angler Surveys
- ▣ Anecdotal reports from guides/ anglers
- ▣ Creel Surveys
 - Length Data
- ▣ Effective in season management



Mark-Recapture Experiment

- ▣ Provided valuable telemetry information
 - Run Timing-within Deshka and Susitna Rivers
 - Spawning Locations
- ▣ PIT (Passive Integrated Transponder) Tags
- ▣ Provides age and length data
- ▣ Enhanced genetic baseline
- ▣ Further supported that the Deshka River is a great indicator/index of the Susitna runs in general





scale: cm (mm per div)



Genetics

- ▣ Radio-Tagged and PIT tagged fish
- ▣ Spawning ground sampling
- ▣ Primarily Chinook and coho
- ▣ Good baseline

Future

- ▣ Juvenile sampling
- ▣ Collaboration with other entities for future work (and to look at past information)
 - USFWS
- ▣ Continue assessment projects

Summary

- ▣ A lot of useful information has been, is, and will be collected
- ▣ Is a great system to work in
- ▣ Information gained from working in the Doshka River can be very important to other areas
 - “Isle Royale” of Alaska Salmon
- ▣ Credit goes to hundreds of people

Questions???