

Management of Chinook Salmon Sport Fisheries in Northern Cook Inlet During a Period of Low Production

1. Escapement Monitoring and Goals
2. Managing Depressed Stocks
3. Future



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Sport Fish Division



Matsu Area Chinook Salmon Streams



Escapement Goal

- Level of escapement or spawning salmon that is known to provide a yield on a consistent basis. A wide range of annual escapement levels can produce sustained yields.

Deshka Weir





Salmon counted as they exit a fish trap



13,000-28,000

Aerial index surveys flown by helicopter



Aerial Survey:

- **Assess run strength relative to other years (Index).**
- **Represents 40-60% of actual escapement.**



Aerial Survey:

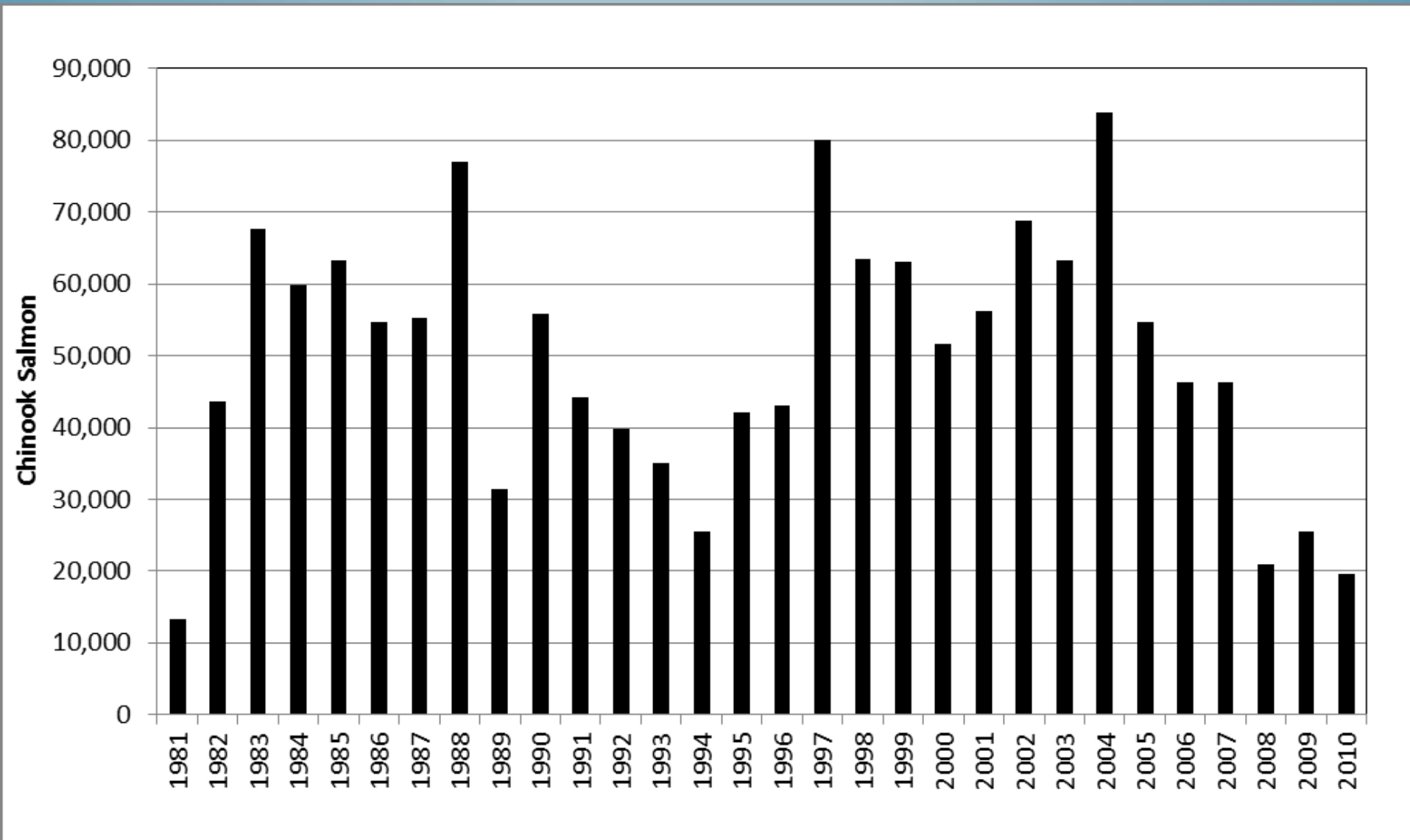
- **Used to set and assess achievement of escapement goals.**



- The current statewide Chinook downturn first noticed in 2007.

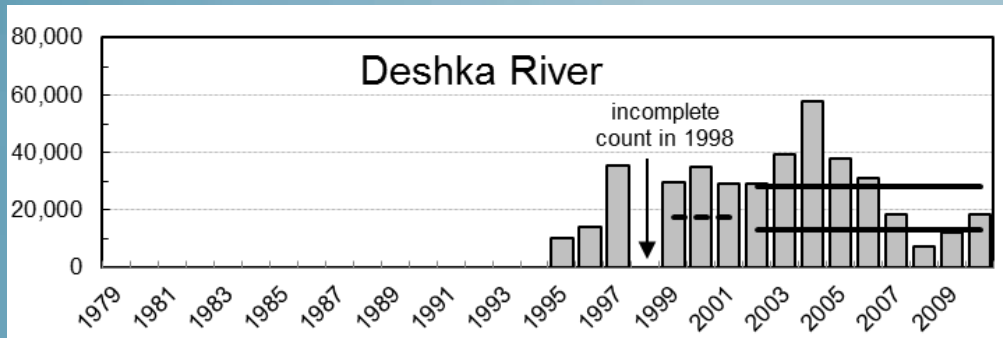


Total Chinook Salmon Escapement on 24 NCI Streams by Single Pass Aerial Survey, 1981-2010.



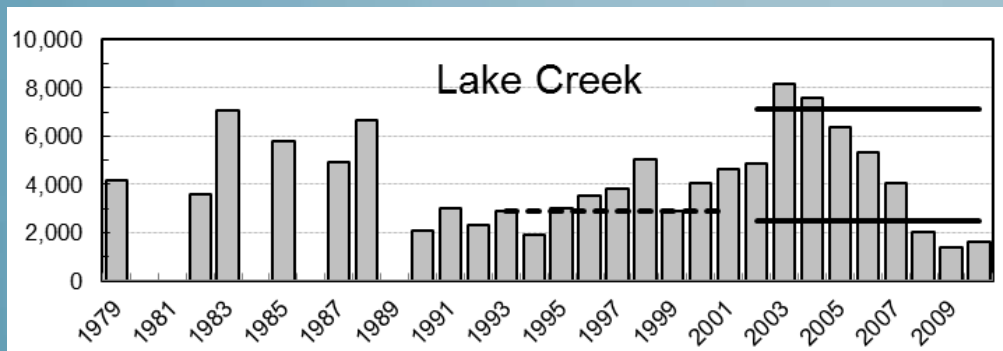
Westside Susitna River

Escapement

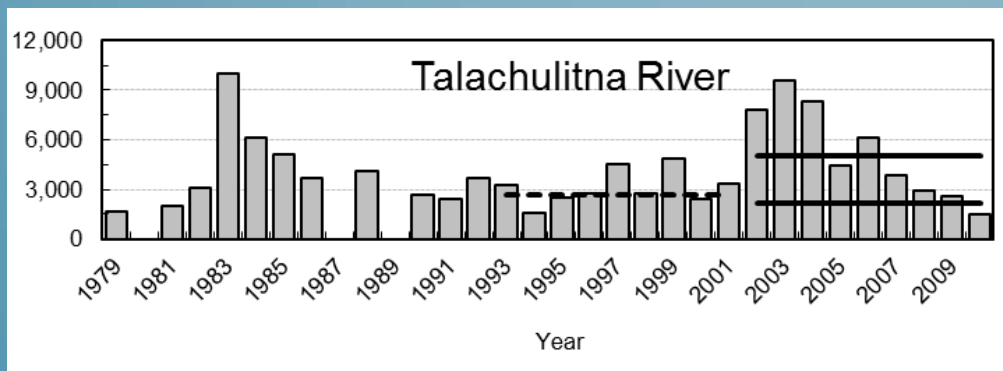


Goals missed
2006-2010:

2 of 5



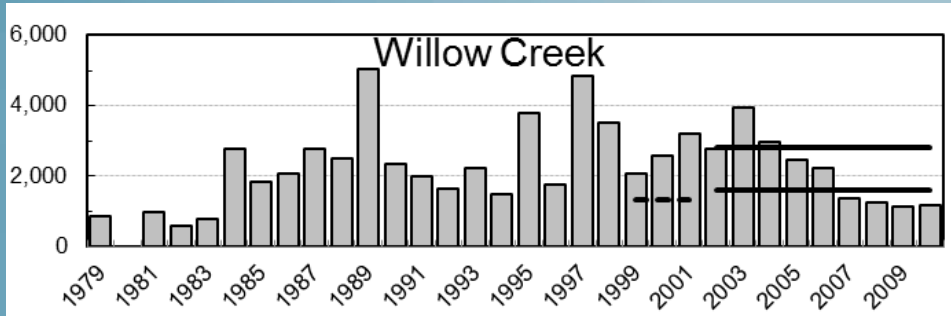
3 of 5



1 of 5

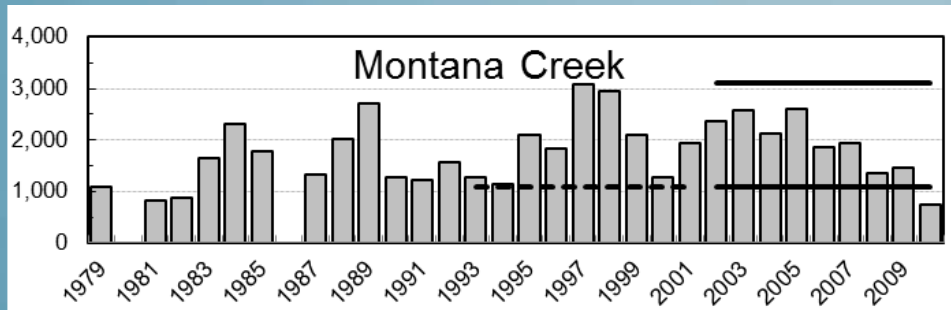
Eastside Susitna River

Escapement

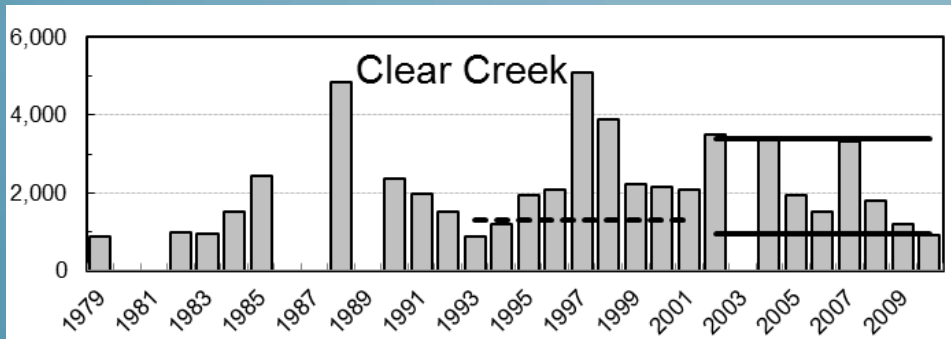


Goals missed
2006-2010:

4 of 5



1 of 5

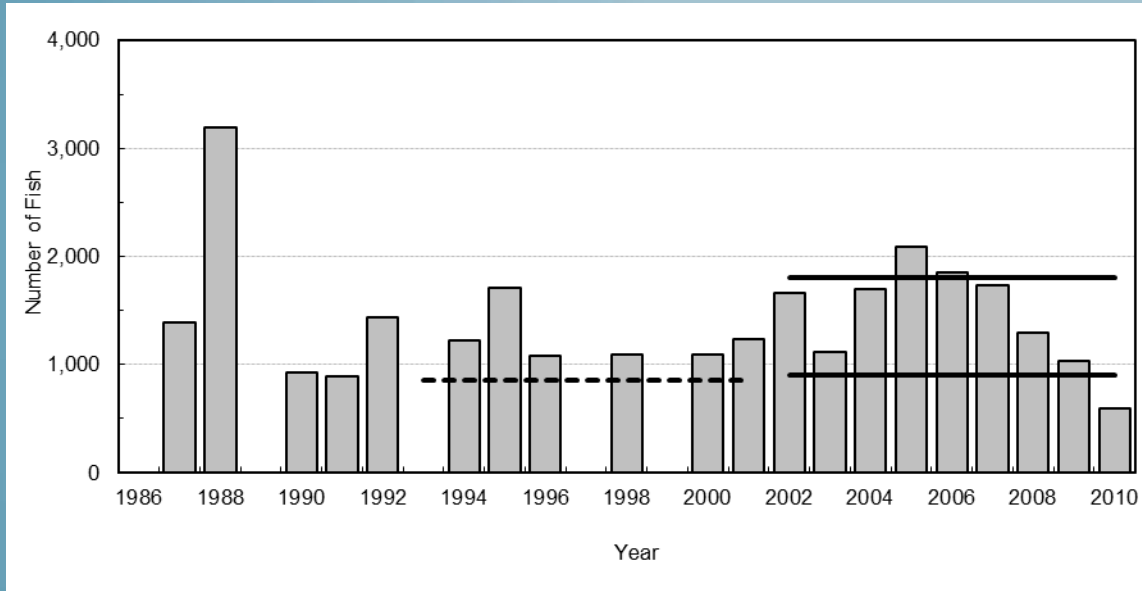


1 of 5

Little Susitna River

Escapement

Goals missed
2006-2010:



1 of 5

ADF&G Emergency Order Changes 2012-2014

- Further restrictions necessary to achieve majority of goals while maximizing fishing opportunity through a full season.
- By-area approach considers harvest and escapement over previous low run years to:
 - ID areas that could support harvest
 - ID areas for C&R only
 - Adjust regulations in other areas to offset shifts in angler effort as a result of restrictions.

Matsu area Chinook streams

Eastside Susitna streams-

Talkeetna Mountains

- Willow Creek
- Little Willow Creek
- Kashwitna River
- Sheep Creek
- **Goose Creek- closed**
- Montana Creek
- Clear Creek
- Prairie Creek
- Chulitna River

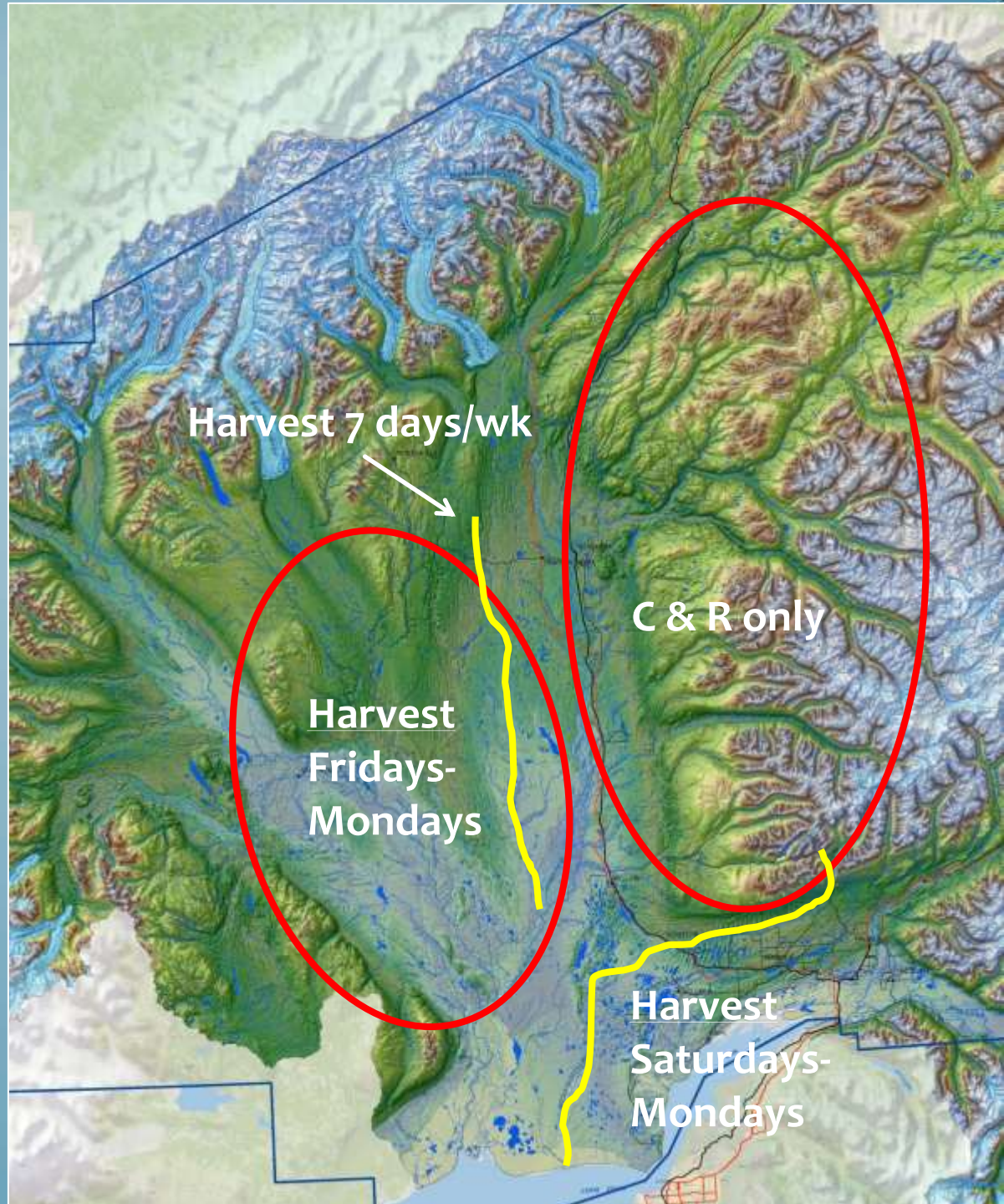
Westside Susitna streams-

Alaska Range

- Dëshka River
- **Alexander Creek- closed**
- Peters Creek
- Lake Creek
- Talachulitna River

Knik Arm streams-

- Little Susitna River



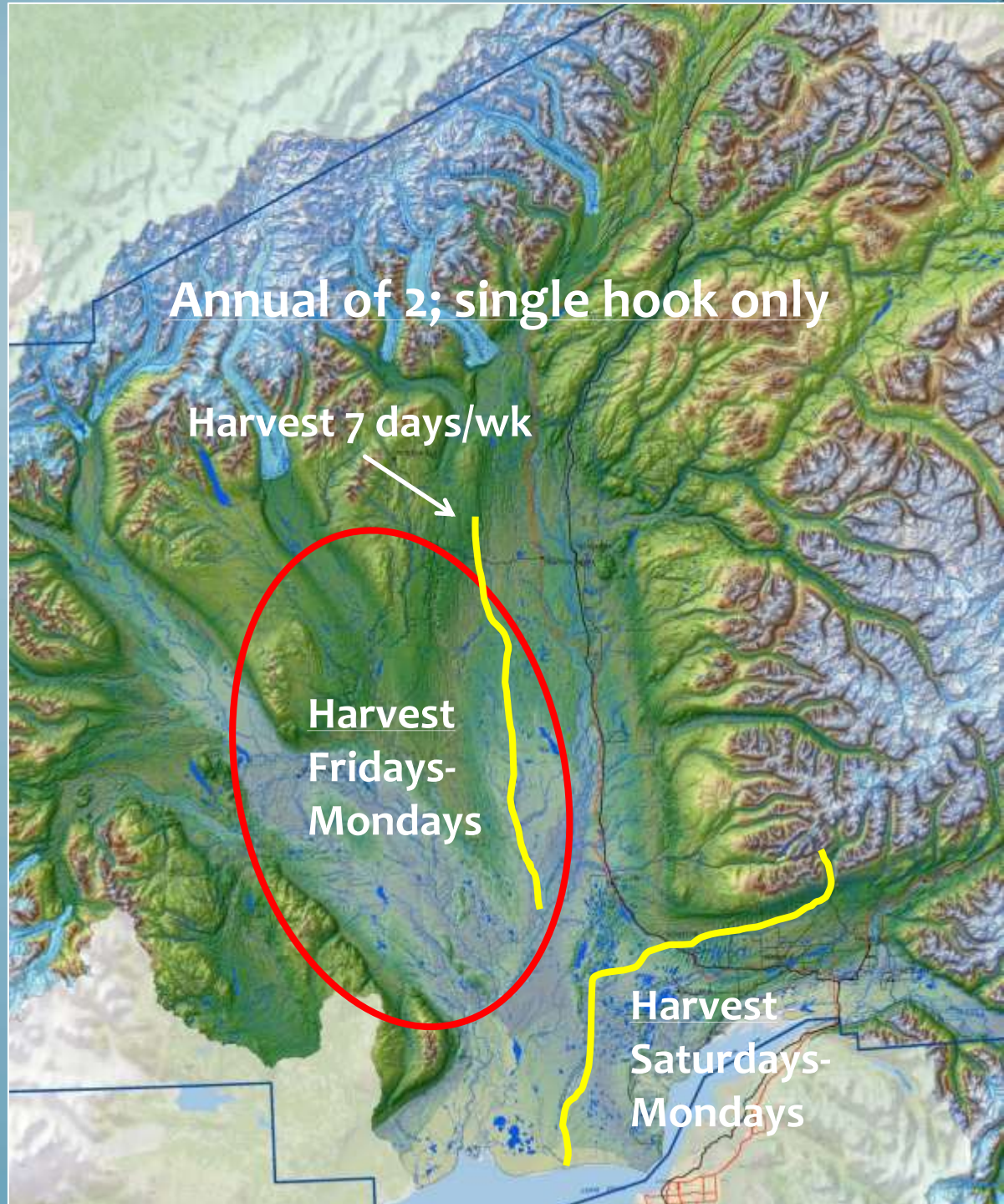
Matsu area Chinook streams

Westside Susitna streams- Alaska Range

- Deshka River
- **Alexander Creek- closed**
- Peters Creek
- Lake Creek
- Talachulitna River

Knik Arm streams-

- Little Susitna River



SPORT FISHING

Emergency Order

ALASKA DEPARTMENT
OF FISH & GAME

Under Authority of AS 16.05.060

Emergency Order No. 2-KS-2-06-14

Issued at: Palmer, Thursday, February 27, 2014

Effective Date: 6:00 a.m., Thursday, May 1, 2014

Expiration Date: 11:59 p.m., Sunday, July 13, 2014, unless superseded by subsequent emergency order.

EXPLANATION:

This emergency order imposes gear, harvest, and other restrictions to sport fishing in the Susitna River drainage for the conservation of king salmon. This limits sport fishing gear in the Susitna River drainage to one unbaited, single-hook, artificial lure only; the use of bait is prohibited.

This emergency order also prohibits the harvest of king salmon (any size) in Units 1 (except Deshka River), 2, 3, 5, and 6 of the Susitna River, and in the Talachulitna River (within Unit 4). In the waters of Unit 2 open to king salmon fishing, fishing for trout and other species is not affected and is allowed as written in current regulation. The Deshka River remains open to harvest of king salmon seven day per week.

Within Unit 4 (Yentna drainage), except for the Talachulitna River, this emergency order allows harvest to occur each Friday, Saturday, Sunday, and Monday and prohibits the retention of king salmon (any size) each Tuesday, Wednesday, and Thursday.

Where harvest is prohibited, fishing for king salmon is allowed. However, king salmon may not be retained or possessed, and king salmon caught may not be removed from the water and must be released immediately in those waters.

A person, after harvesting a king salmon 20 inches or greater in length, may not fish for any species of finfish on the same day in any flowing waters open to sport fishing for king salmon in the Susitna River Drainage Area.

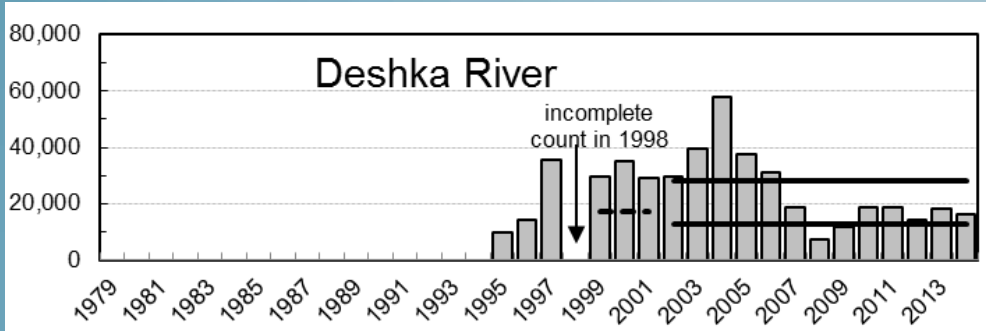
This emergency order is effective from 6:00 a.m., Thursday, May 1, 2014, through 11:59 p.m., Sunday, July 13, 2014.

REGULATION: The provisions of 5 AAC 61.112. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 1 of Susitna River Drainage Area. (1), (4), and (6)(B), 5 AAC 61.114. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 2 of Susitna River Drainage Area. (1) and (3), 5 AAC 61.116. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 3 of Susitna River Drainage Area. (2), 5 AAC 61.118. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 4 of Susitna River Drainage Area. (1), and (2), 5 AAC 61.120. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 5 of Susitna River Drainage Area. (1) and (2), and 5 AAC 61.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 6 of Susitna River Drainage Area. (1) and (4)(A), are superseded by this emergency order.

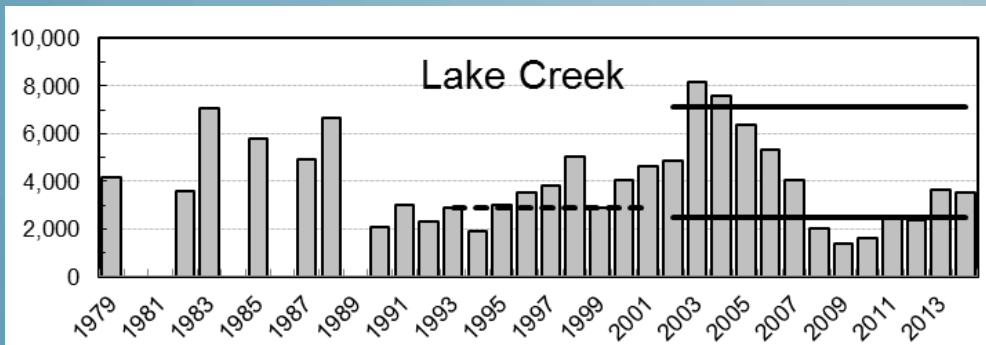
Westside Susitna River

Escapement

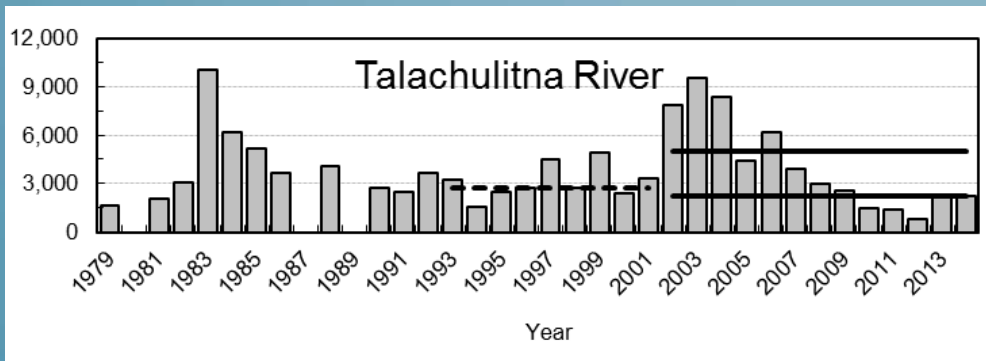
Harvest reduction:



30%



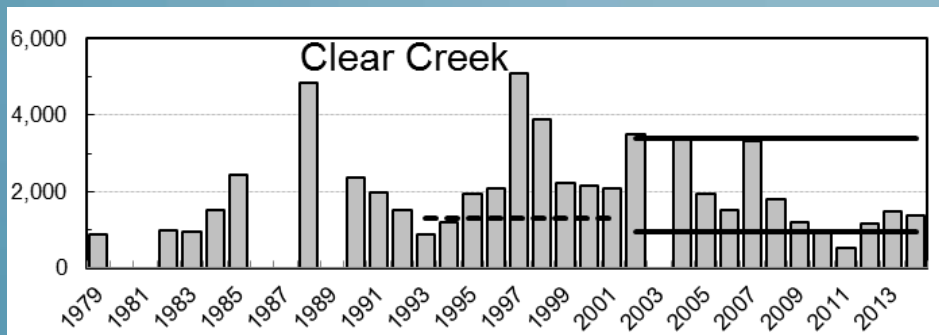
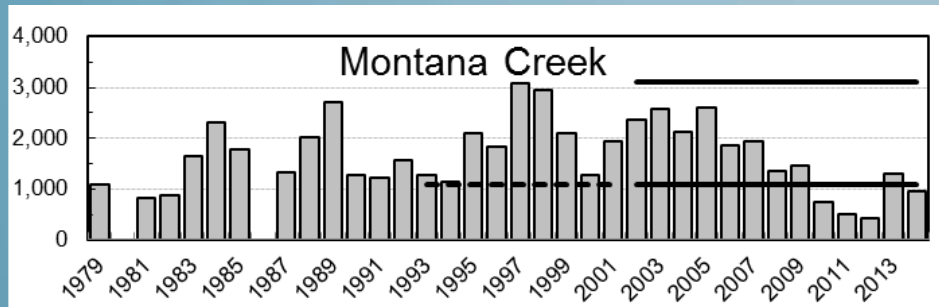
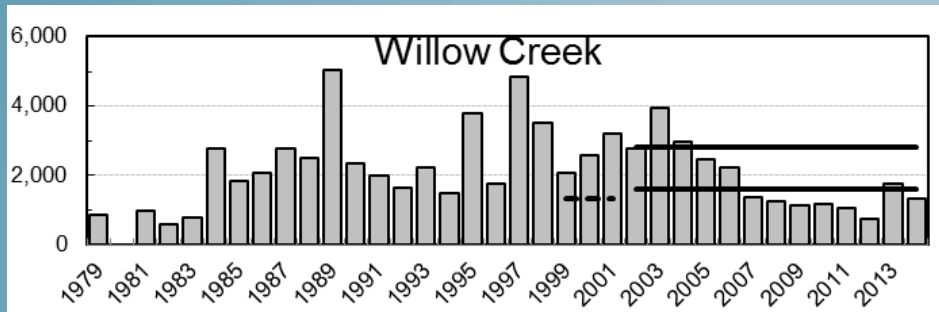
60%



100%

Eastside Susitna River

Escapement



Harvest reduction:

100%

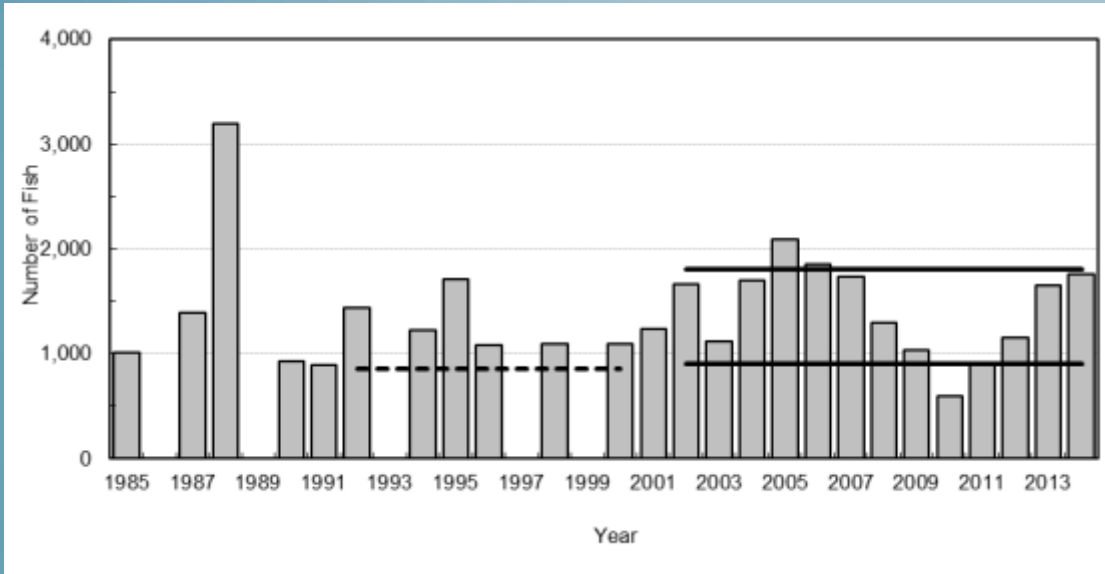
100%

100%

Little Susitna River

Escapement

Harvest reduction:



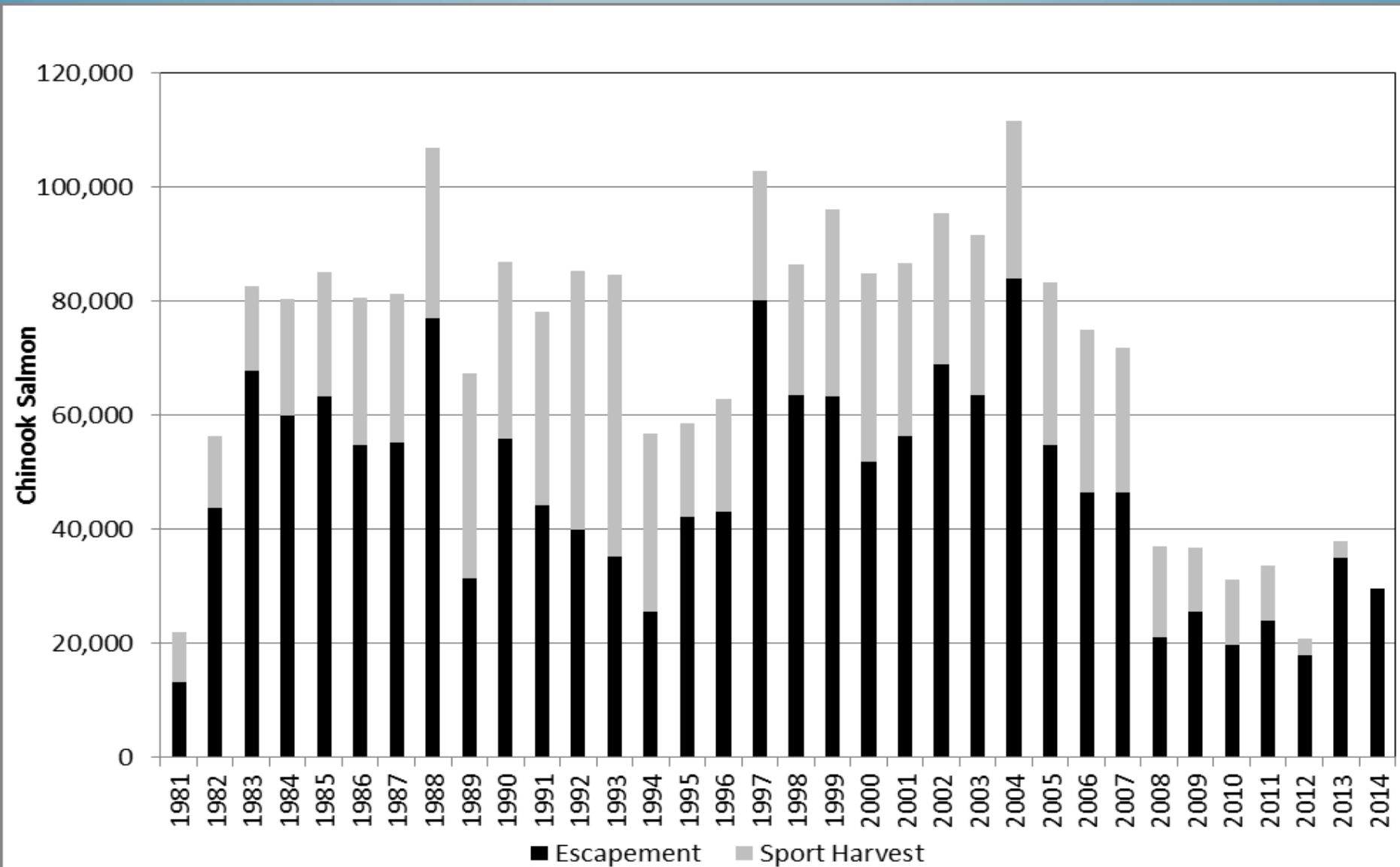
70%

Systems achieving goals majority of time

- Deshka River - reduced harvest
- Lake Creek - reduced harvest
- Peters Creek - reduced harvest
- Little Susitna - reduced harvest
- Talachulitna - C&R only
- Little Willow - C&R only
- Clear Creek - C&R only

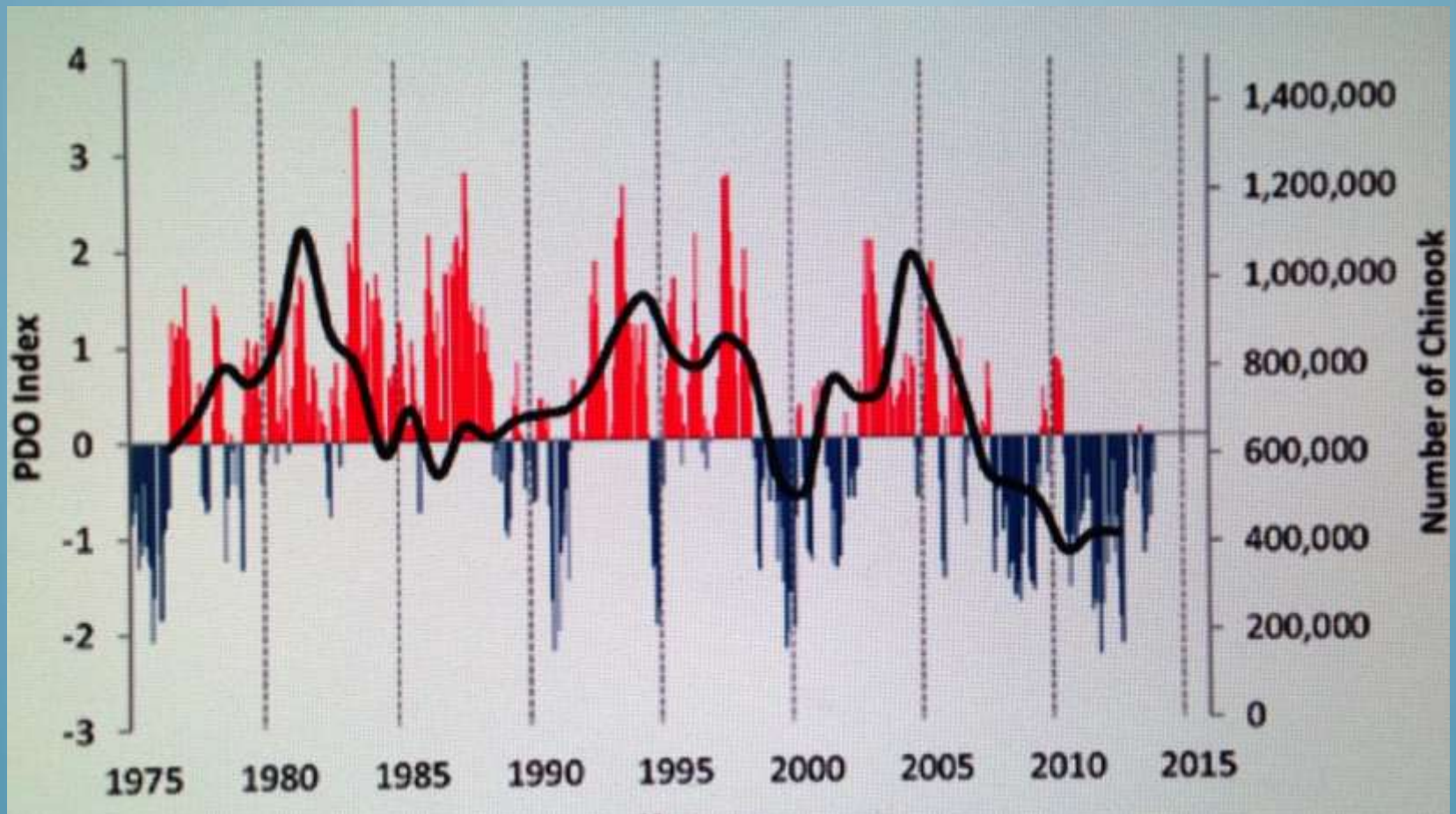


Total Chinook Salmon Escapement and Harvest on 24 NCI Streams by Single Pass Aerial Survey, 1981-2014.



What is causing the Chinook downturn?

- Poor marine survival
 - PDO and its influence on ocean mixing may be influencing the downturn; currently in a cool phase.



- 100 yr floods may compound the downturn.



2006 Flood

2012 Flood

2010

2011

2012

2016

2017

2018

Future Management:

- Continue to conserve stocks
 - Allow fishing opportunity where possible.
 - Allow harvest in areas that can support it.
- Ensure sufficient numbers are available to take advantage of more favorable marine conditions once they occur.



Thank You

