California Department of Fish and Game
Klamath-Trinity Project

Klamath Basin Chinook Salmon Spawning Escapement, Harvest and Age Composition

Salmon Information Public Meeting

Santa Rosa, CA. February 28, 2012

Wade Sinnen-Presenter

Contributors:

-CDFG (KTP, OSP)

-Hoopa Valley Tribal Fisheries

-Yurok Tribal Fisheries

-Quartz Valley Tribal Fisheries

-Karuk Tribal Fisheries

-Mid Klamath Watershed Council

-Salmon River Restoration Council

-US Fish and Wildlife Service

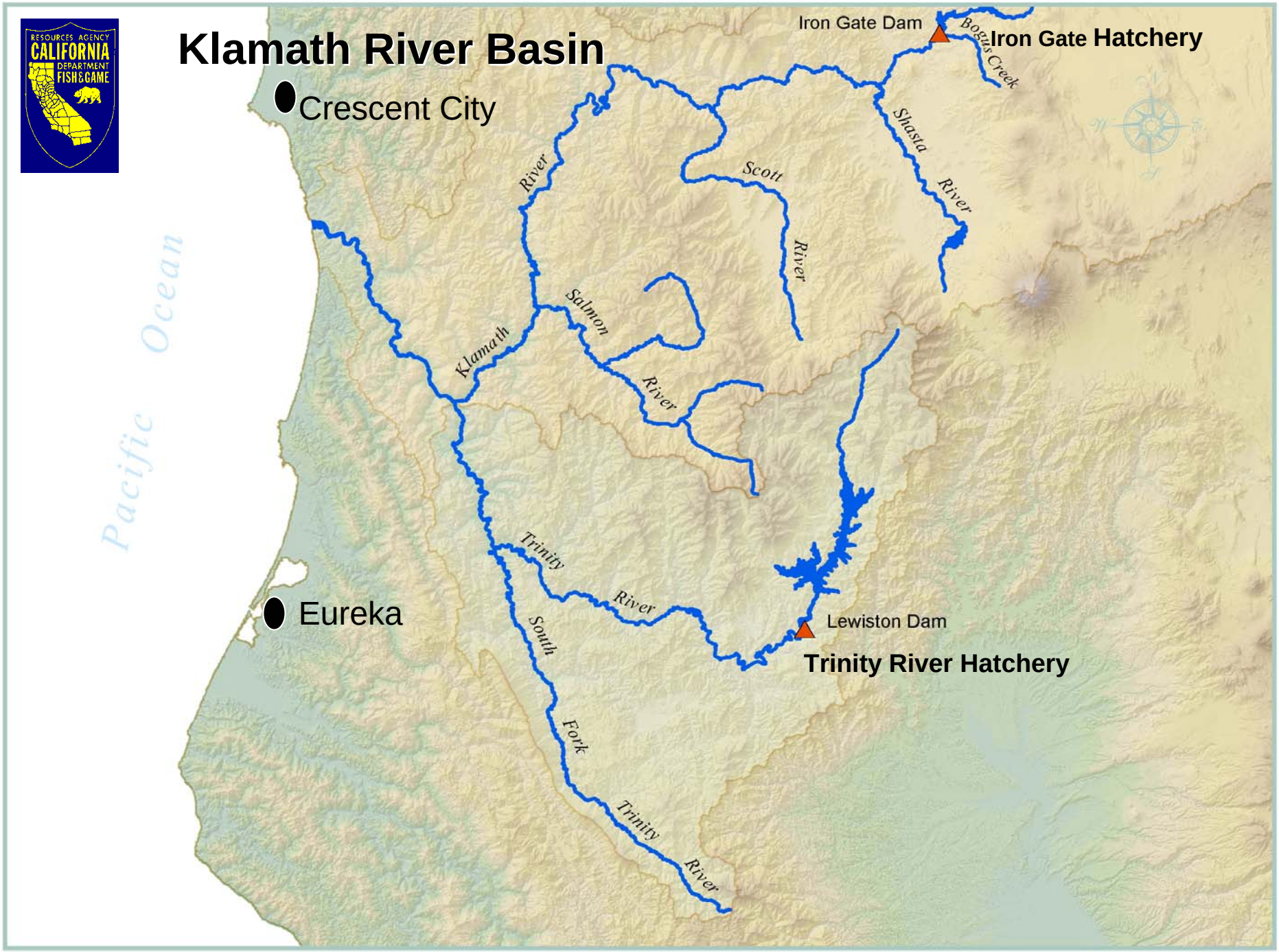
-US Forest Service

-NOAA

-Schools

-Landowners

Klamath River Basin

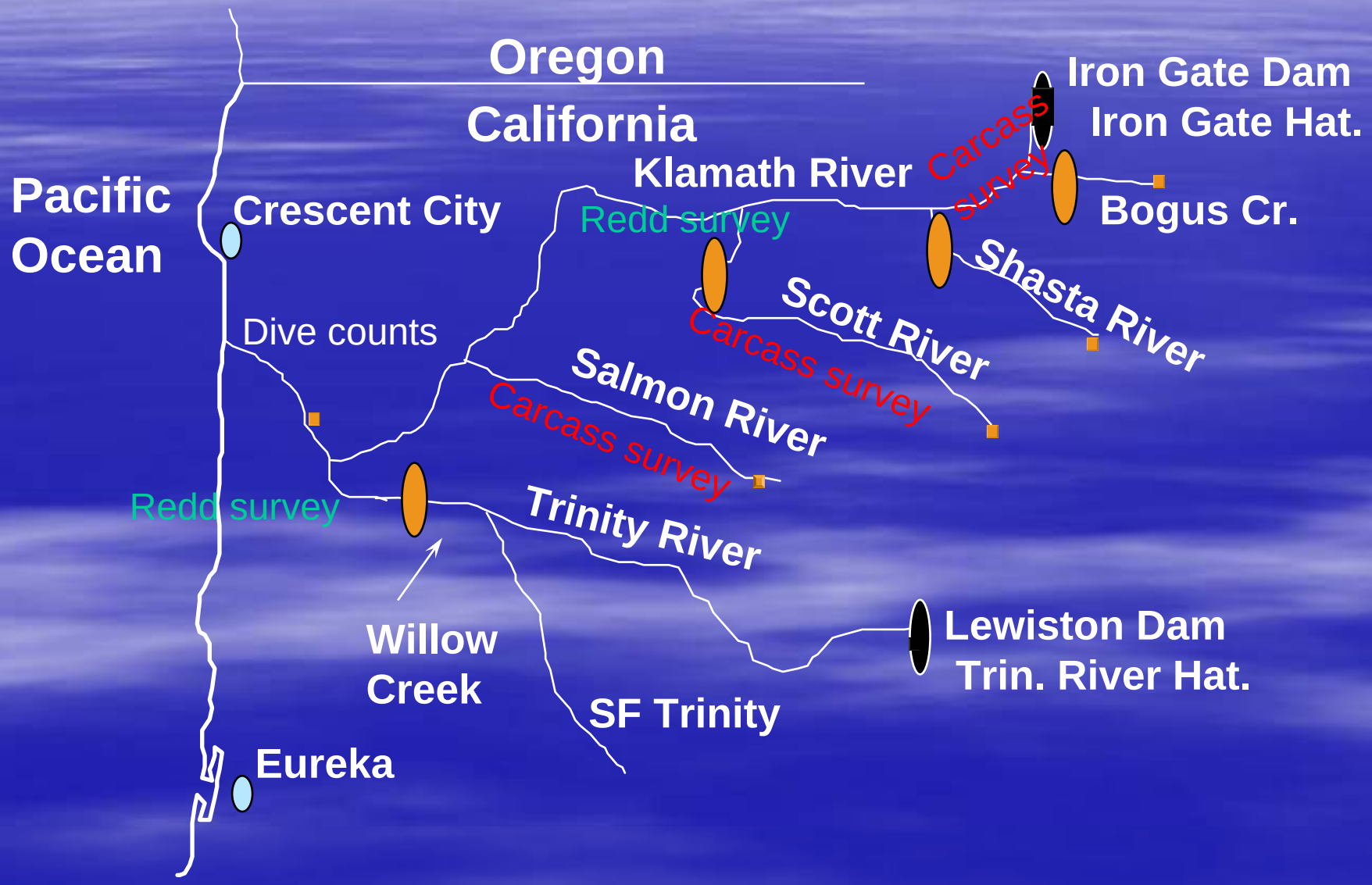


2011 Klamath River Basin Fall Chinook Run-size Estimates

Methods:

- Natural Escapement
  - Weir operations
  - Carcass surveys
  - Redd surveys
  - Dive counts
- Hatchery Escapement
  - Direct counts of fish returning to basin hatcheries
- In-river Harvest
  - Sport Angler Harvest
    - Creel census
    - Reward tag returns
  - Indian Net Harvest
    - Sub-sampling net catch

2011 Klamath River Basin Fall Chinook Escapement Monitoring Methods



Trinity River weir

Scott River Video weir

Carcass survey

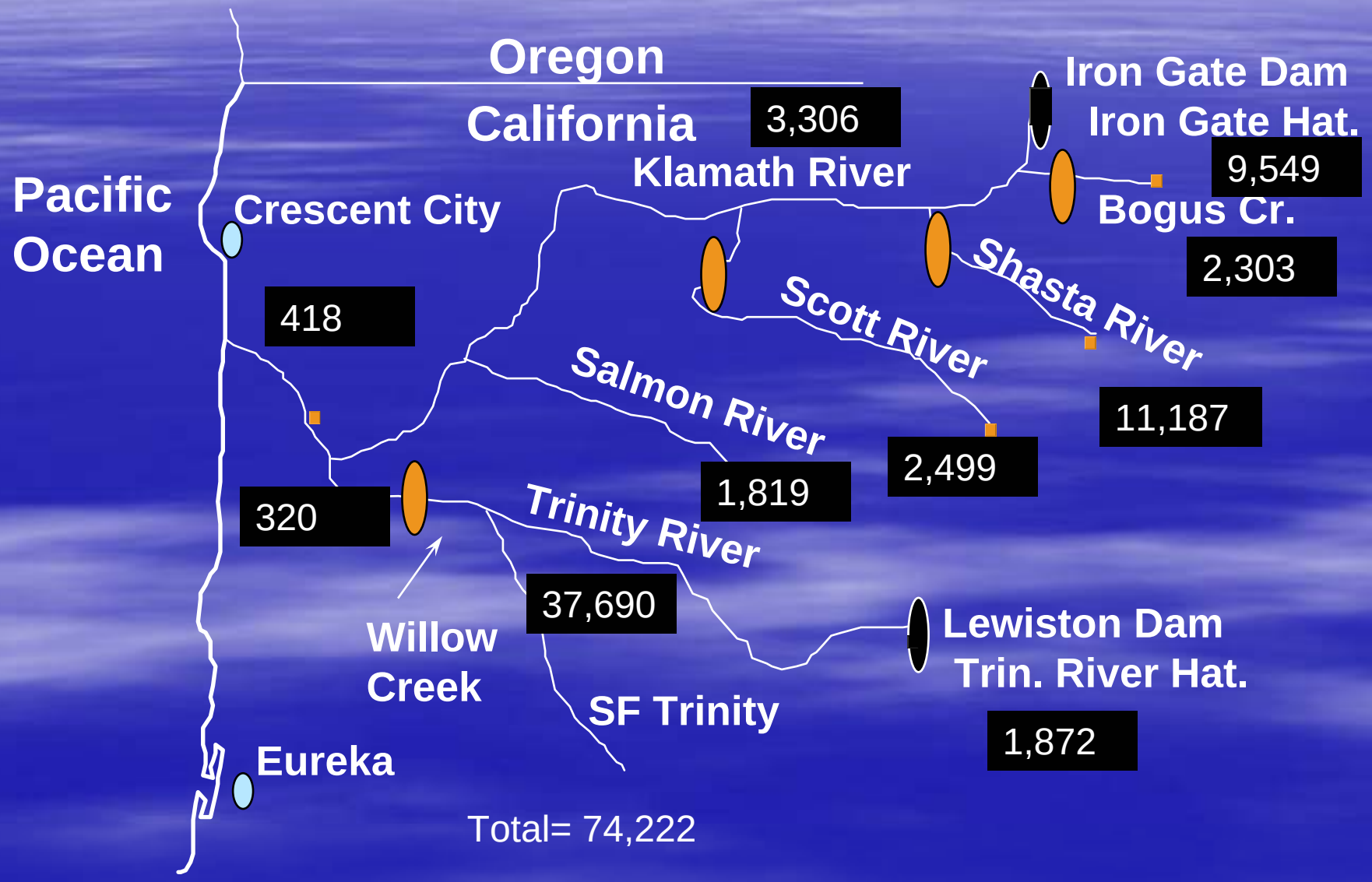
Redd survey

Dive survey

Hatchery recovery

2011 Klamath River Basin Adult Fall Chinook Escapement

2011 Klamath River Basin Grilse Fall Chinook Escapement



2011 Klamath Basin natural area adult fall Chinook escapement estimates (2011 Conservation objective = 35,000)

Klamath R. mainstem = 3,976

Salmon R. = 3,674

Scott R. = 3,016

Shasta R. = 213

Bogus Cr. = 2,919

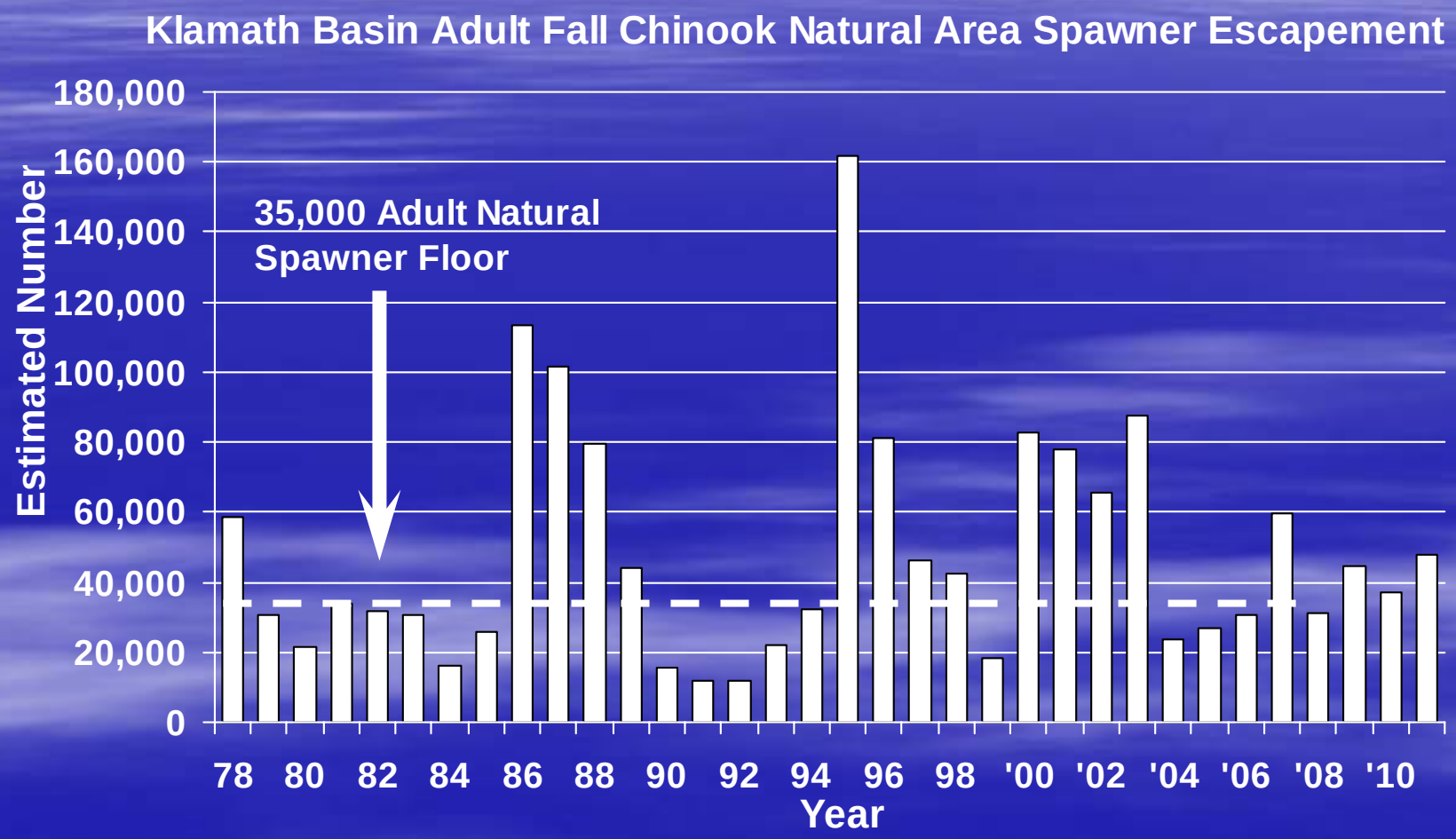
Klamath misc. tribs. = 3,072

Trinity R. mainstem = 28,668

Trinity misc. tribs. = 1,072

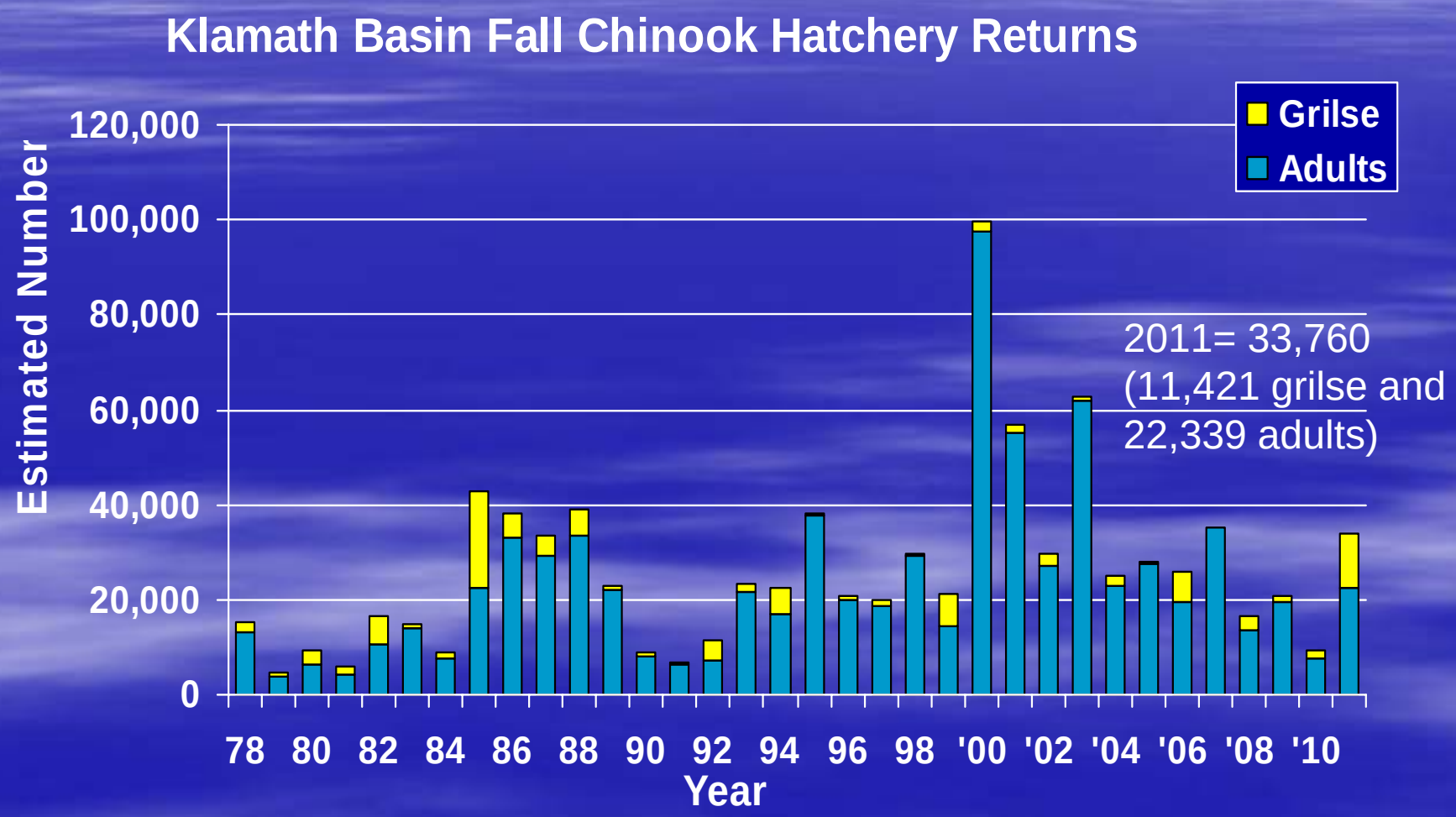
Total basin adult natural escapement = 47,753

1978 -2011 Klamath River Basin Adult Fall Chinook Natural Area Escapement Estimates



2011 natural area escapement = 47,753

1978 - 2011 Klamath River Basin Fall Chinook Hatchery Estimates



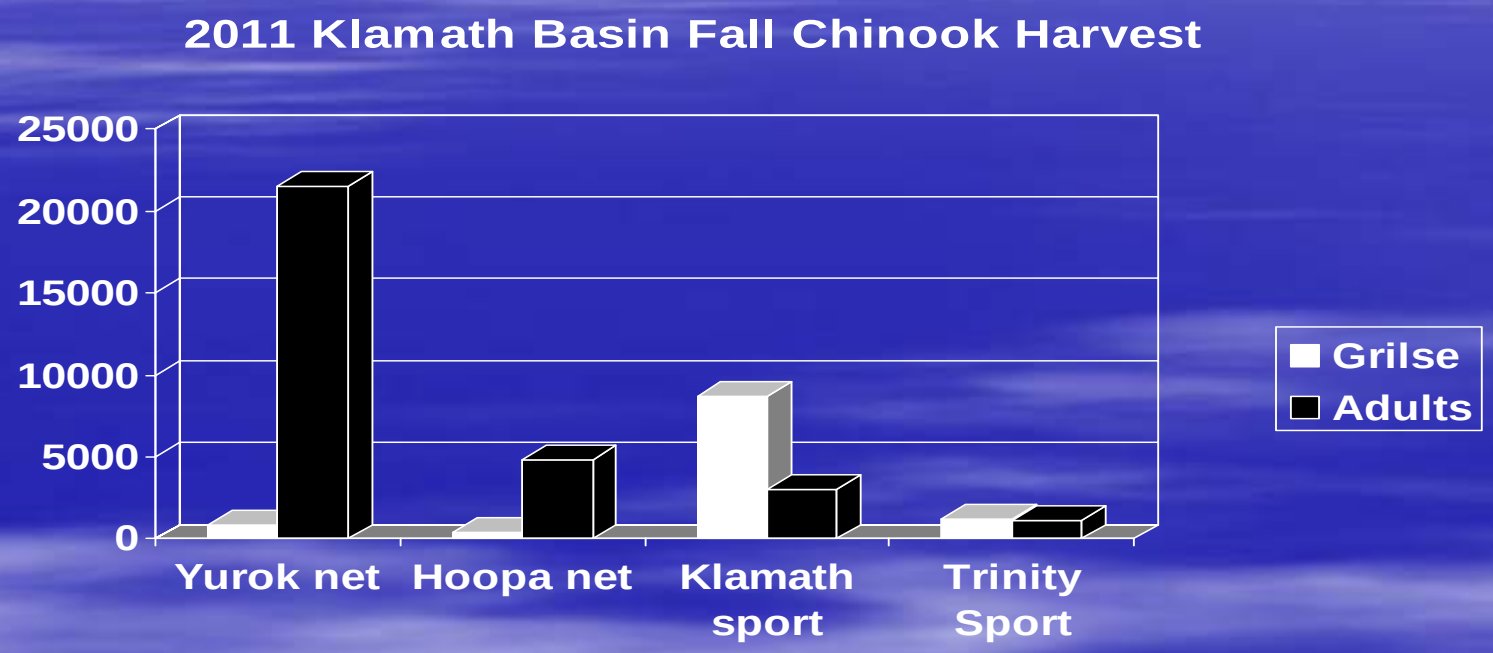
IGH=18,039 + TRH = 15,721

2011 Klamath River Basin Fall Chinook Harvest Monitoring Methods

Angler interview

Reward tag

2011 Klamath River Basin Fall Chinook Harvest Estimates

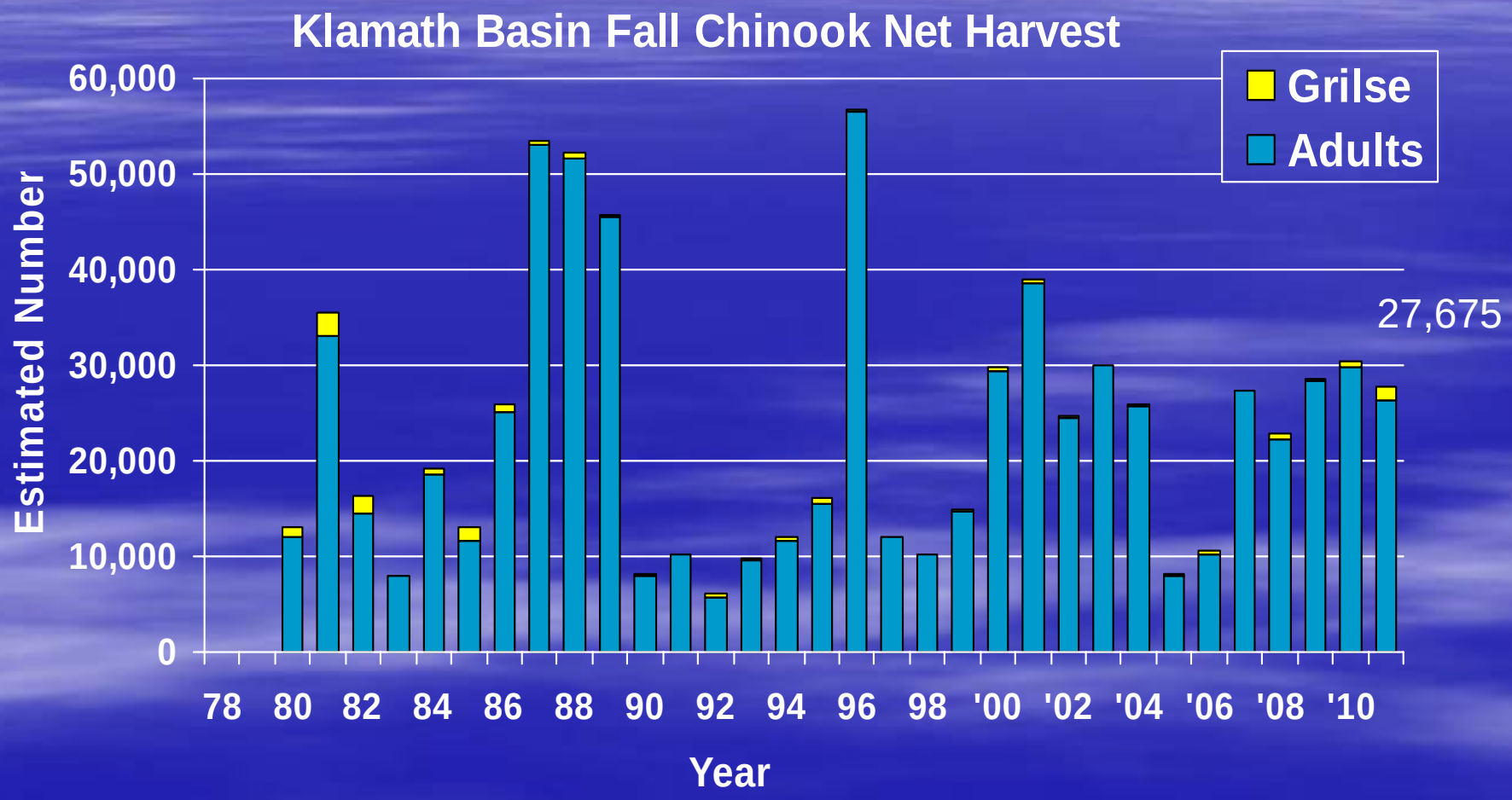


2011 adult fall Chinook quotas – 7,900 sport and 34,800 tribal

Total in-river harvest 41,835 fall Chinook (14,160 sport and 27,675 net)

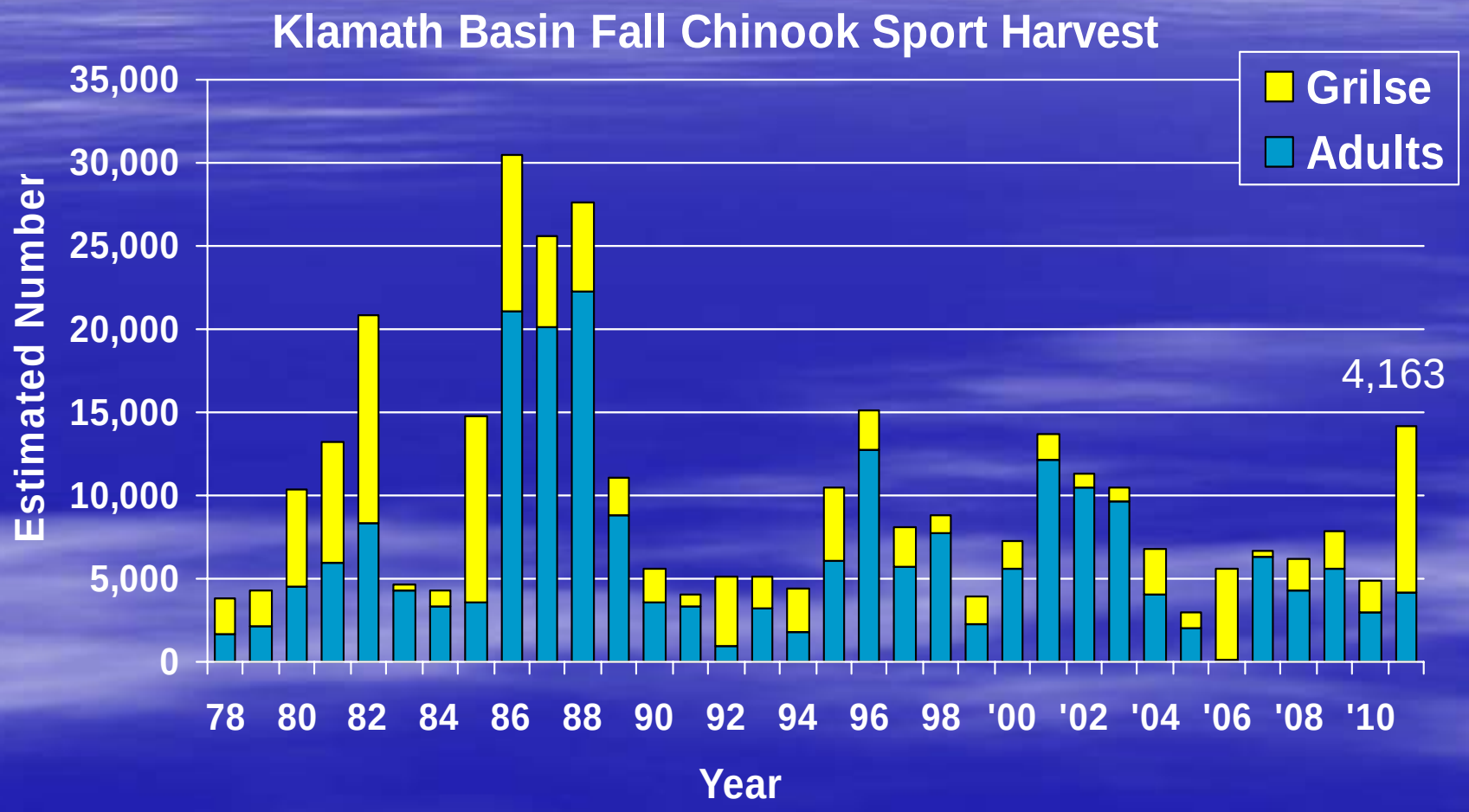
Adult Chinook harvest – tribal 26,353; sport 4,163

1980 - 2011 Klamath River Basin Fall Chinook Net Harvest Estimates



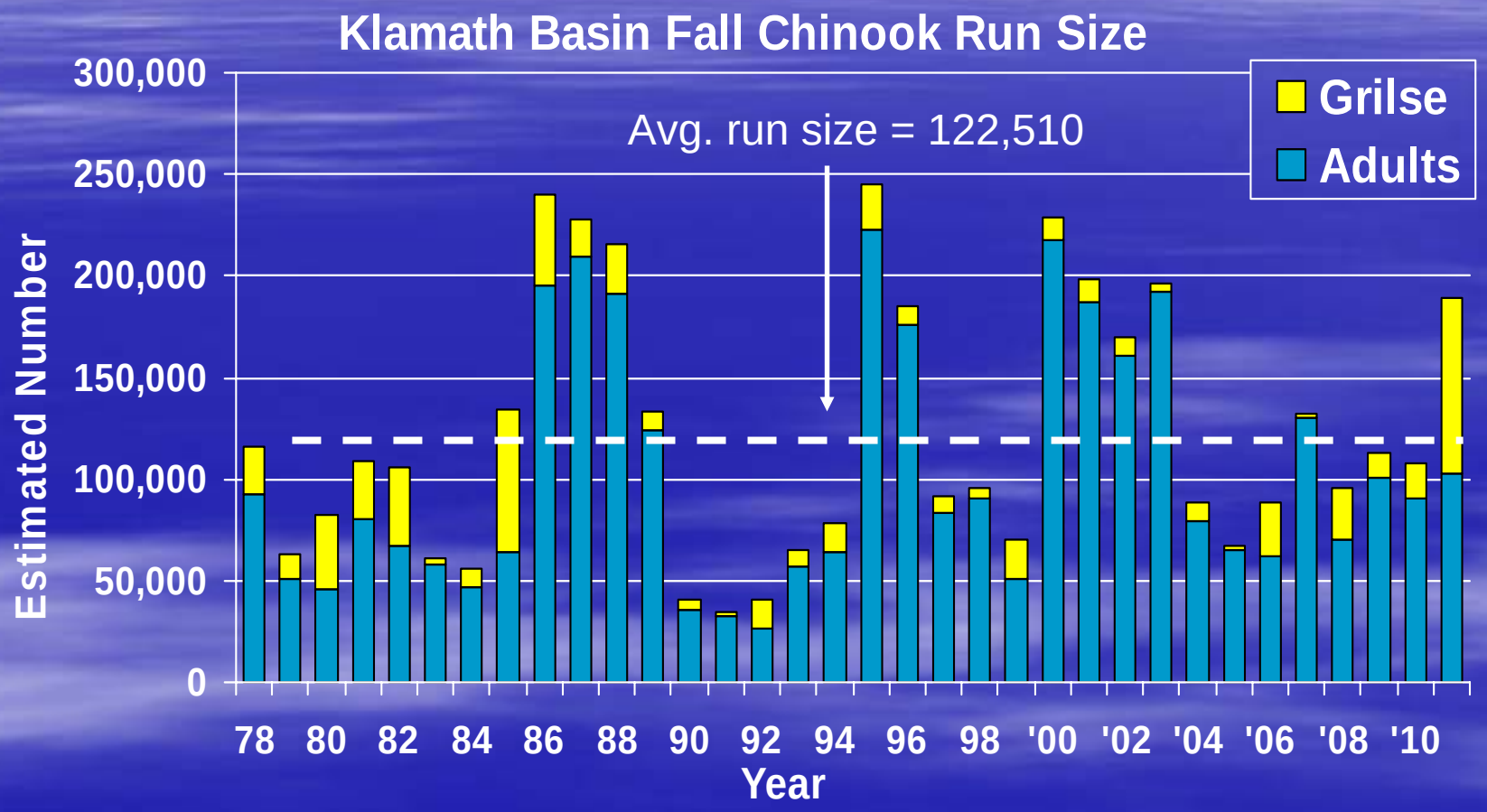
Tribal adult Chinook harvest allocation of @27,000 fish was not met

1978 - 2011 Klamath River Basin Fall Chinook Sport Harvest Estimates

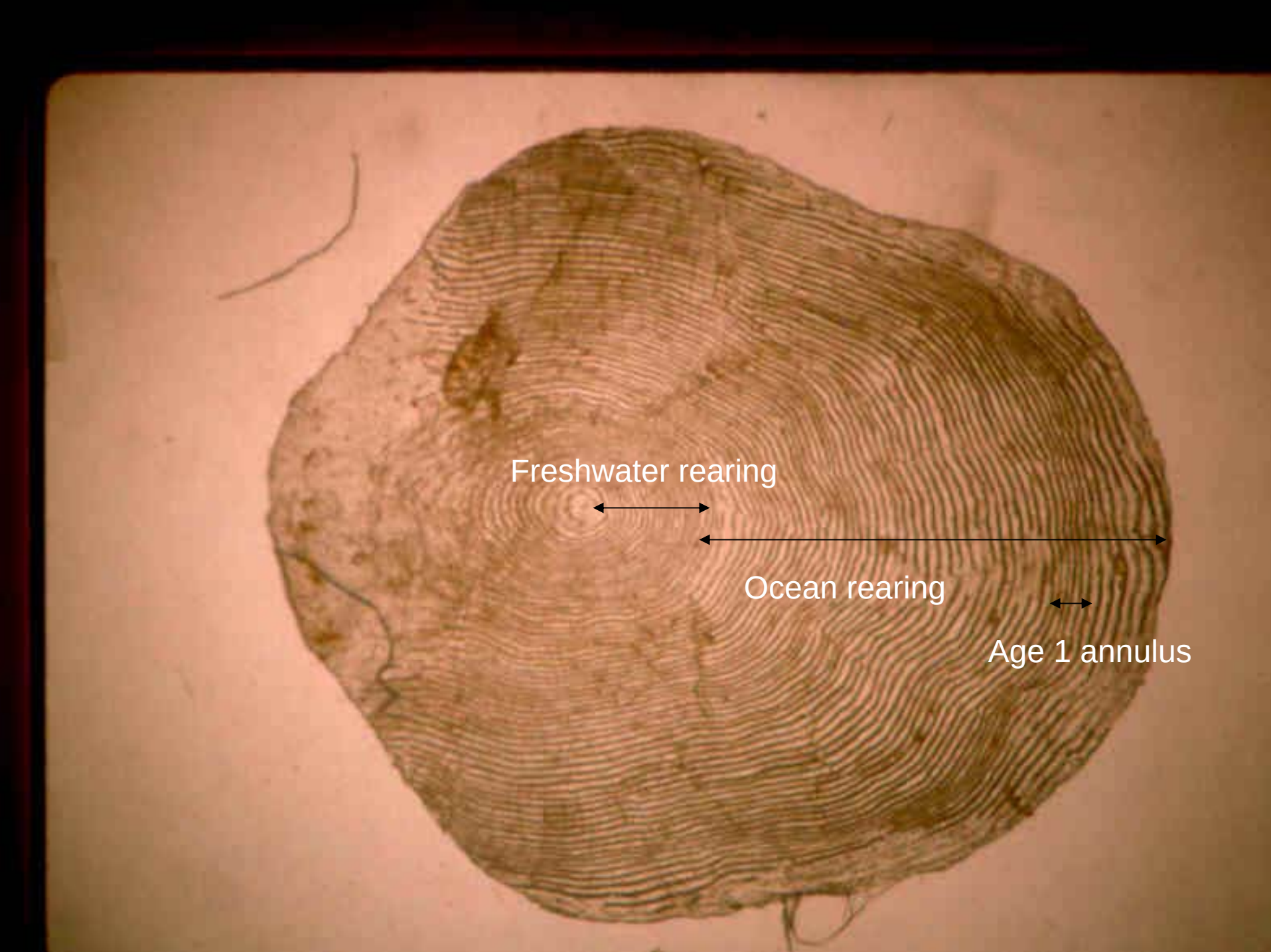


2010 Basin quota of 7,900 fall Chinook adults not met

1978 -2011
Klamath River Basin Fall Chinook
Run-size Estimates



2011 run size = 188,845


Freshwater rearing
Ocean rearing
Age 1 annulus

2011 Klamath Basin fall Chinook age structure by sector

*Data from KRTAT, 2012

	Age Structure				
Sector	2	3	4	5	Total
Hatchery escapement	11,421	18,374	22,217	81	33,760
Natural escapement	62,801	24,207	22,217	1,330	110,554
Sport harvest	9,997	2,637	1,475	52	14,160
Net harvest	1,322	13,286	12,587	481	27,675
Incidental fishing mortality	319	1,209	1,125	43	2,696
Totals	85,860	59,713	41,286	1,986	188,845

California Department of Fish and Game
Klamath River Basin Estimates

Preliminary Findings:

1. **The 2011 Klamath Basin fall Chinook run was the 8th largest since 1978.**

2. **Grilse (2 yr old Chinook) comprised 85,860 (45.5%) of the total run this year which is the highest total ever estimated in our data set. The number of grilse in 2011 are an important indicator of a strong year class, in this case brood year 2009.**

3. **The " floor" conservation escapement goal of 35,000 adult natural fall Chinook spawners was met this season. The conservation floor (35,000 – 40,700) has been met 3 of the last five years following a three year span of not meeting this objective.**