Status and Trends of Trinity River Anadromous Fish Populations

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Trinity River Anadromous Fishery and Management Overview

- Chinook and Coho salmon and steelhead run estimates- methods and results
- Klamath basin fall Chinook estimates
- Trinity River Restoration Program fishery goals and program activities
- Hatchery management- HGMP's, HSRG review, Ad Hoc group
- Other K/T basin news

Trinity River Run-size Estimation

Willow Creek Weir

Trinity River Run-size Estimates

- Field staff with CA Dept. of Fish and Game and the Hoopa Valley tribe operate two main stem weirs for the purpose of trapping and tagging salmonids to develop harvest and escapement (run-size estimates) for Chinook and coho salmon and adult steelhead.

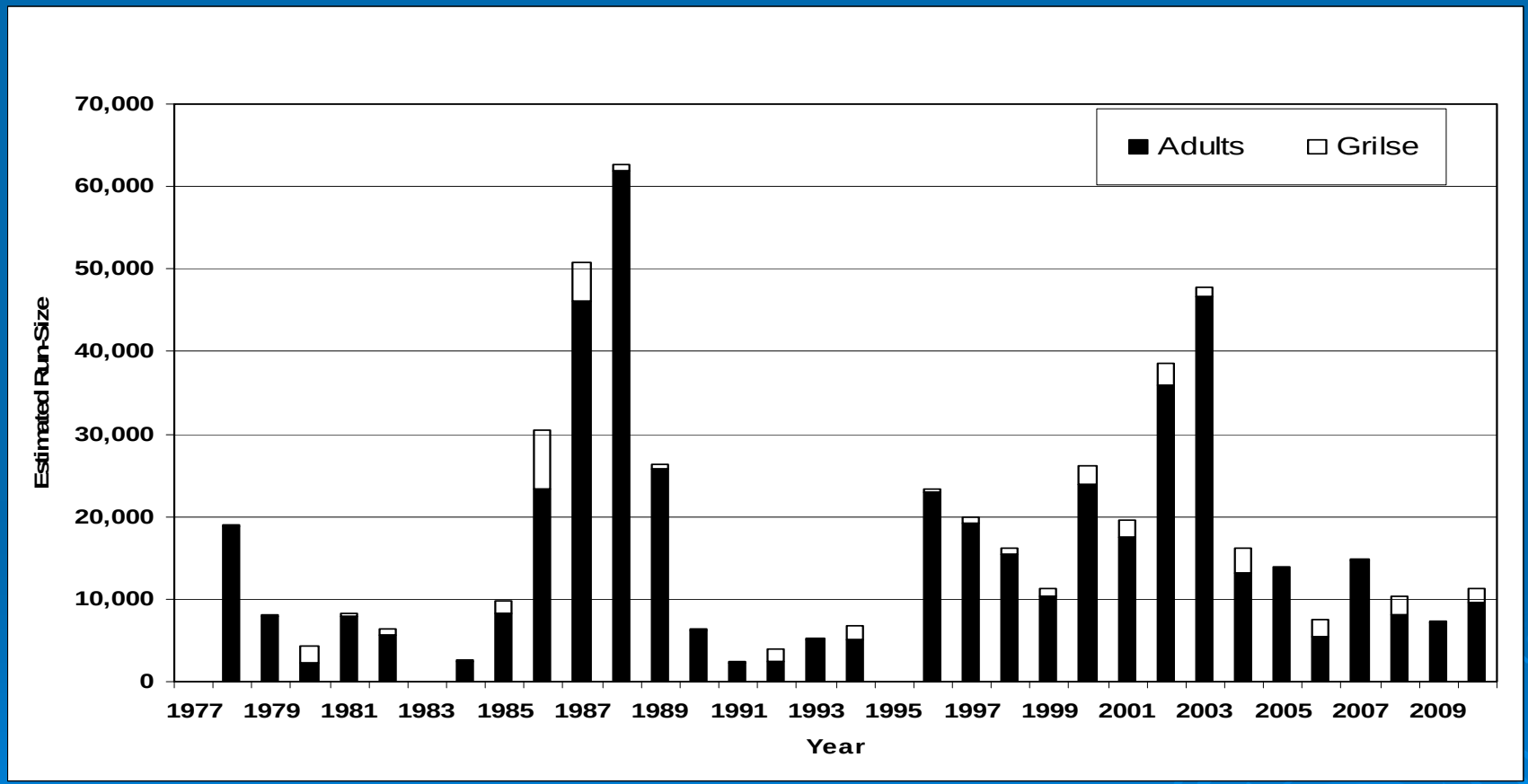
Trinity River Run-size Estimates

- Tagged fish are recovered at Trinity River Hatchery allowing for a “mark-recapture” population estimator to be employed.

Trinity River Run-size Estimates

- Biological samples and information are collected to make annual estimates of age, hatchery composition, run-timing, predator interactions, and incidental scarring from angler and net fisheries.

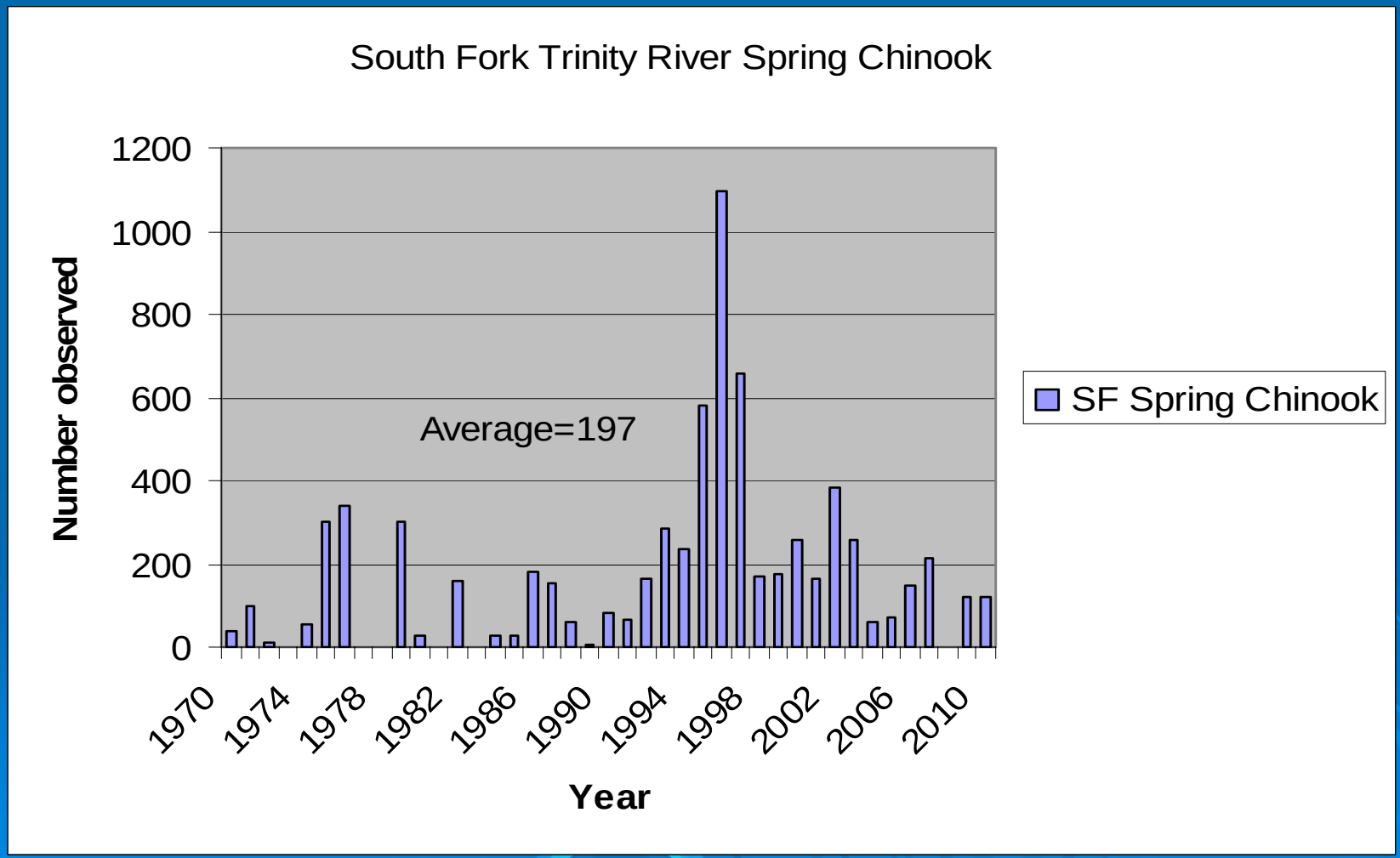
Trinity River Run-size Estimates
Spring Chinook Salmon-upstream of JCW



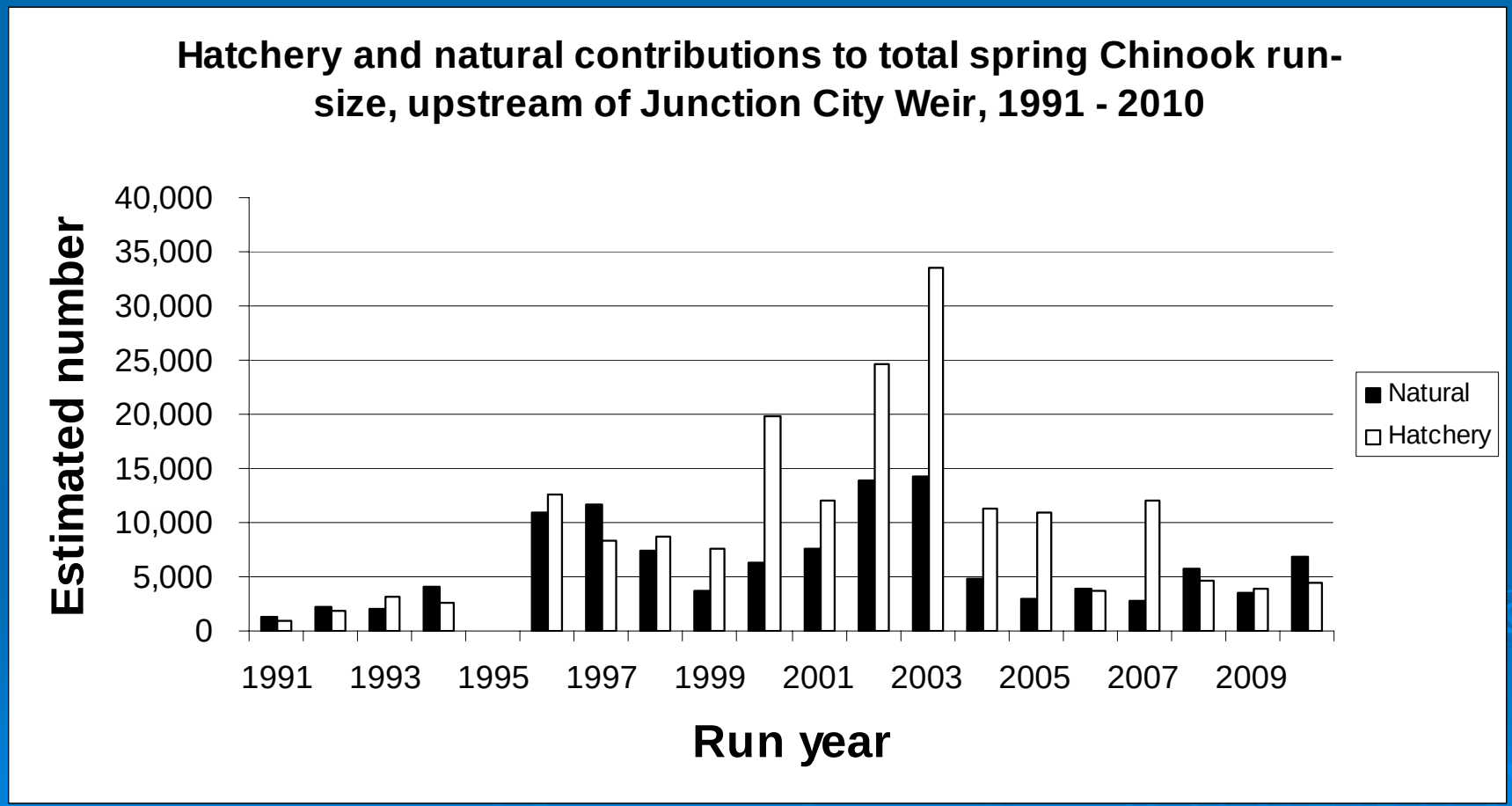
Average run-size is 17,350 (1978 – 2010).

Hatchery component of the run has ranged from 39.2% to 81.6%, averaging 58.8%

South Fork Trinity River Snorkel Estimates Spring Chinook Salmon

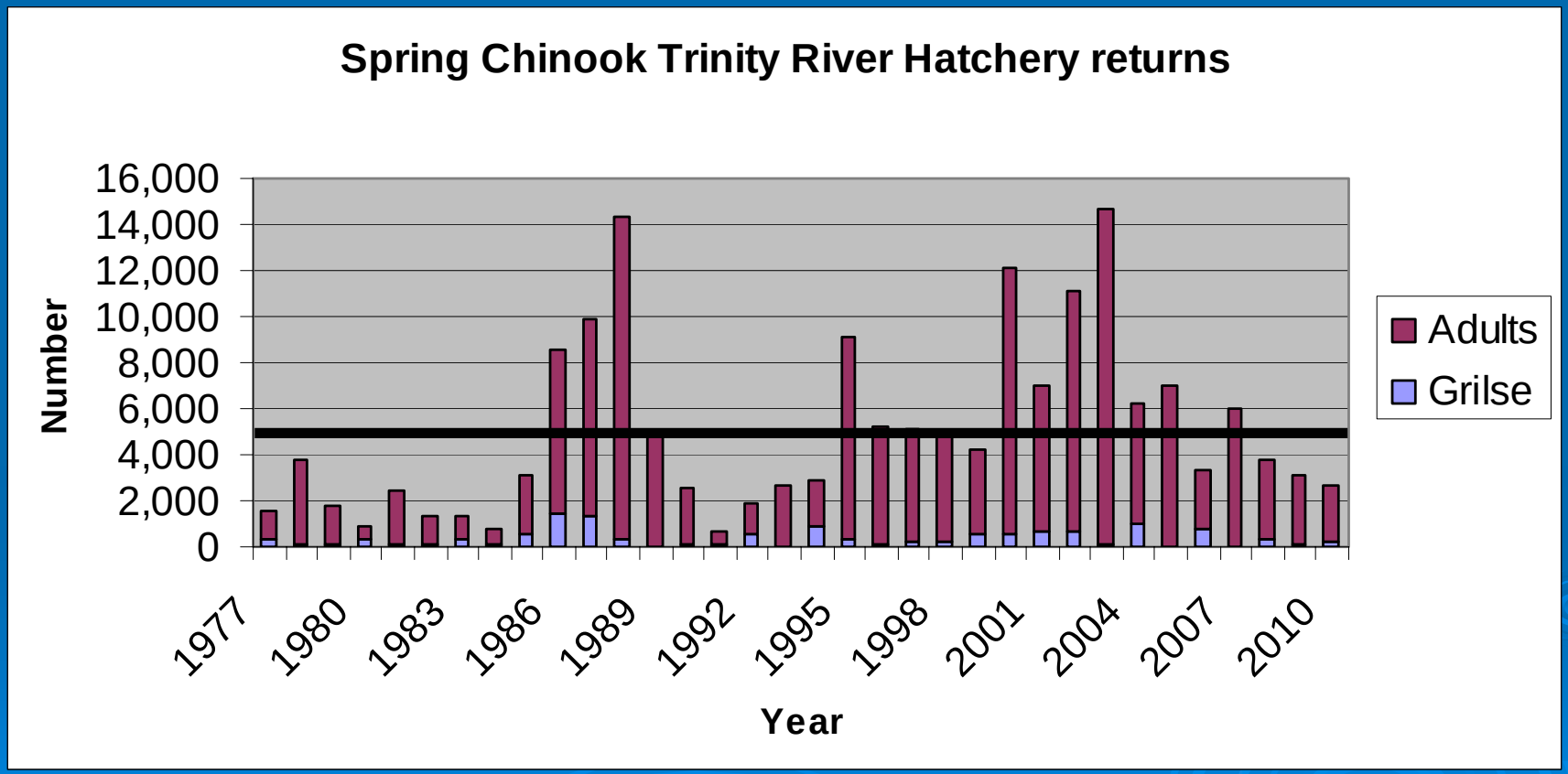


Trinity River Run-size Estimates Spring Chinook Salmon

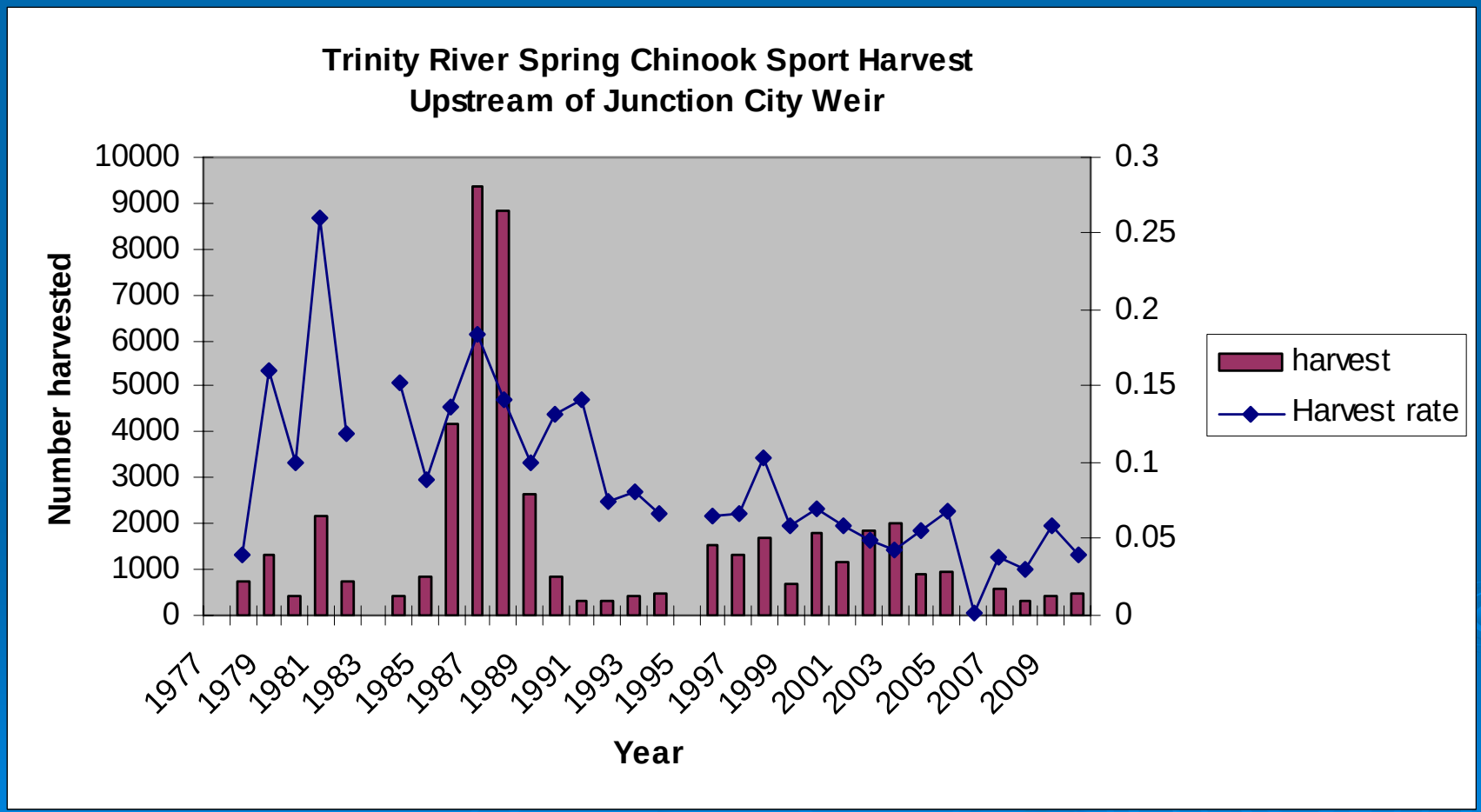


42.5% Natural composition, 1991-2010

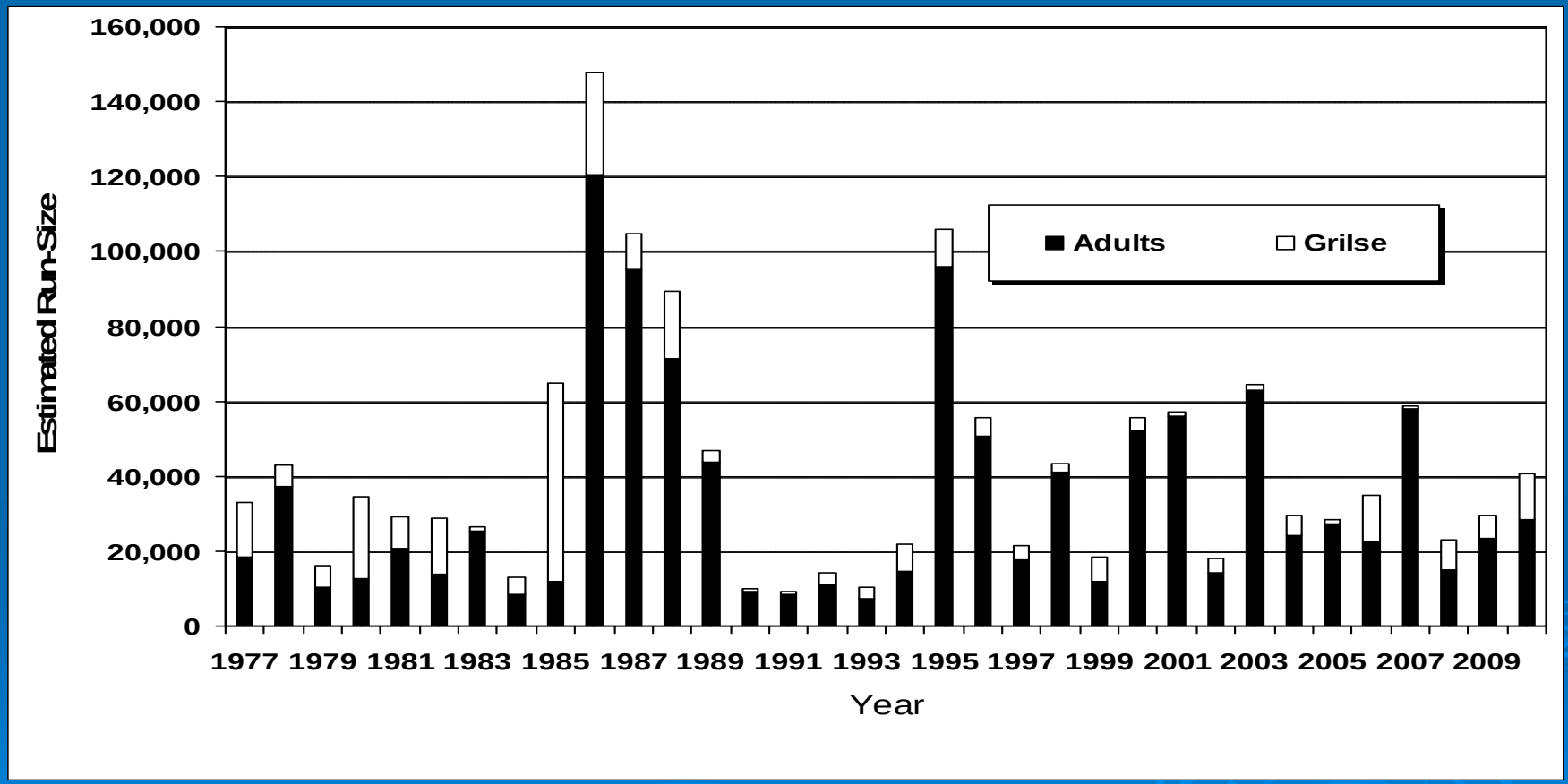
Trinity River Hatchery returns Spring Chinook Salmon



Trinity River Sport Harvest Spring Chinook Salmon



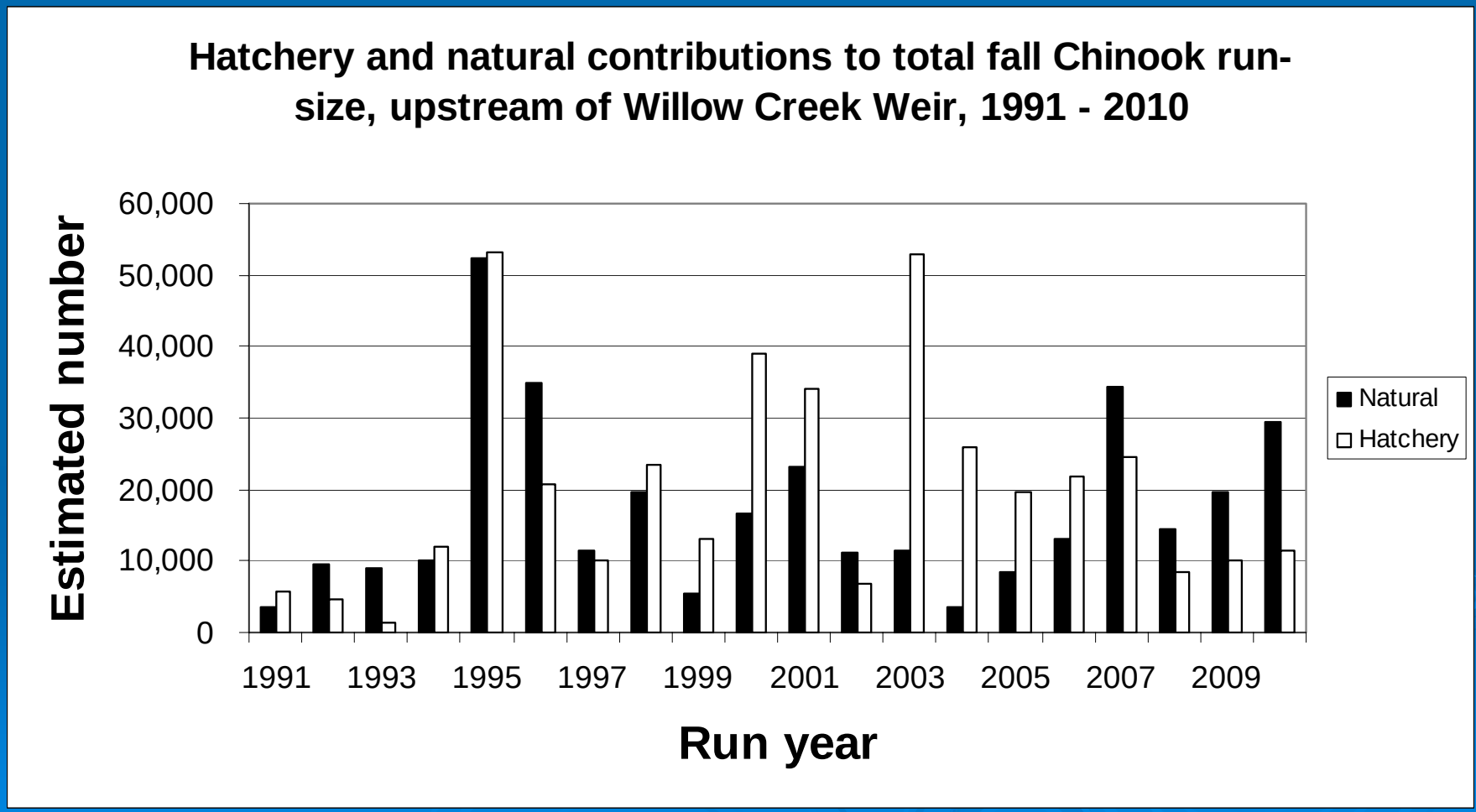
Trinity River Run-size Estimates
Fall Chinook Salmon



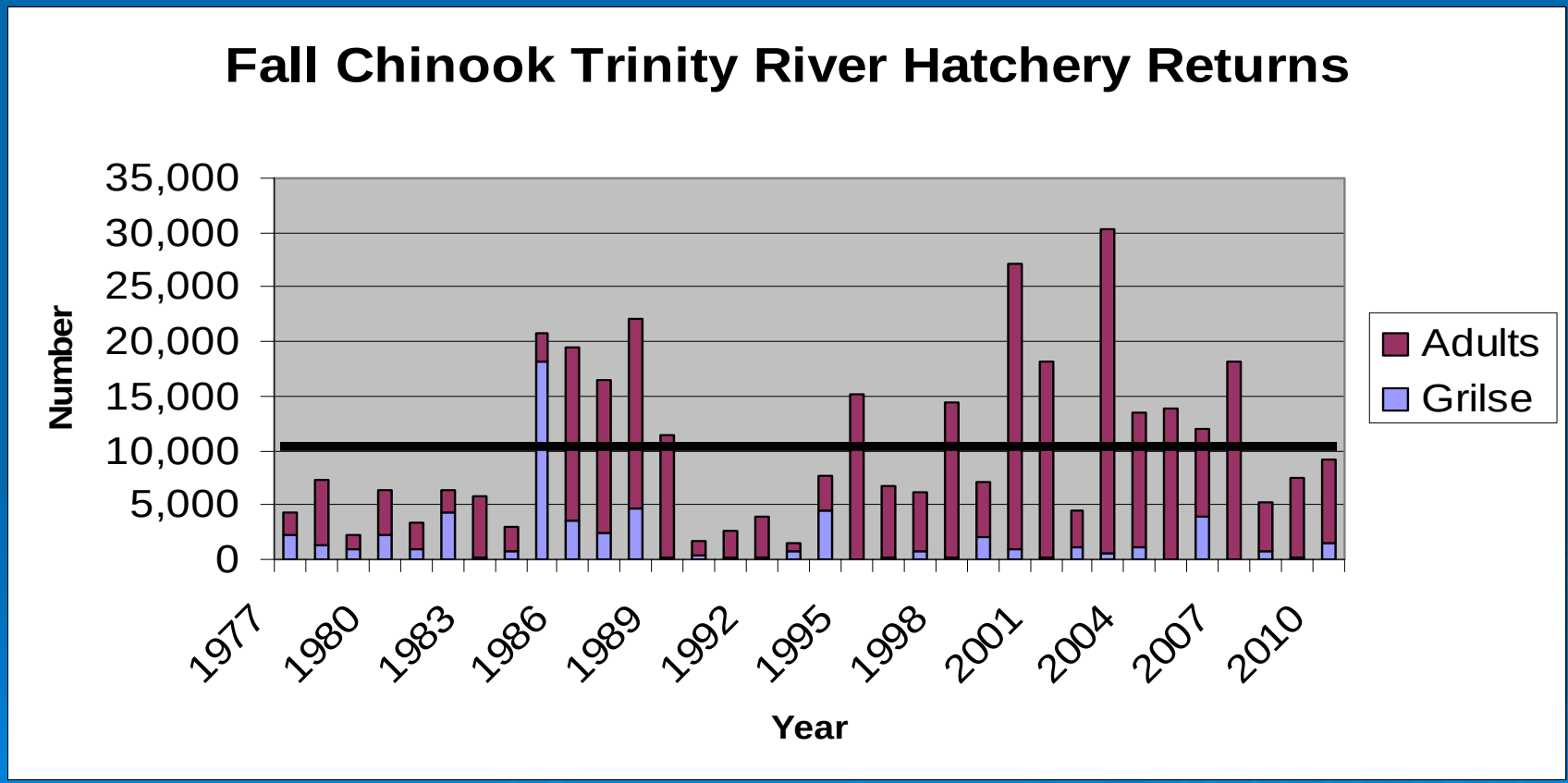
Average run-size is 41,991 (1977 – 2010).

Hatchery component of the run has ranged from 14.3% to 87.9%, averaging 53.9%

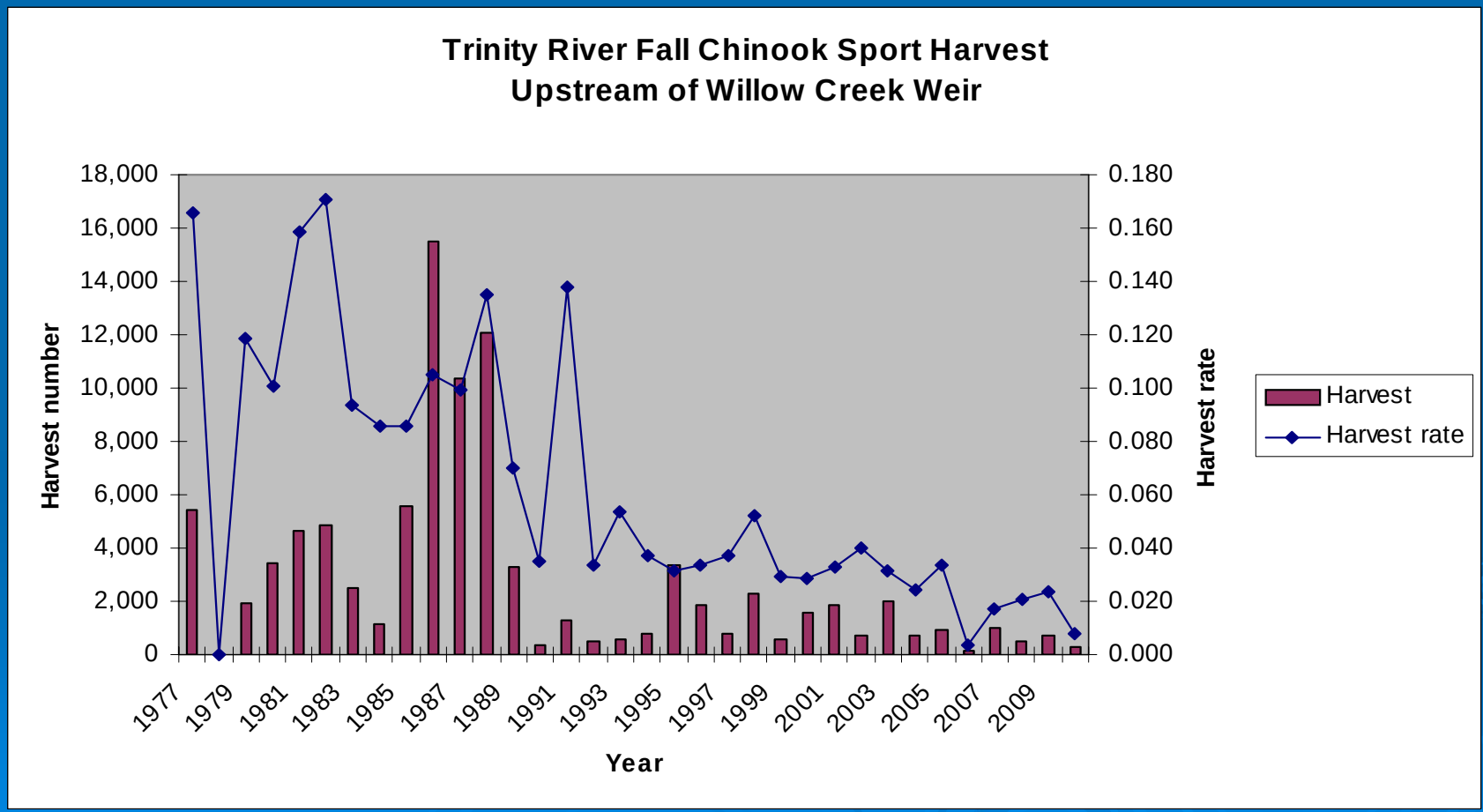
Trinity River Run-size Estimates Fall Chinook Salmon



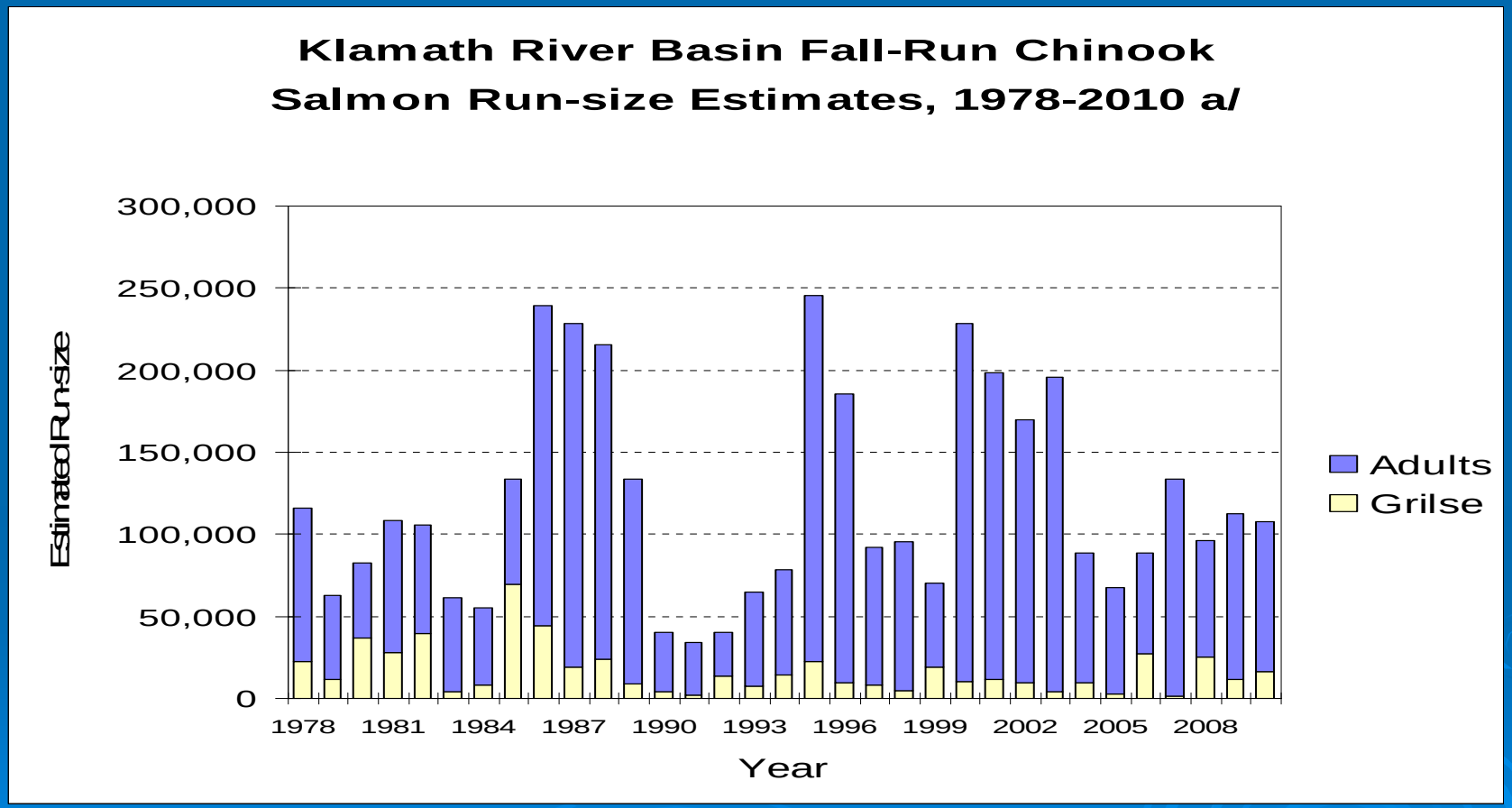
Trinity River Hatchery Returns
Fall Chinook Salmon



Trinity River Hatchery Returns Fall Chinook Salmon

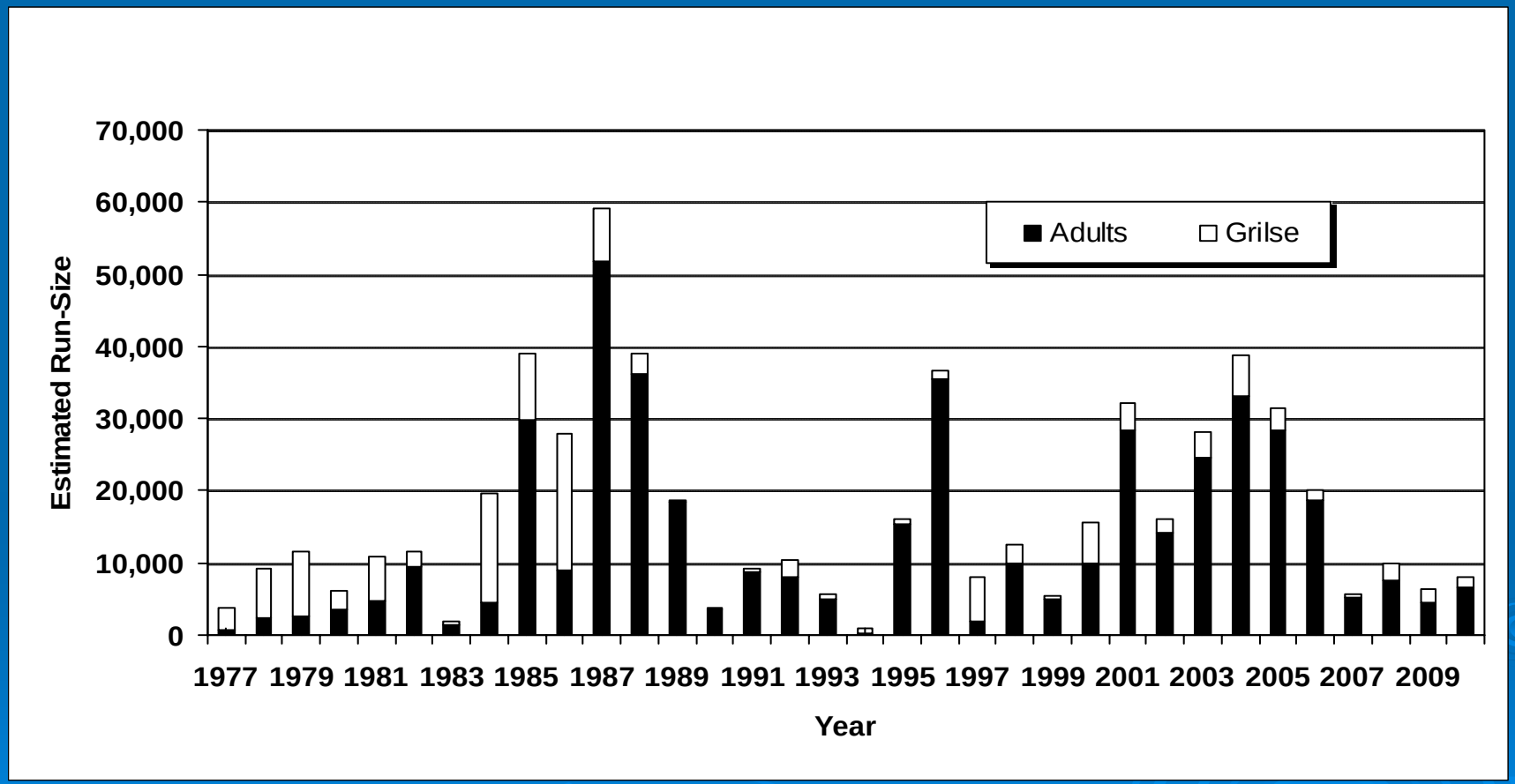


Klamath Basin Run-size Estimates Fall Chinook



Trinity River fall Chinook estimates are a major component of basin wide estimates. Average basin run-size is 120,504 (1977 – 2010). The Trinity River contributes approximately half of the adult natural escapement to the Klamath basin on average.

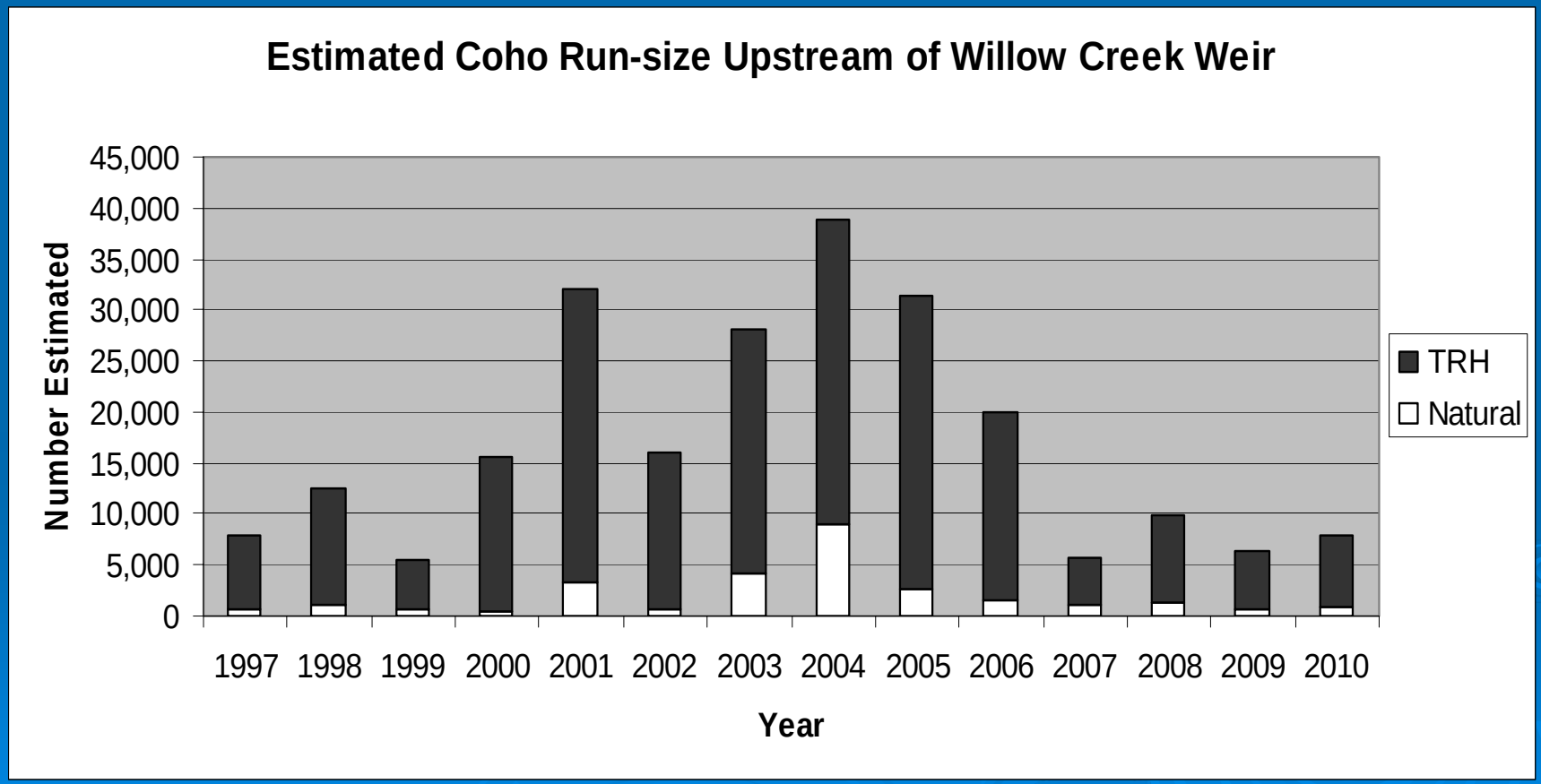
Trinity River Run-size Estimates Coho Salmon



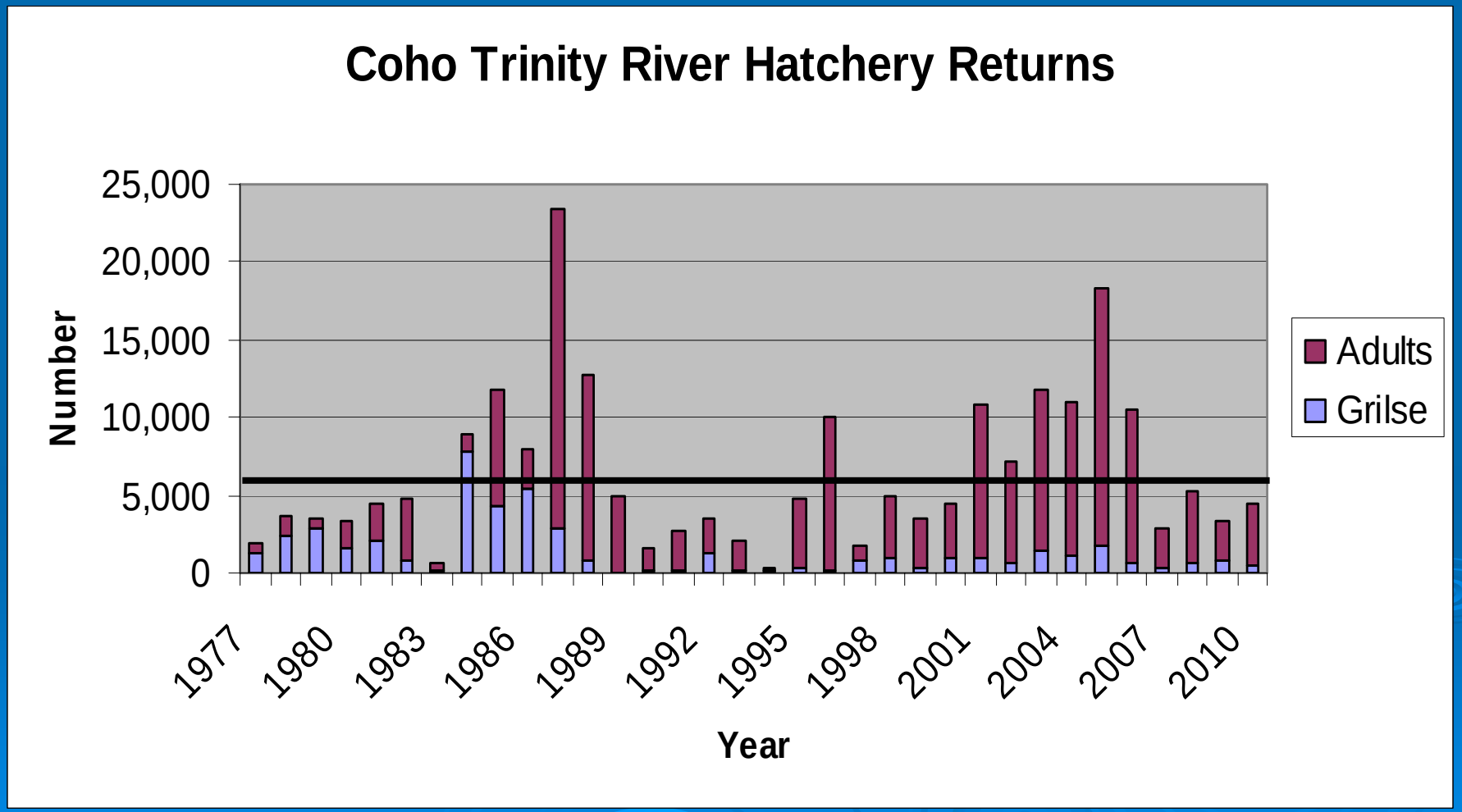
Average run-size is 17,038 (1977 – 2010).

Hatchery component of the run has ranged from 77% to 97%, averaging 89%

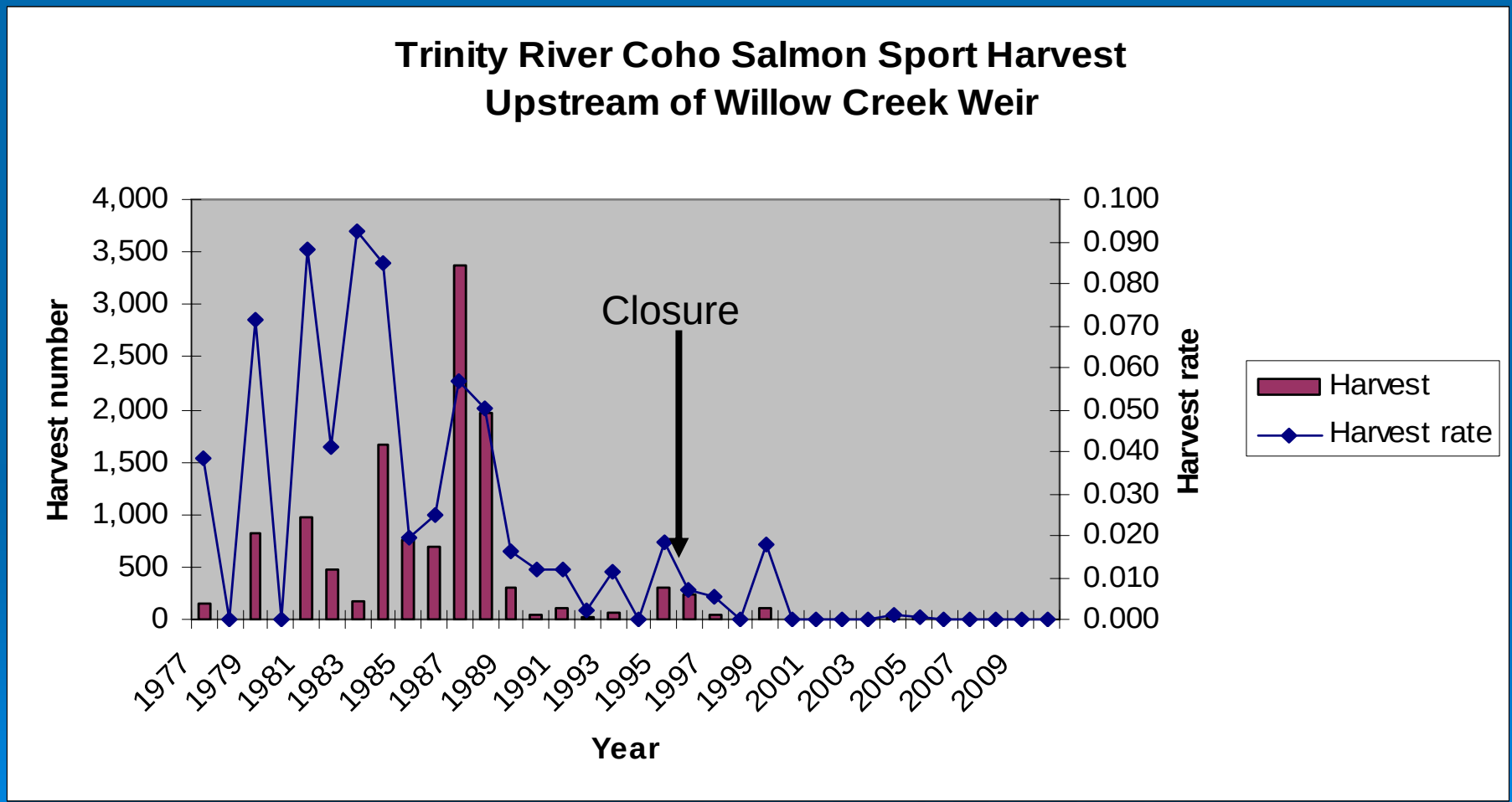
Trinity River Run-size Estimates Coho Salmon



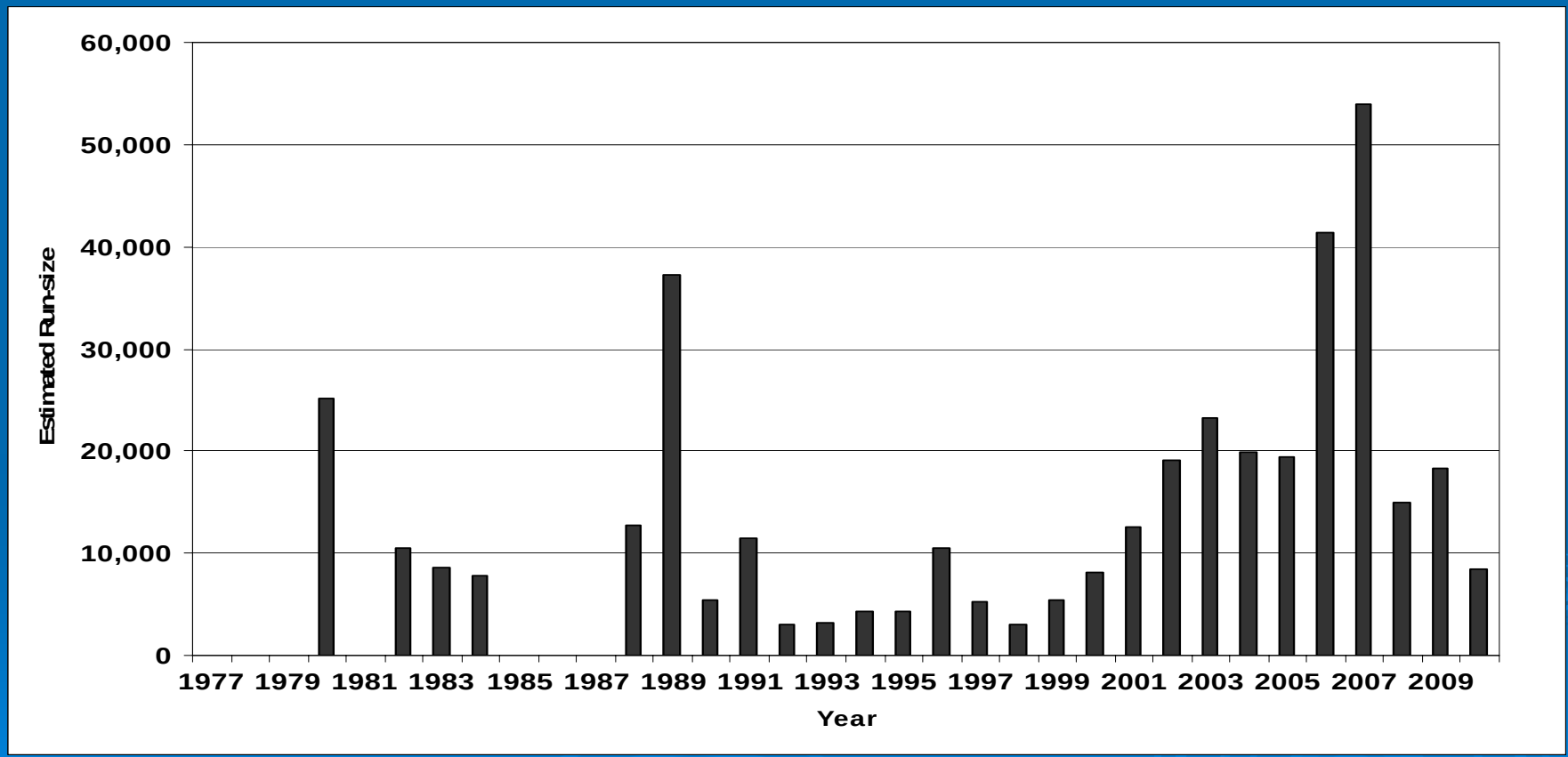
Trinity River Hatchery Returns
Coho Salmon



Trinity River Sport Harvest Coho Salmon

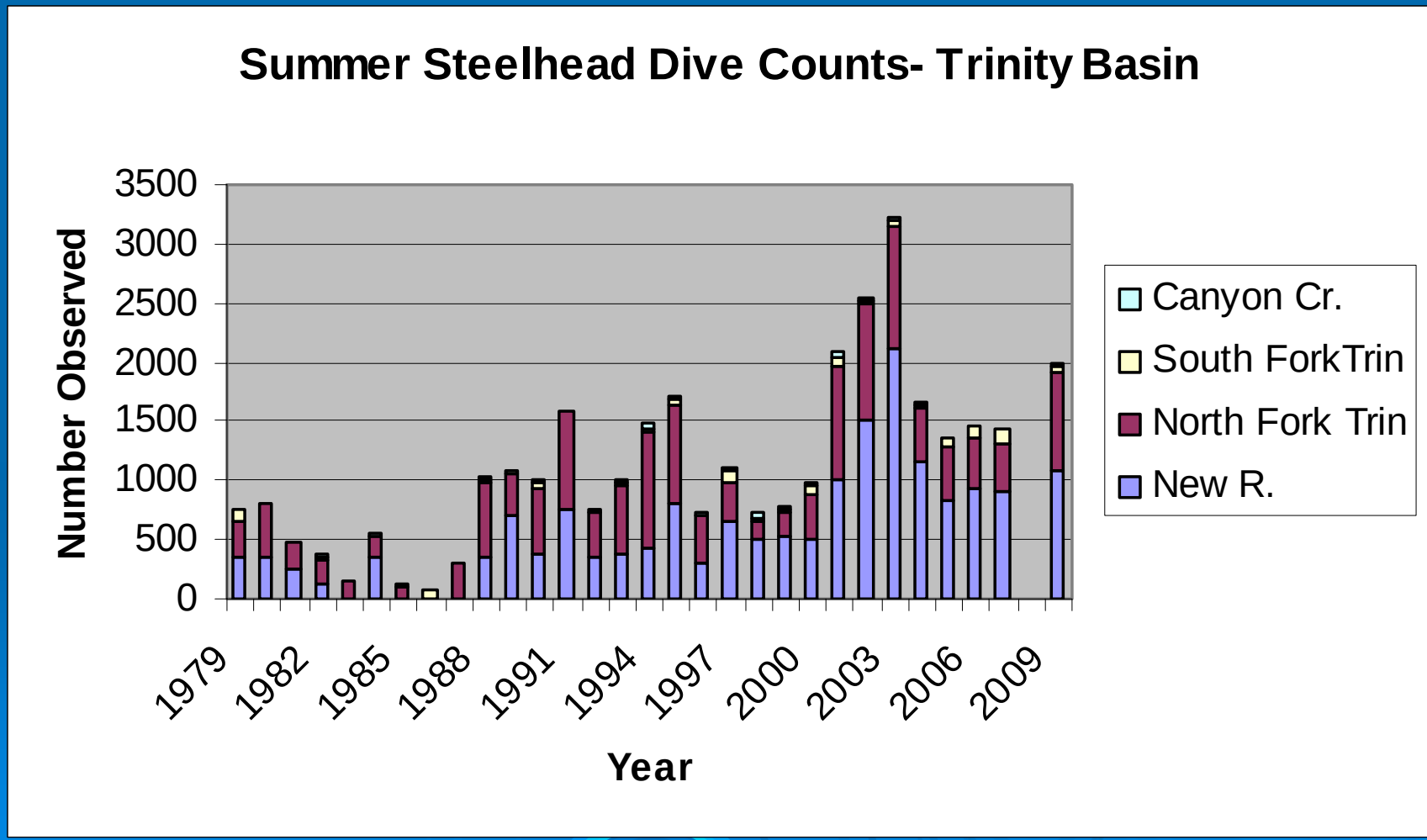


Trinity River Run-size Estimates- Adult Fall-run Steelhead-Upstream of Willow Creek Weir

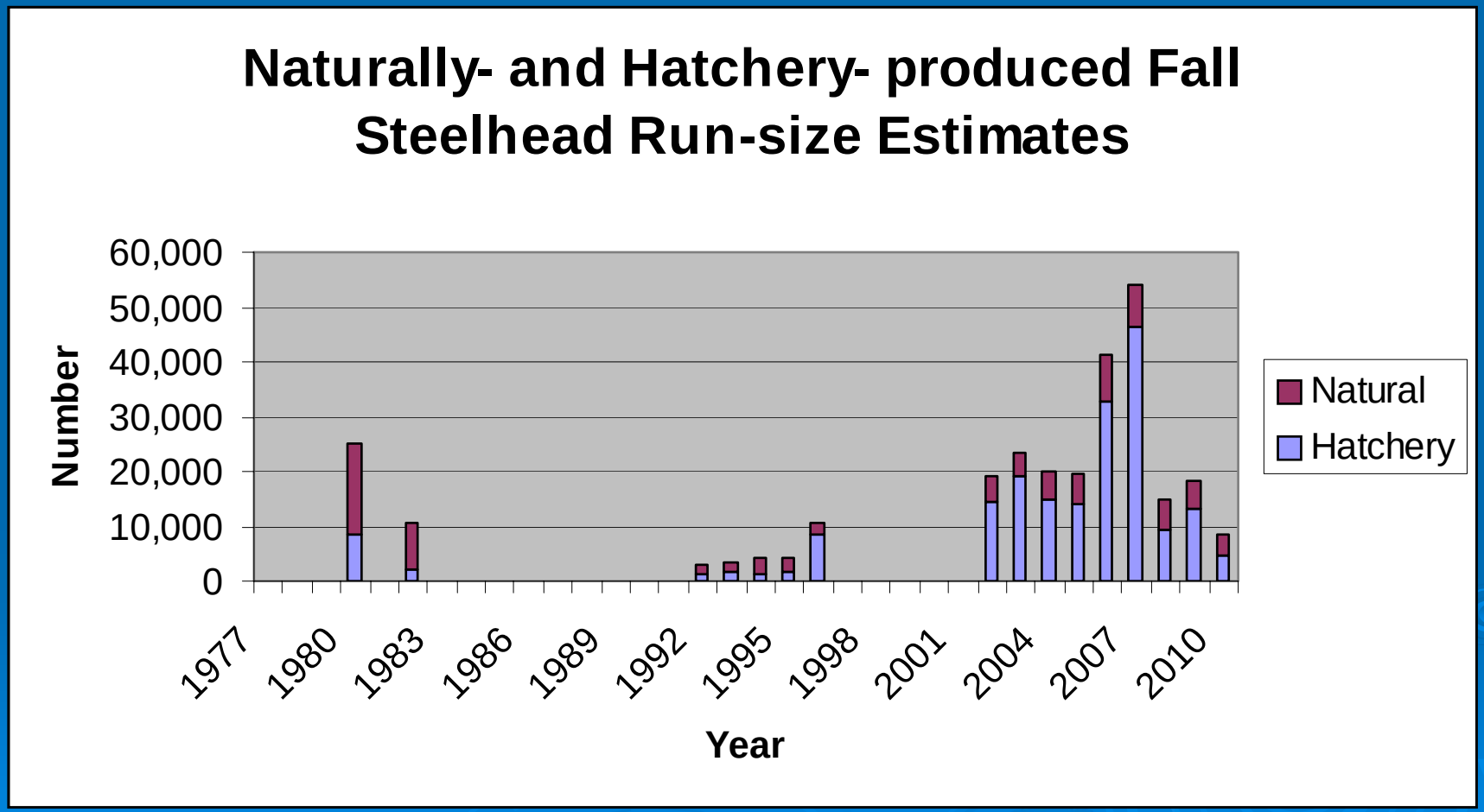


Average run-size is 14,706 (1980 – 2010).

Trinity River Run-size Estimates Adult Fall-run Steelhead

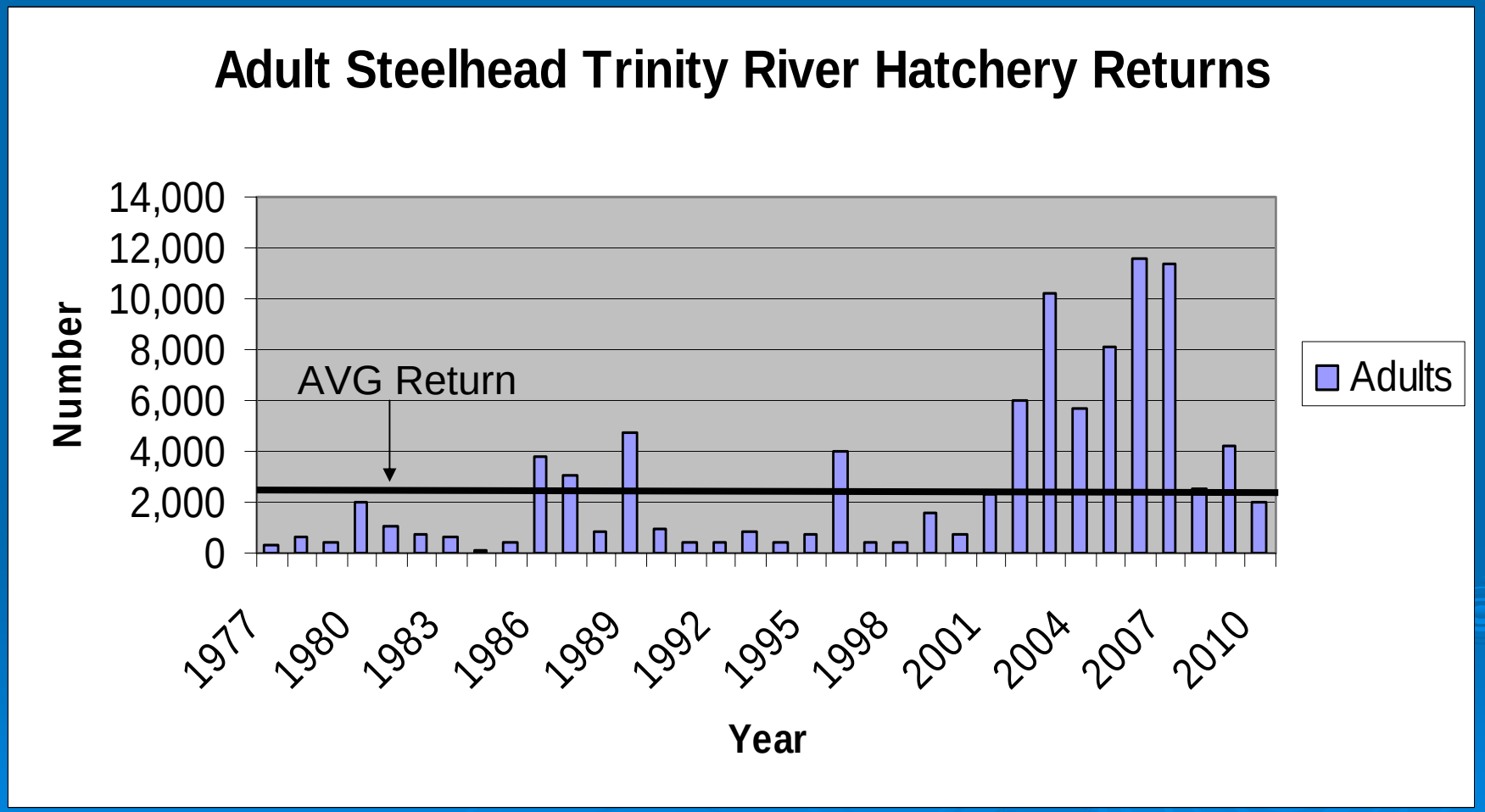


Trinity River Run-size Estimates Adult Fall-run Steelhead



Hatchery component of the run has ranged from 20% to 86%, averaging 61%

Trinity River Run-size Estimates Adult Fall-run Steelhead



Trinity River Restoration Program- Program Activities

- Program authorized in 2000 (Secretarial ROD)
- Charged with restoring anadromous fish habitat using flow and channel rehab
- Funds scientific monitoring as part of adaptive management
- Program has mutli- partner (agencies and tribes) and NGO participation.

Trinity River Restoration Program Adult Escapement Goals

Species	Escapement type	Goal	Average
Spring Chinook	River	6,000	5,483
Spring Chinook	Hatchery	9,000	9,285
Fall Chinook	River	62,000	14,188
Fall Chinook	Hatchery	9,000	18,827
Coho	River	1,400	1,890
Coho	Hatchery	2,100	12,282
Steelhead	River	40,000	4,170
Steelhead	Hatchery	10,000	12,556

Hatchery management

- Both IGH and TRH are being reviewed by the Hatchery Scientific Review group (federal mandate)- Will produce report and recommendations in March? 2012.
- HGMP's (coho salmon) for both hatcheries are currently underway.
- Department led Ad Hoc and technical team for reviewing TRH operations.

Other K/T basin news

- Recent SONCC Coho Recovery Document (NOAA) reviewed by the Department.
- NOAA Petitioned to review Chinook status (spring vs. fall)
- KRBA and KHSA for Klamath River ongoing.
- Projected fall Chinook run of @100,000 adults in 2011.
- The whale remains!!!

Questions or Comments?