

Bruce A. Measure
Chair
Montana

Rhonda Whiting
Montana

W. Bill Booth
Idaho

James A. Yost
Idaho



Dick Wallace
Vice-Chair
Washington

Tom Karier
Washington

Bill Bradbury
Oregon

Joan M. Dukes
Oregon

February 24, 2011

MEMORANDUM

TO: Council Members

FROM: Jim Ruff – Manager, Mainstem Passage and River Operations

SUBJECT: Briefing on 2011 Fishery Forecasts and 2010 Fishery Retrospective

Background

At the March 9th Council meeting, Bill Tweit (Columbia River Policy Lead for the Washington Department of Fish and Wildlife) and Ed Schriever (Chief of Fisheries for the Idaho Department of Fish and Game) will present the latest information on the 2011 adult salmon and steelhead run forecasts for the Columbia and Snake rivers. In particular, Bill Tweit's presentation will first include a retrospective review of the 2010 adult salmon and steelhead runs to the lower Columbia River. In addition, he will also present an overview of 2011 run forecasts to the Columbia River with a brief summary of expectations for the 2011 Columbia River fishery. He will also cover the major regulatory and management changes for 2011, including those for white sturgeon.

Ed Schriever will summarize the recent, historical returns of salmon and steelhead to the lower Snake River in Washington, focusing on the species/run groupings of spring, summer, fall Chinook salmon; summer steelhead; and sockeye salmon. For each species/run grouping, counts of fish crossing Lower Granite Dam will be presented. Numbers of fish passing Lower Granite Dam comprise the aggregate count of adult salmon and steelhead destined primarily for eastern Oregon's Grande Ronde and Imnaha river drainages and Idaho's Clearwater and Salmon river drainages. In addition to historical return information, 2011 forecast information for Snake River spring/summer Chinook salmon, summer steelhead, and sockeye salmon will be presented.

w:\jr\ww\2011\2-24-11 run forecast memo.docx

Columbia River 2010 Returns and 2011 Forecasts

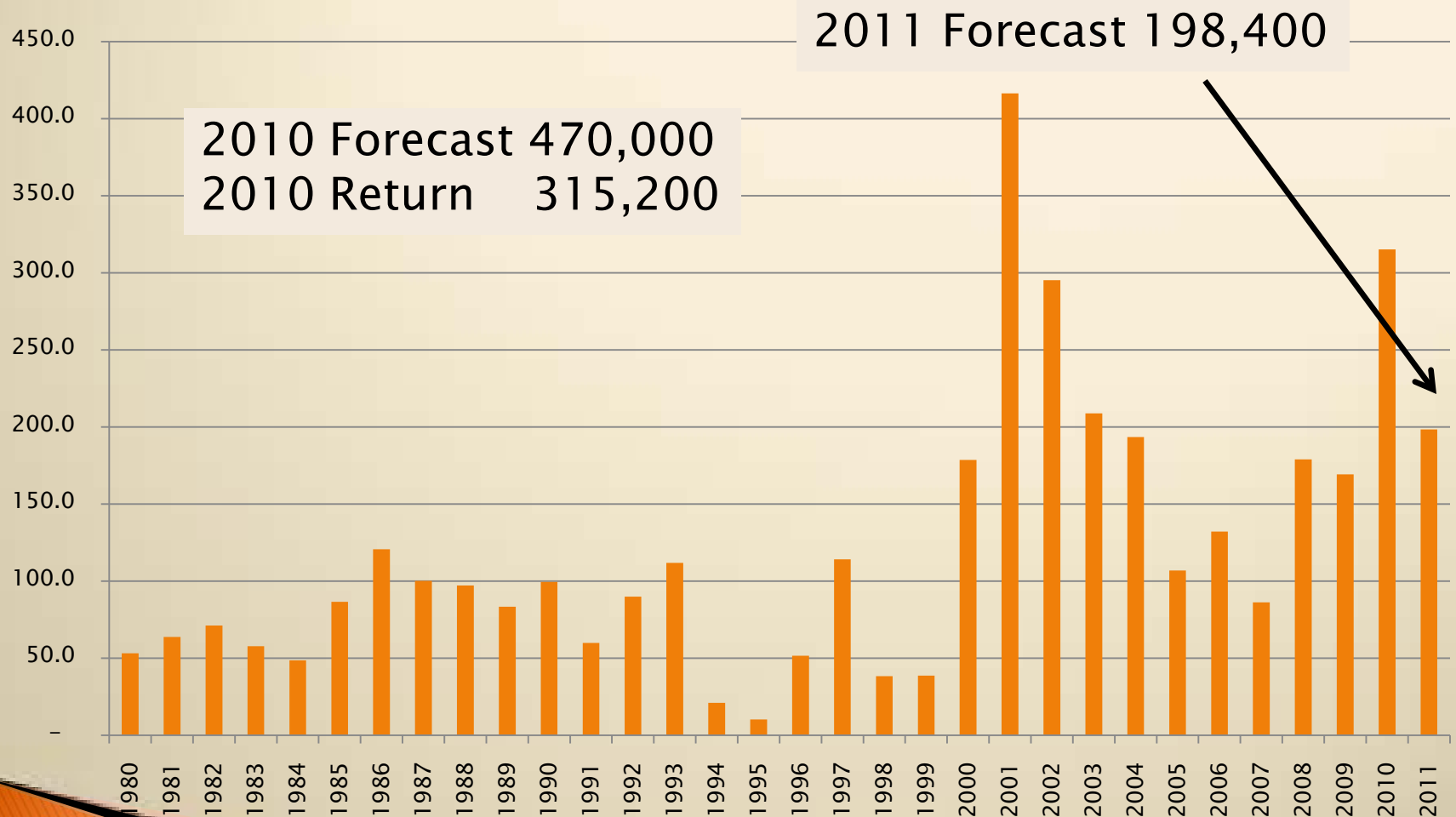


*Presented by Bill Tweit
Washington Department of Fish and Wildlife
March 2011*

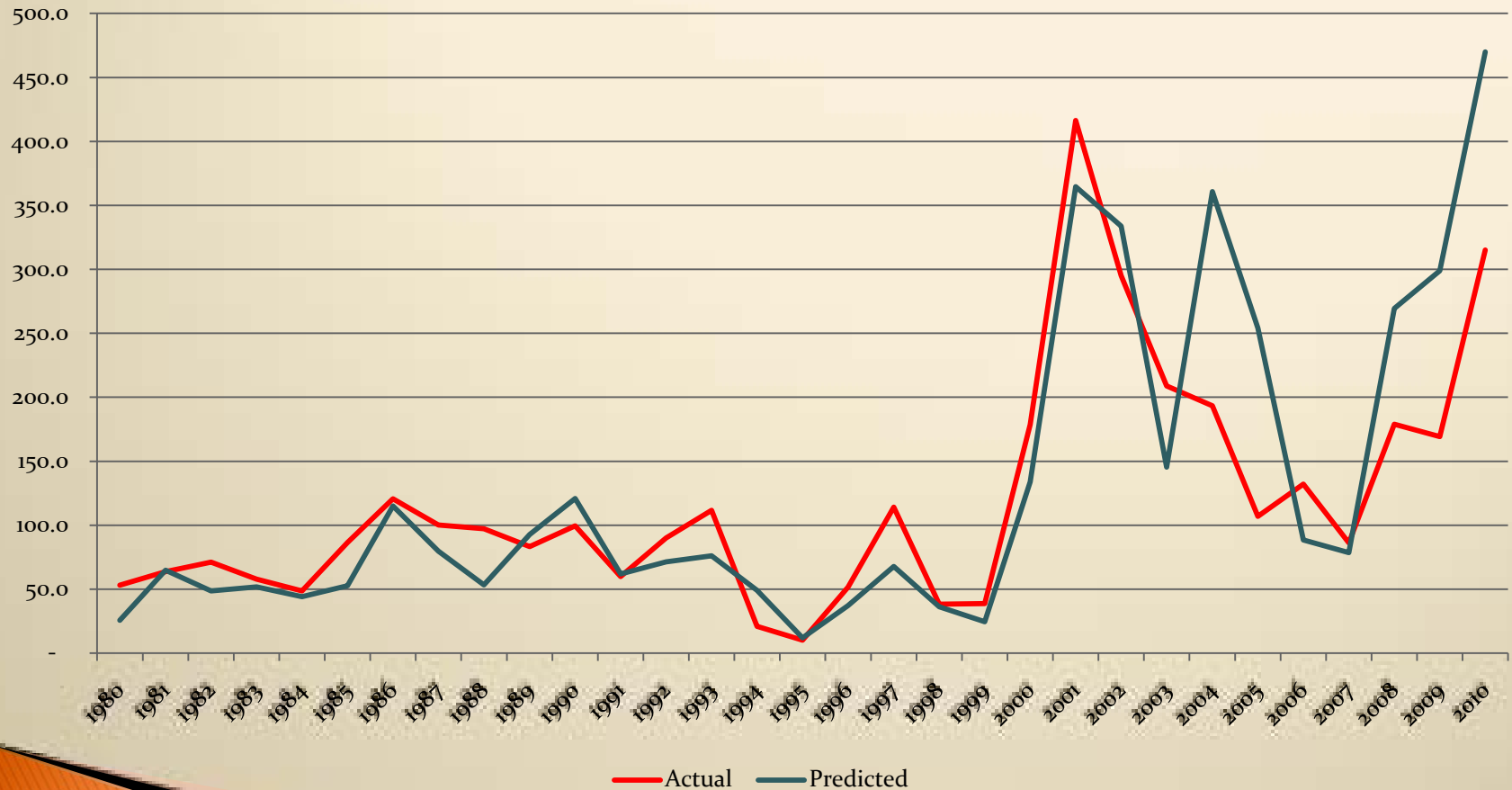
Columbia River

- ▶ 2010 returns and 2011 forecasts
 - Upriver Spring Chinook
 - Upper Columbia Summer Chinook
 - Sockeye
 - Upriver Summer Steelhead
 - Fall Chinook
 - White Sturgeon
- ▶ 2010 fisheries review
- ▶ 2011 challenges

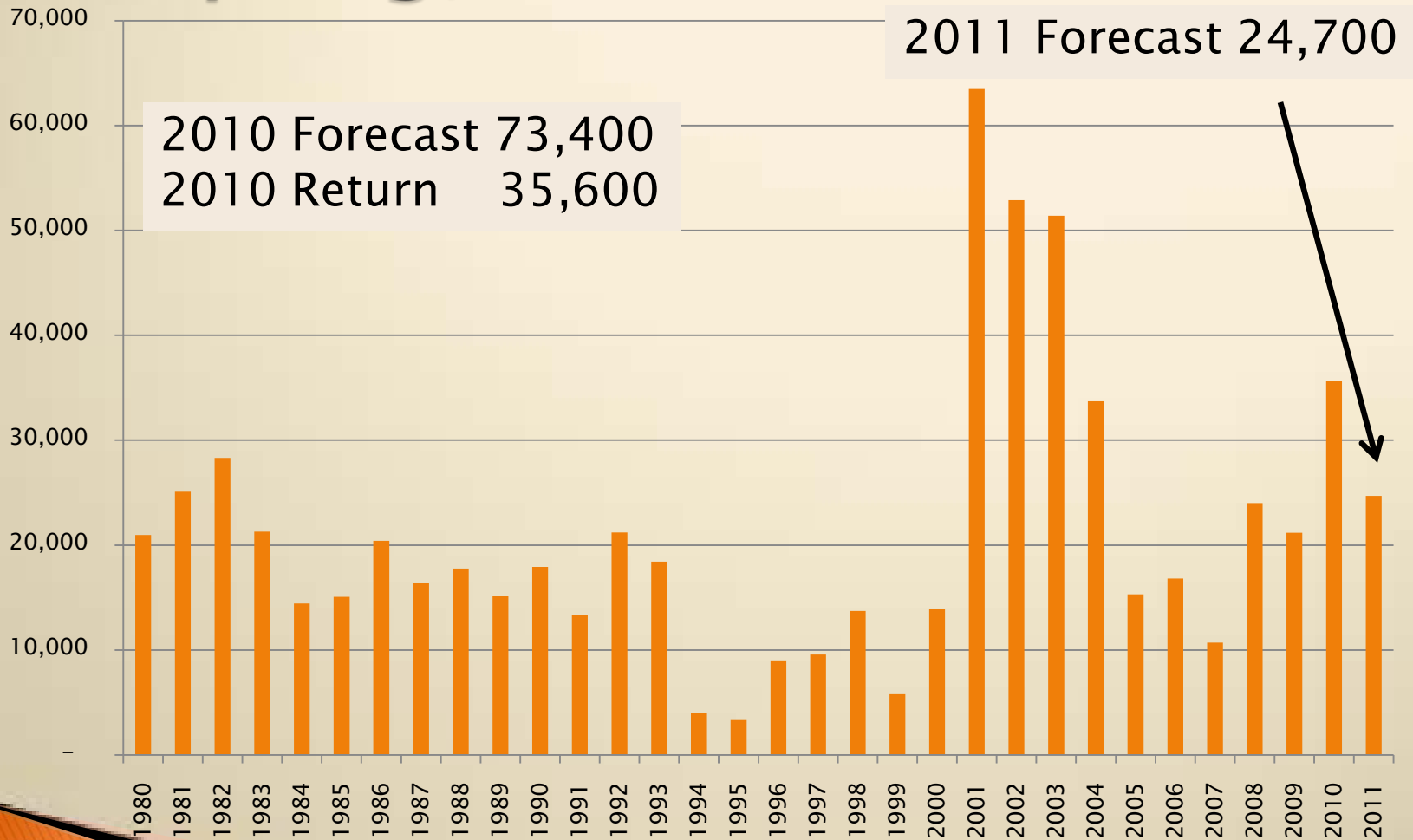
Upriver Spring Chinook



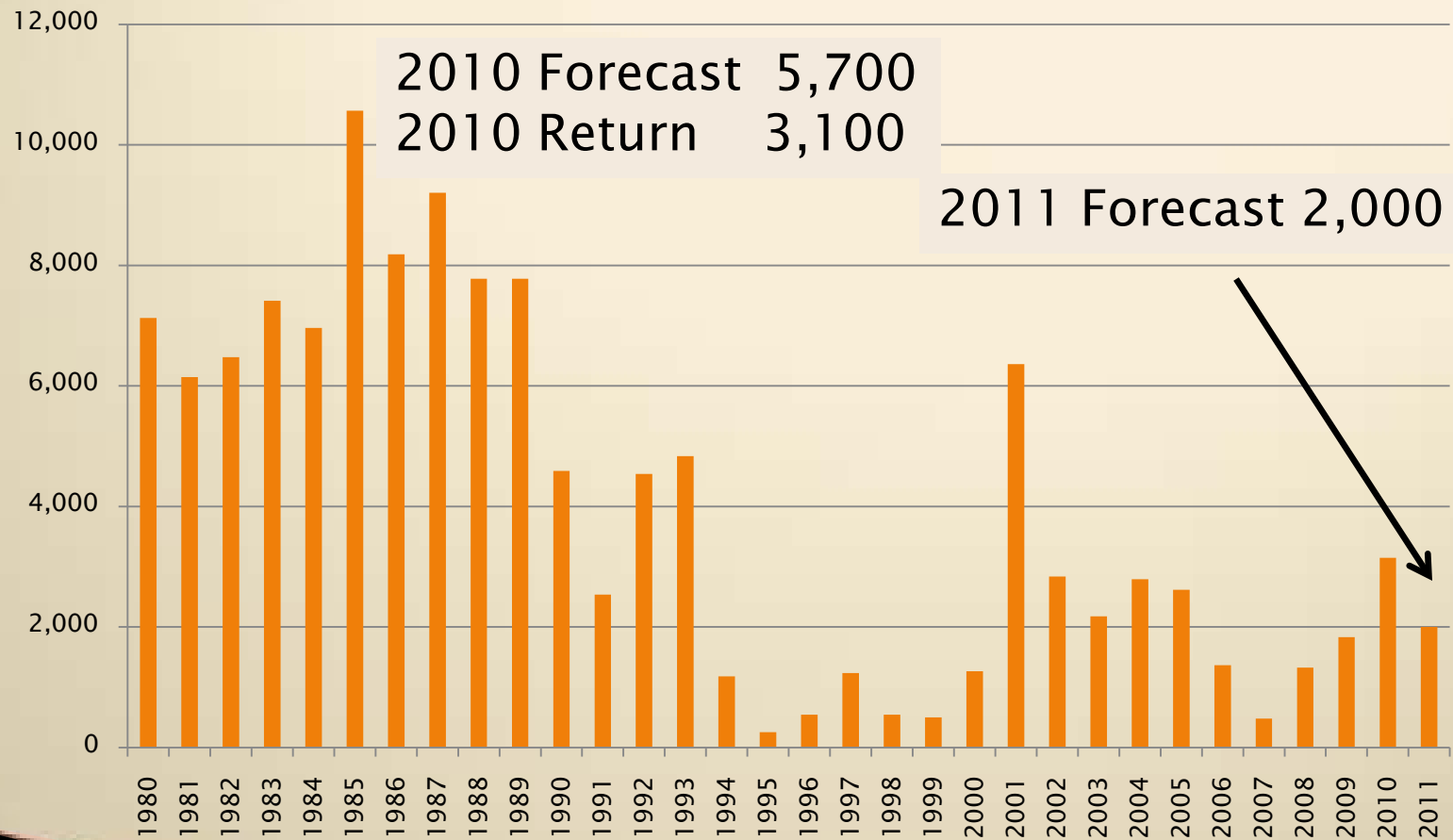
Predicted versus Actual Returns of Adult Upriver Spring Chinook to the Columbia River



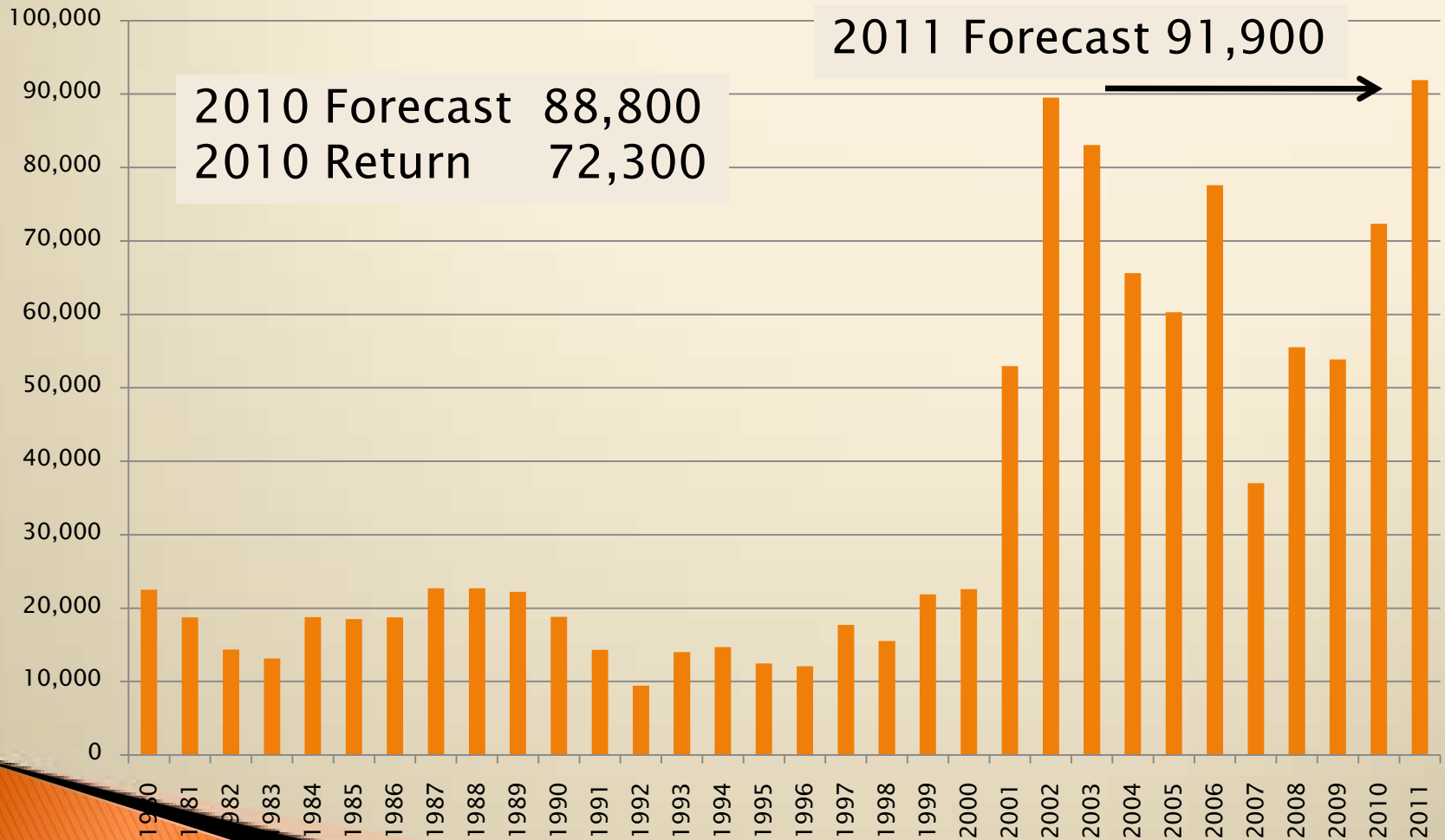
Snake River Wild Spring/Summer Chinook



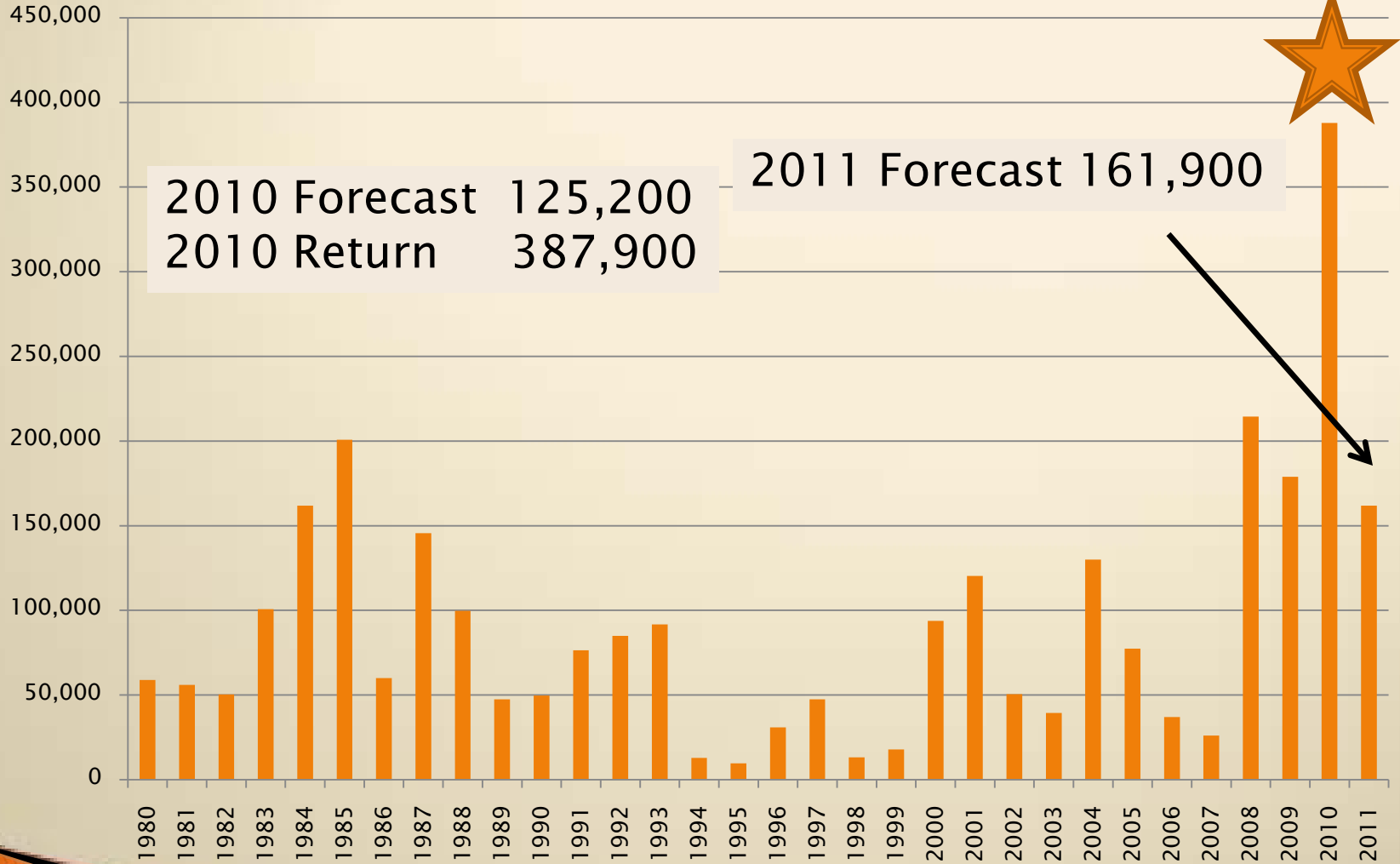
Upper Columbia Wild Spring Chinook



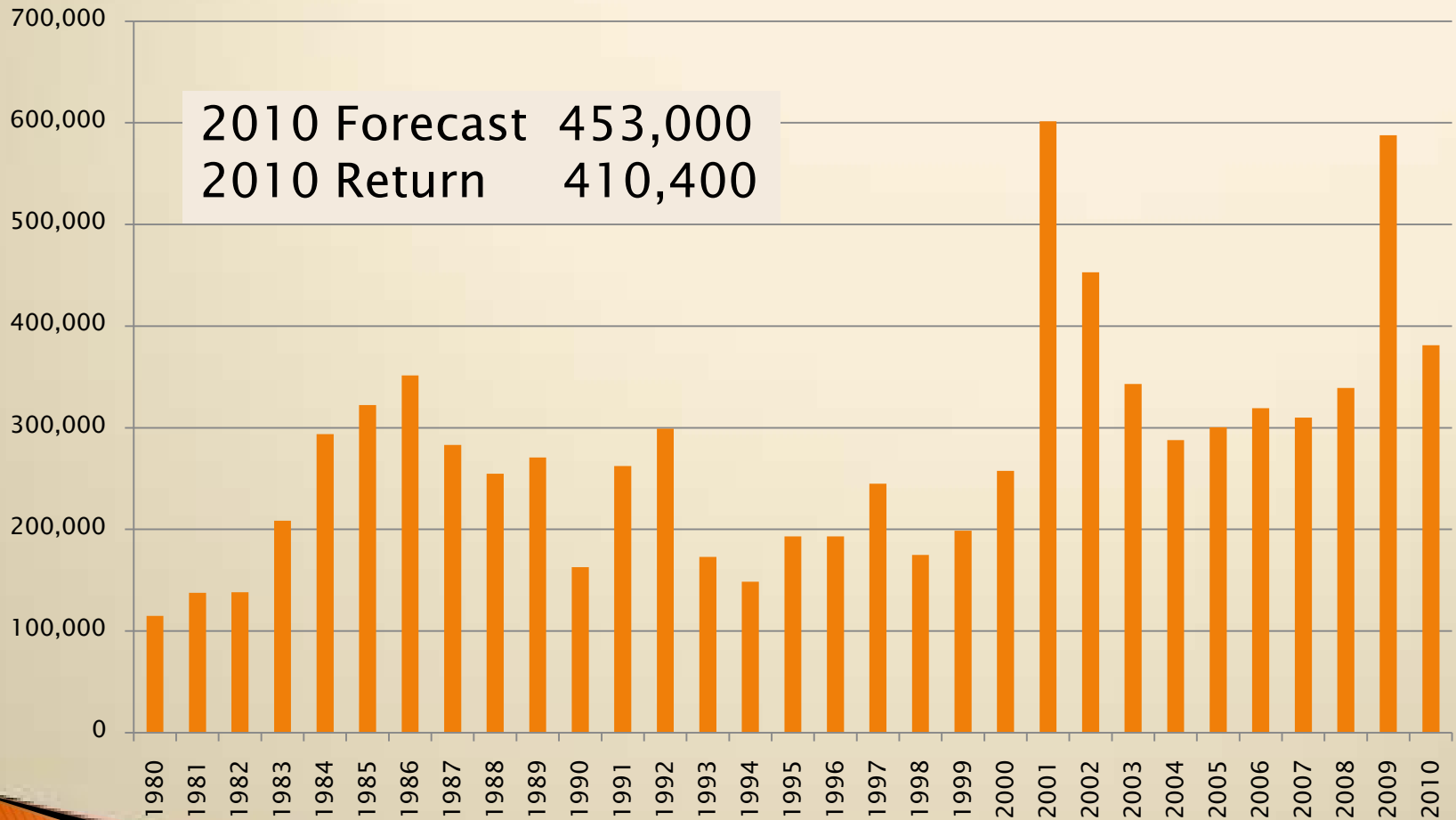
Upper Columbia Summer Chinook



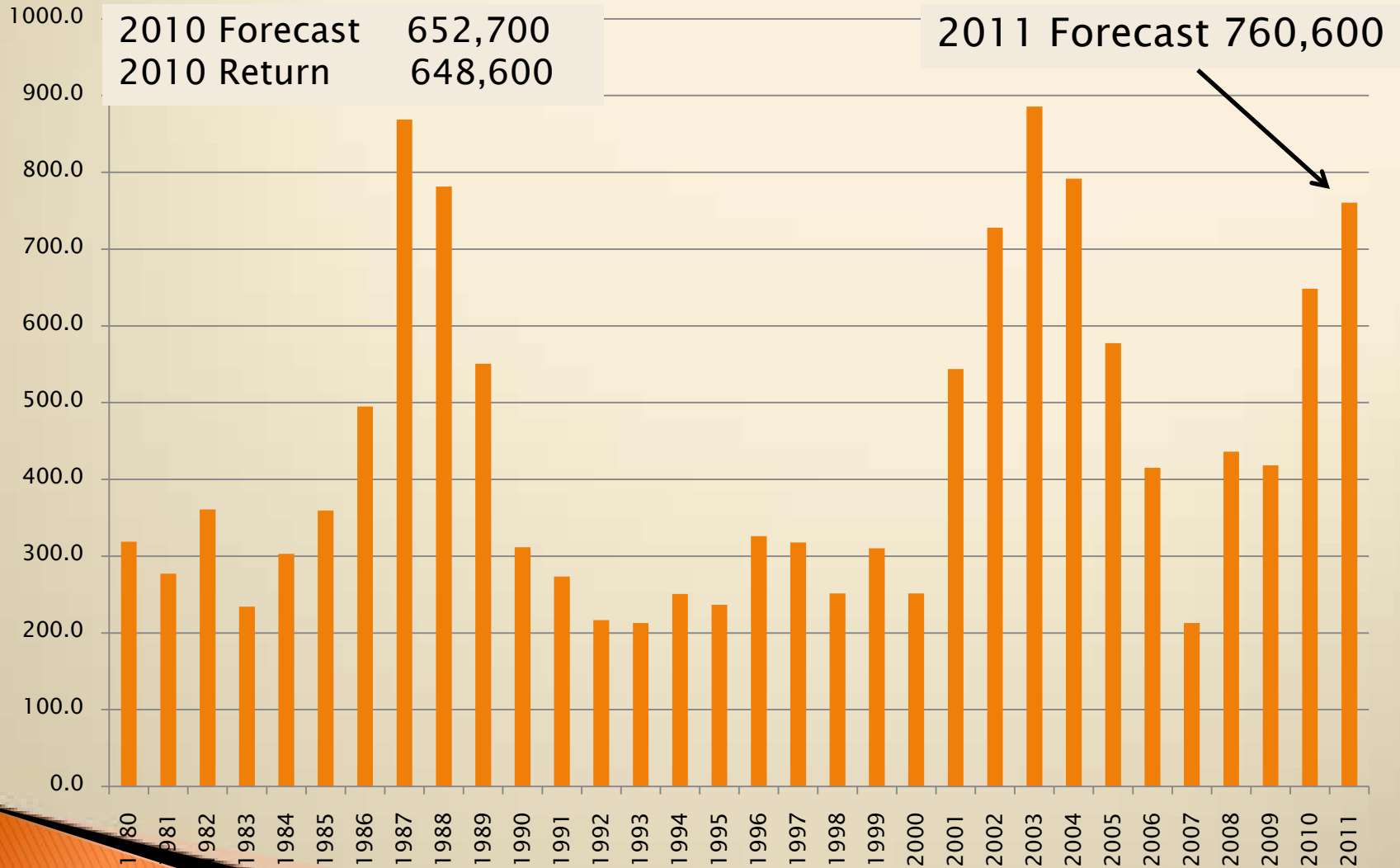
Sockeye



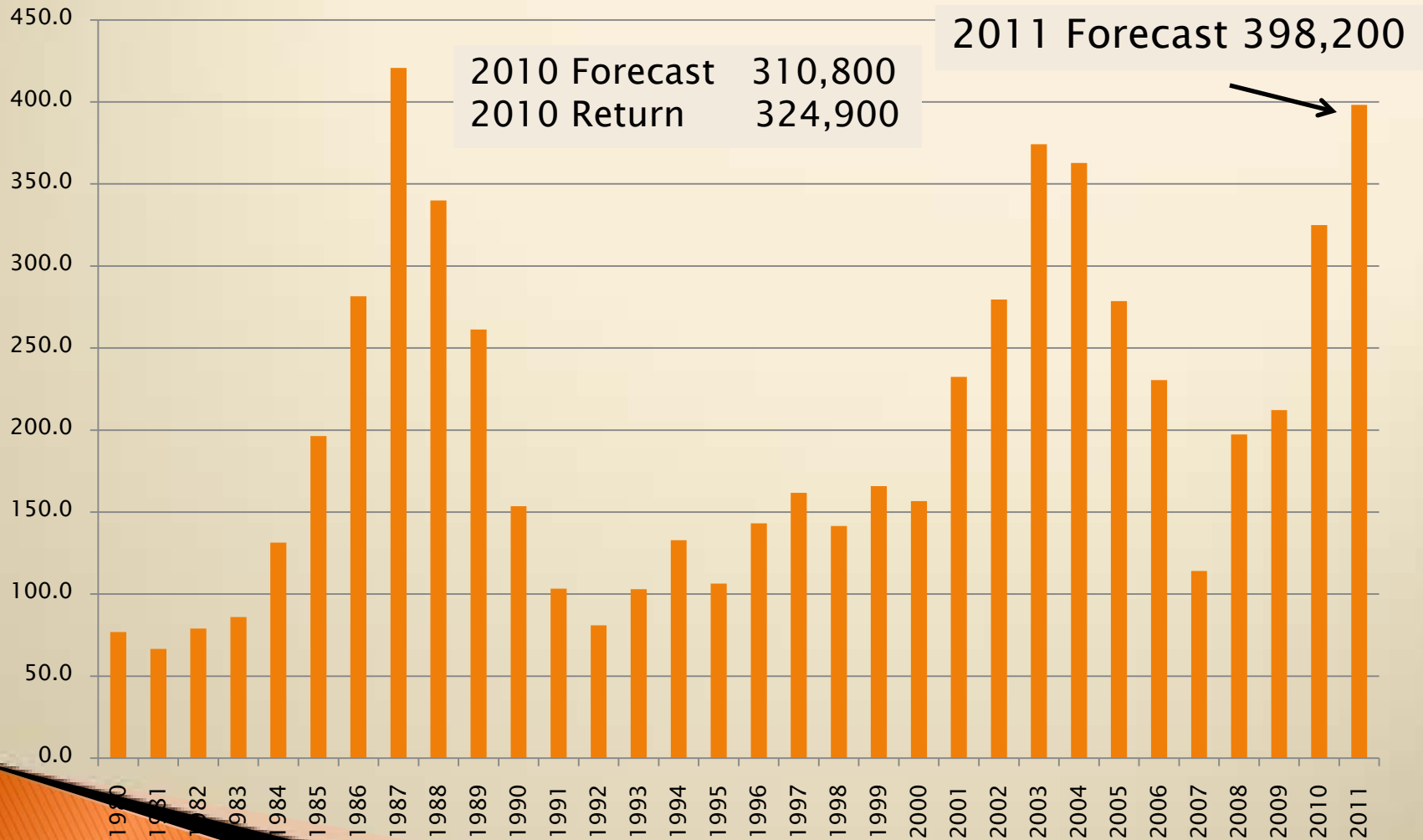
Upriver Summer Steelhead



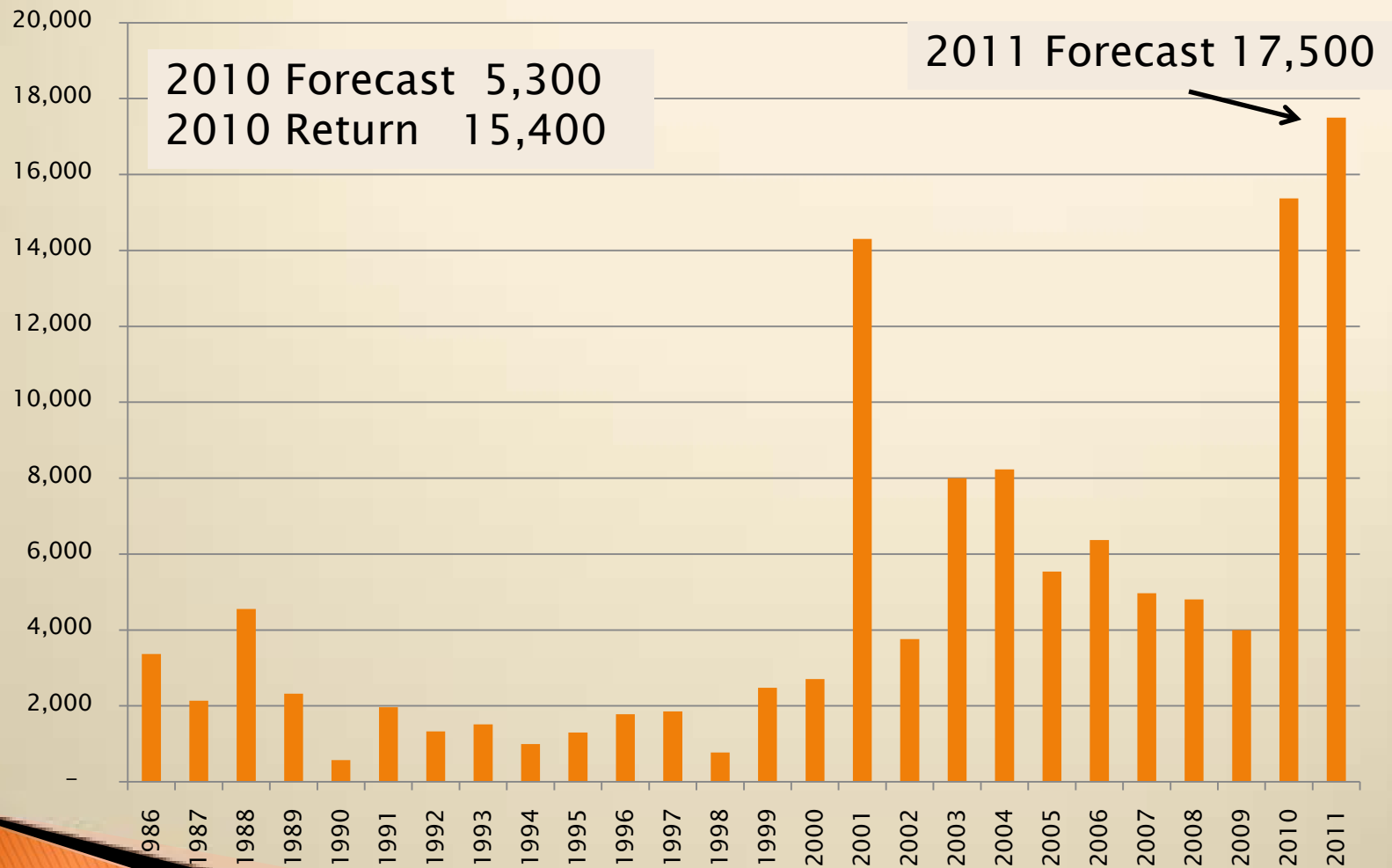
Total Fall Chinook



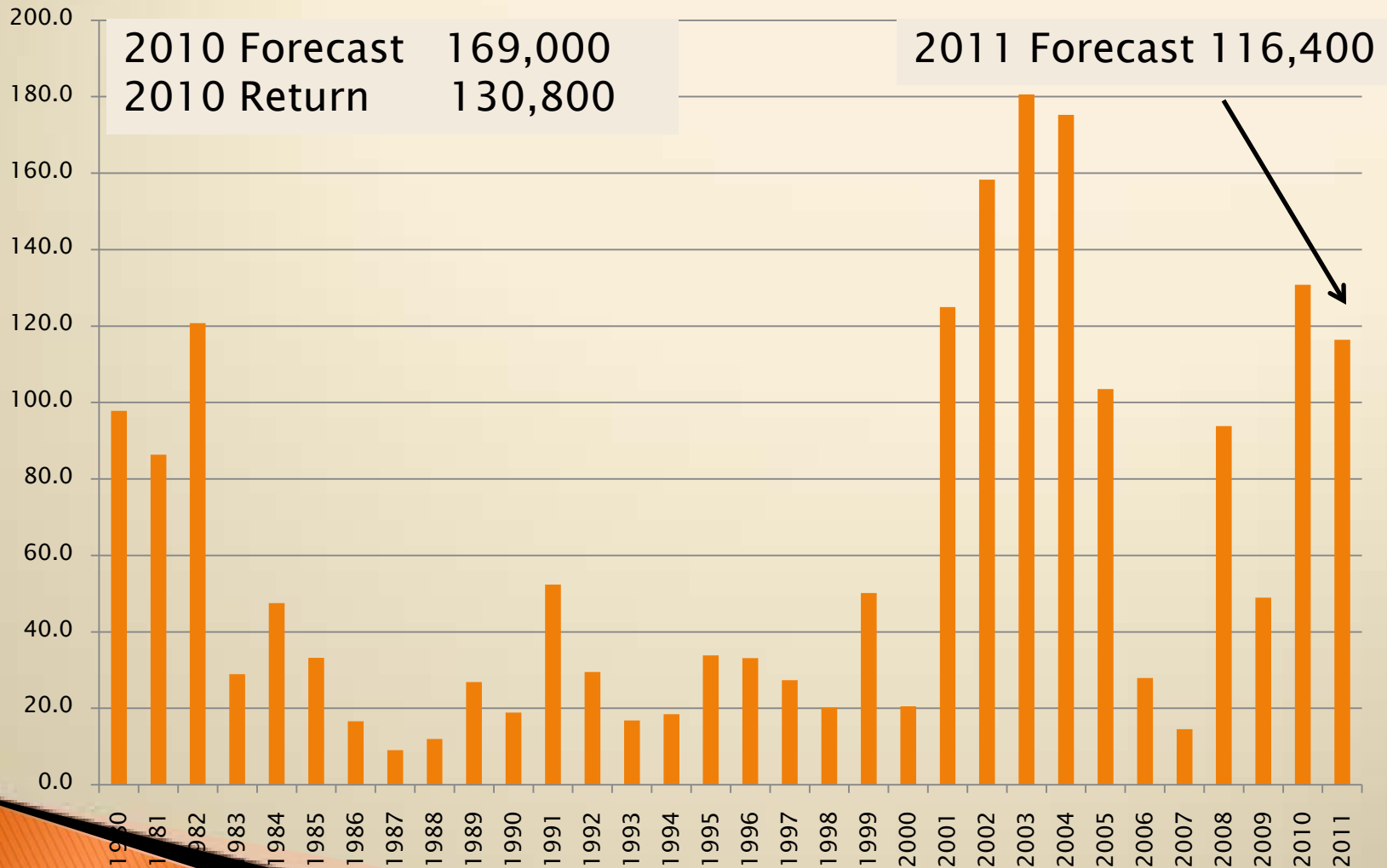
Upriver Bright (URB) Fall Chinook



Snake River Wild (SRW)



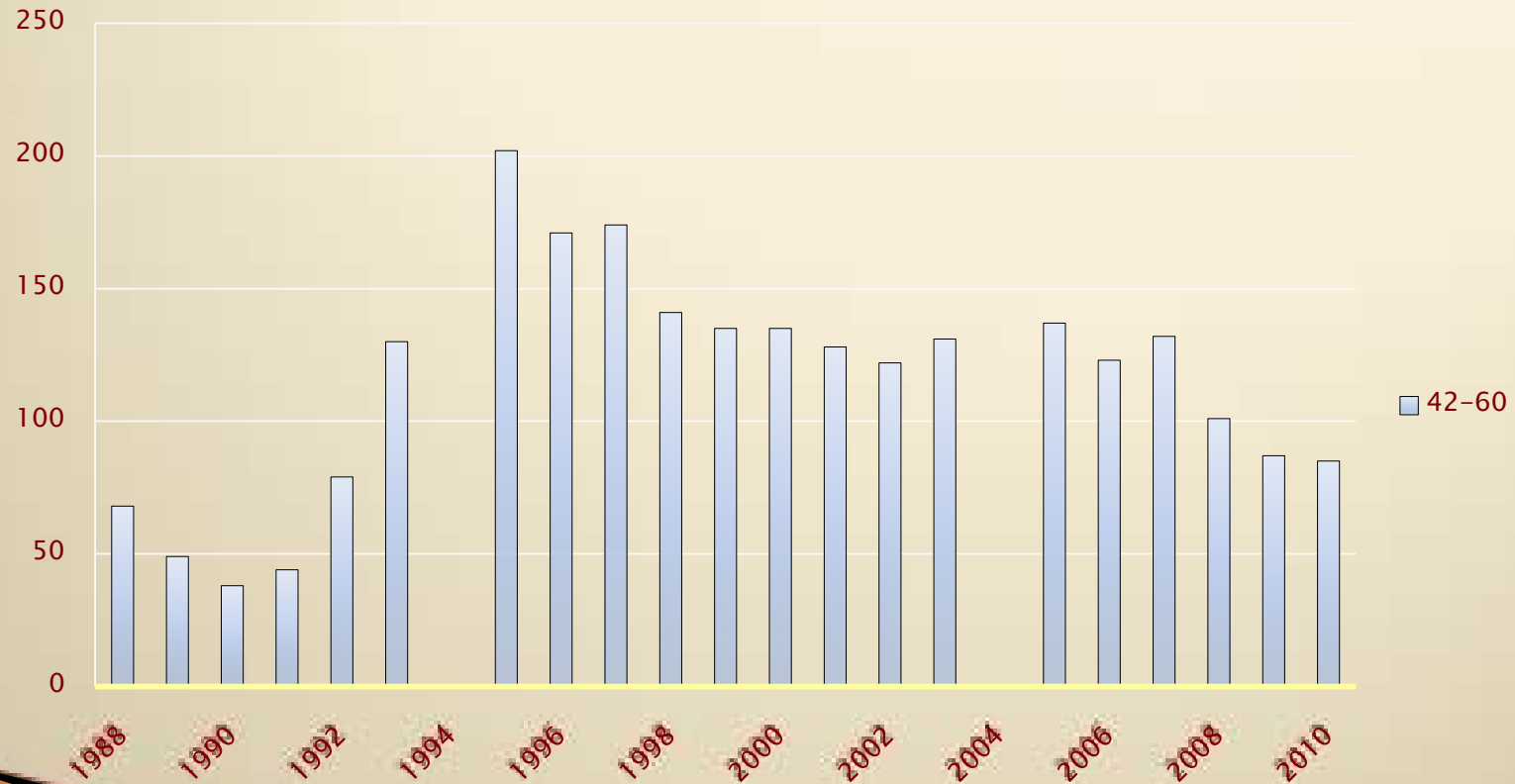
Bonneville Pool Hatchery (BPH) Fall Chinook



BELOW BONNEVILLE

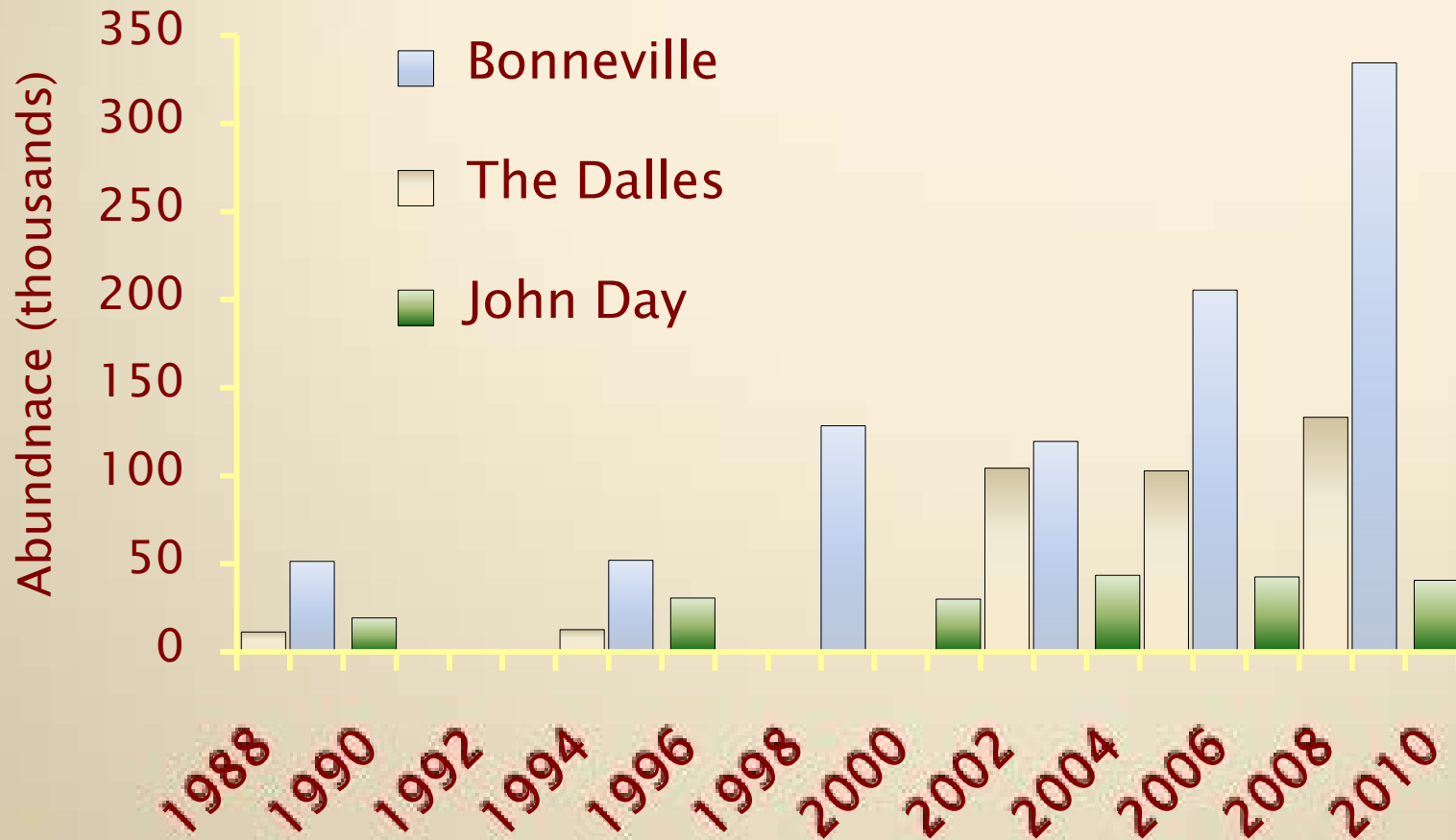
42"- 60" WHITE STURGEON ABUNDANCE TREND

42-60



BONNEVILLE – McNARY

>24" WHITE STURGEON ABUNDANCE TREND



2010 Non-Indian Sport Fisheries

- Spring Chinook
 - 172,000 angler trips below Bonneville, 29,200 fish kept
 - 3,400 fish kept Bonneville to McNary
 - 1,700 fish kept Snake River
- Summer Season
 - 70,700 angler trips below Bonneville – 2,500 summer Chinook kept
 - 220 sockeye kept, 12,300 steelhead kept
- Fall Season
 - Buoy 10 – 52,000 angler trips, 6,200 Chin, 8,000 coho
 - Mainstem below Bonneville – 18,100 Chin, 2,000 coho
 - Hanford Reach – 11,000 Chinook – record catch

2010 Non-Indian Commercial Fisheries

- Spring Chinook – 9,000 fish
- Summer Chinook – 4,700 fish
- Fall Chinook – 32,100 fish
- Coho – 18,000 fish
- SAFE
 - 24,900 Spring Chinook
 - 20,100 Fall Chinook
 - 58,700 Coho

2010 Treaty Indian Fisheries

- ▶ Spring Chinook – 43,000 fish
- ▶ Summer Chinook – 15,800 fish
- ▶ Sockeye – 26,100 fish
- ▶ Steelhead –
 - 11,300 fish in spring/summer fisheries
 - 26,000 fish in fall fisheries

2011 Management Concerns

- ▶ North of Falcon process concludes April 14
- ▶ Conservation concerns = ESA listed salmon and steelhead, white sturgeon
- ▶ Increased reliance on selective fisheries, WDFW has implemented barbless hook requirements in all marine areas and many rivers.
- ▶ Continue evaluation efforts for new commercial selective gears

Questions?



The Snake River Update – Recent trends in salmon and steelhead abundance and outlook on 2011 adult returns



Chinook Salmon



Sockeye Salmon



Summer Steelhead

Ed Schriever
Idaho Department of Fish and Game



The Snake River Update – Recent trends in salmon and steelhead abundance and outlook on 2011 adult returns

Content:

1. 2000-2010 time-series return information for Snake River:
 - a. Sockeye Salmon
 - b. Fall Chinook Salmon
 - c. Summer Steelhead
 - d. Spring/Summer Chinook Salmon

2. 2011 run-size forecasts for:
 - a. Fall Chinook Salmon
 - b. Sockeye Salmon
 - c. Spring/Summer Chinook Salmon



CHINOOK SALMON - FALL



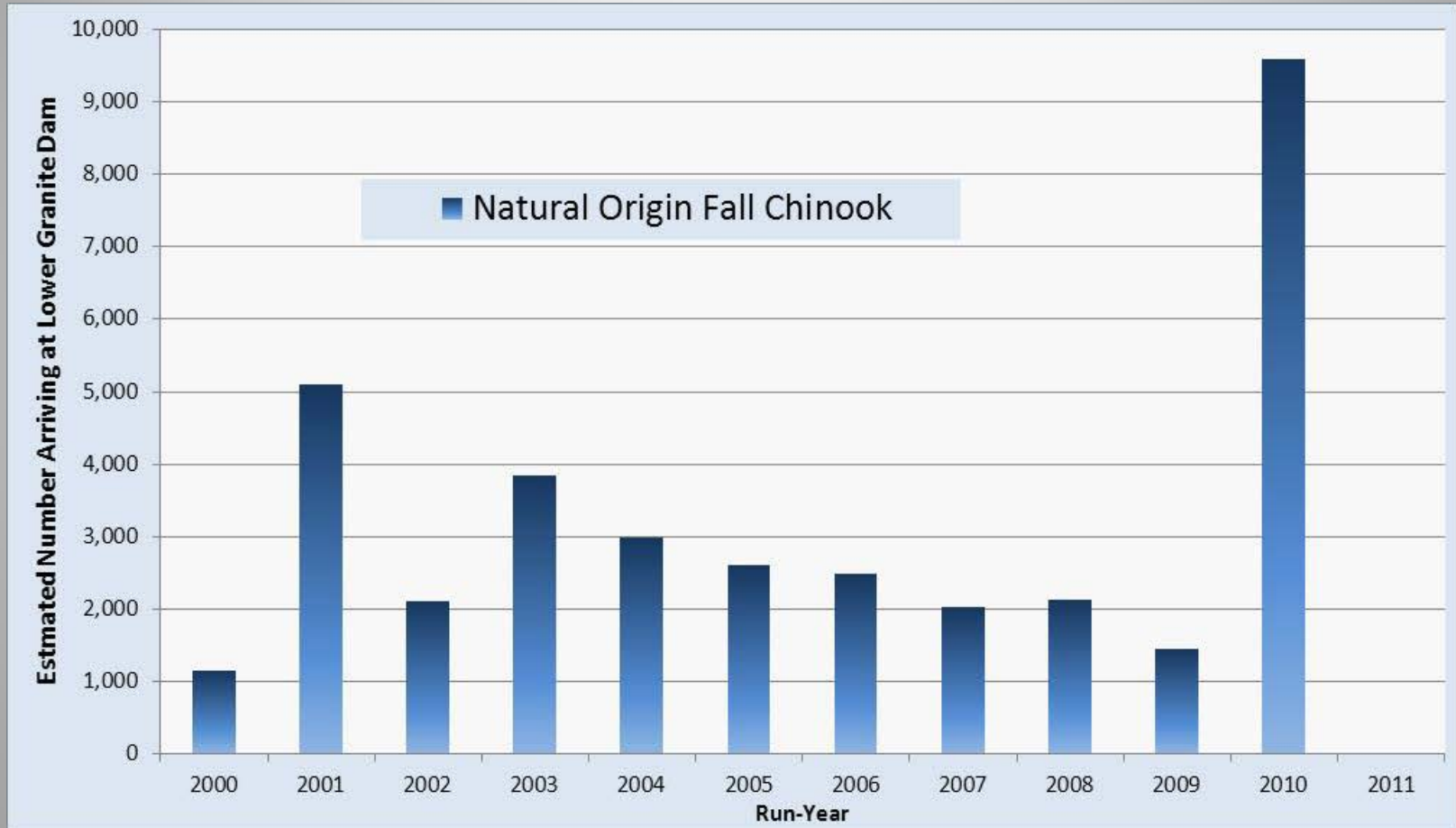
Fall Chinook sampling at Lower Granite Dam



CHINOOK SALMON

Estimated Return Of

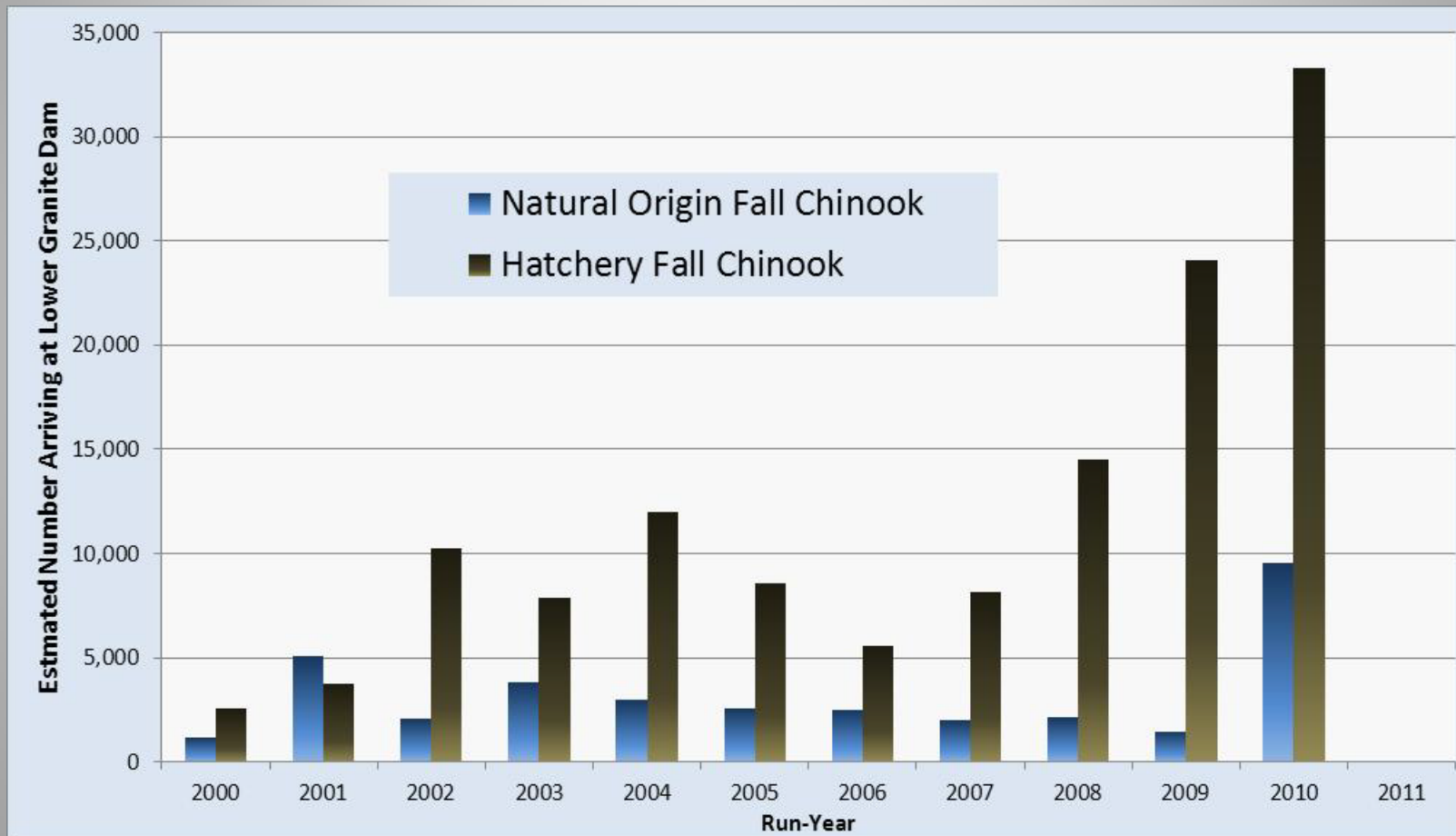
Species: Chinook Salmon
Run: Fall
Origin: Natural
Period: 2000 – 2010



CHINOOK SALMON

Estimated Return Of

Species: Chinook Salmon
Run: Fall
Origin: Natural and Hatchery
Period: 2000 – 2010



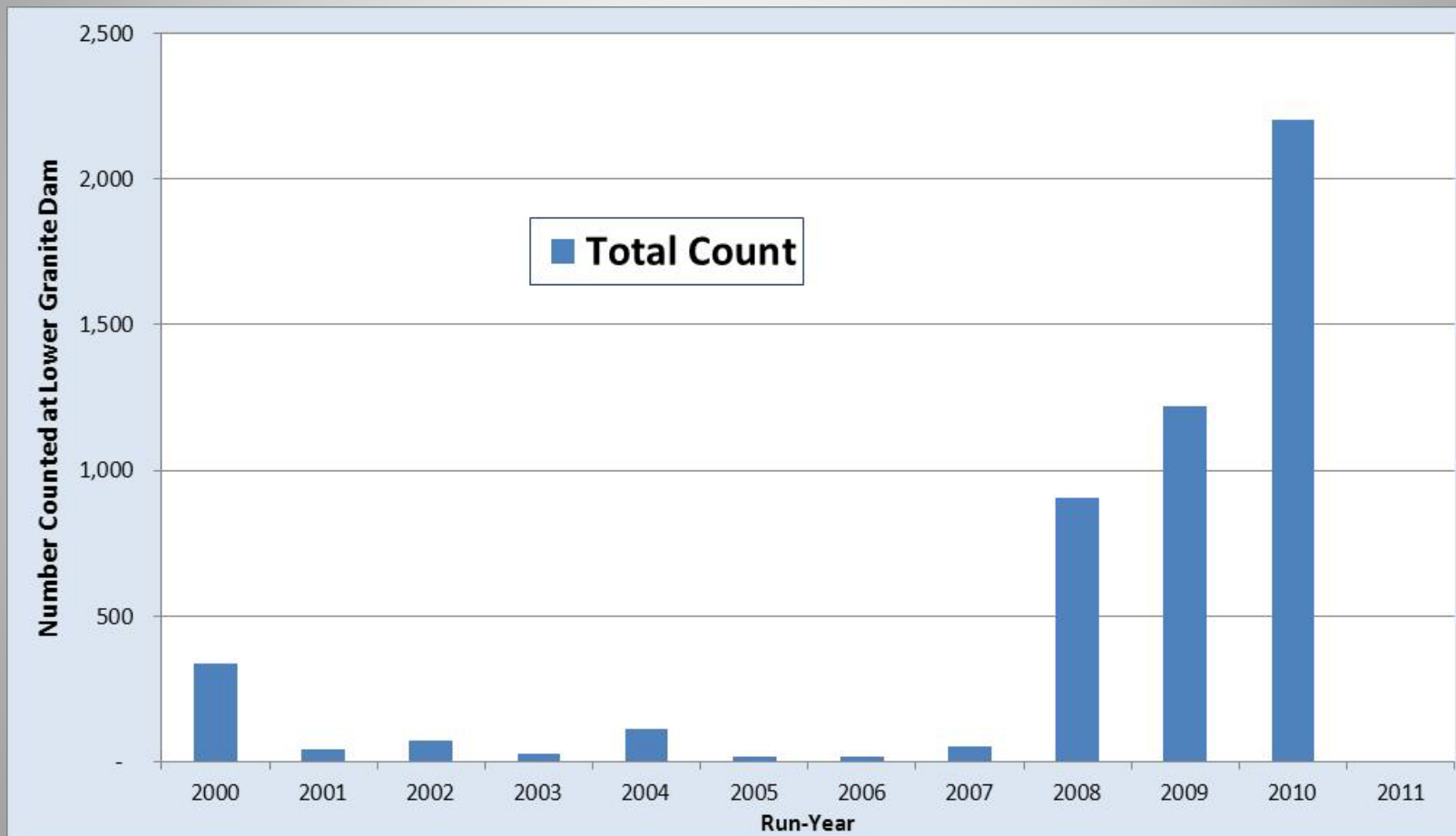
SOCKEYE SALMON



SOCKEYE SALMON

Estimated Return Of

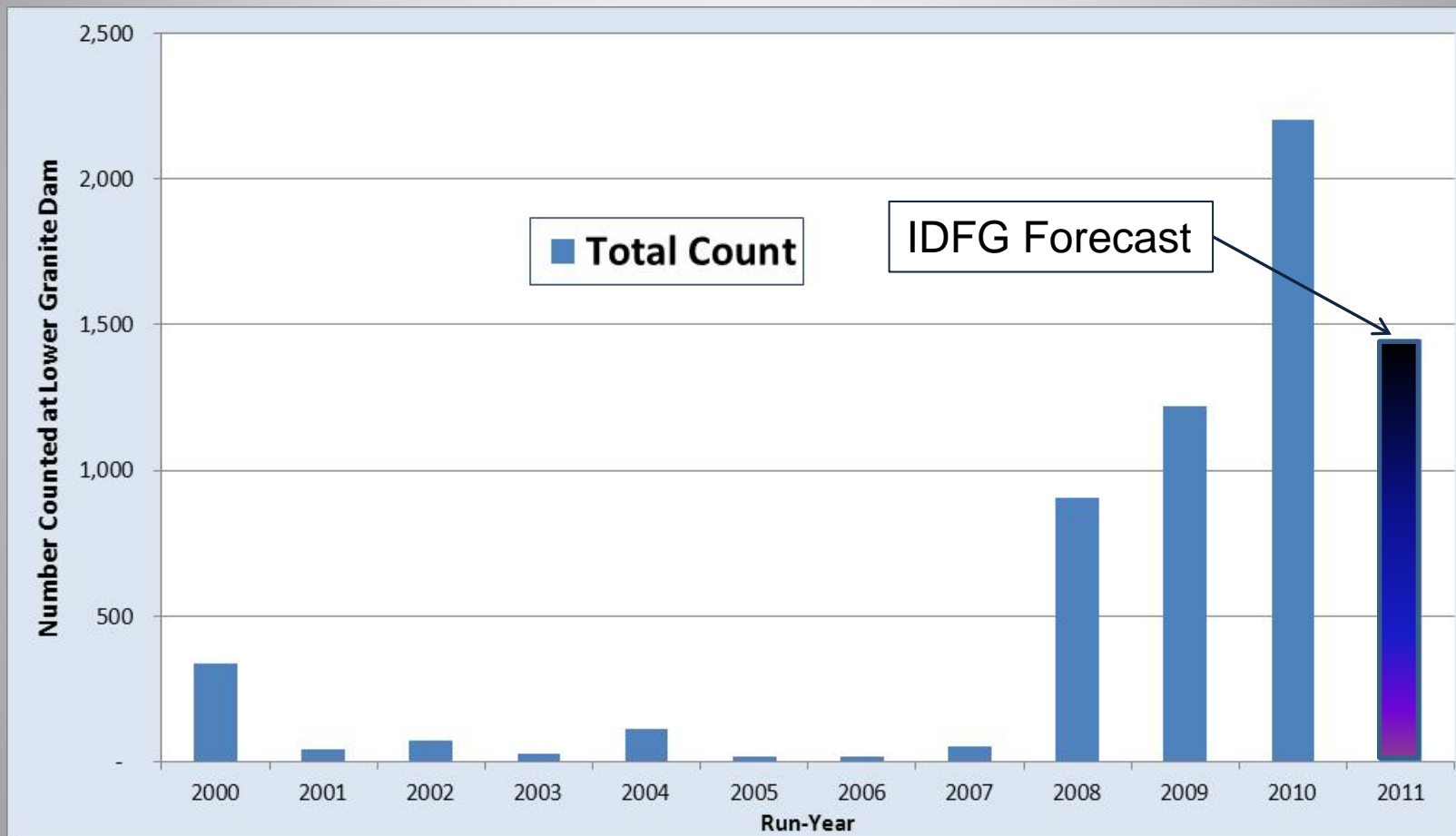
Species: Sockeye Salmon
Run: Snake River
Origin: Wild and Hatchery
Period: 2000 – 2010



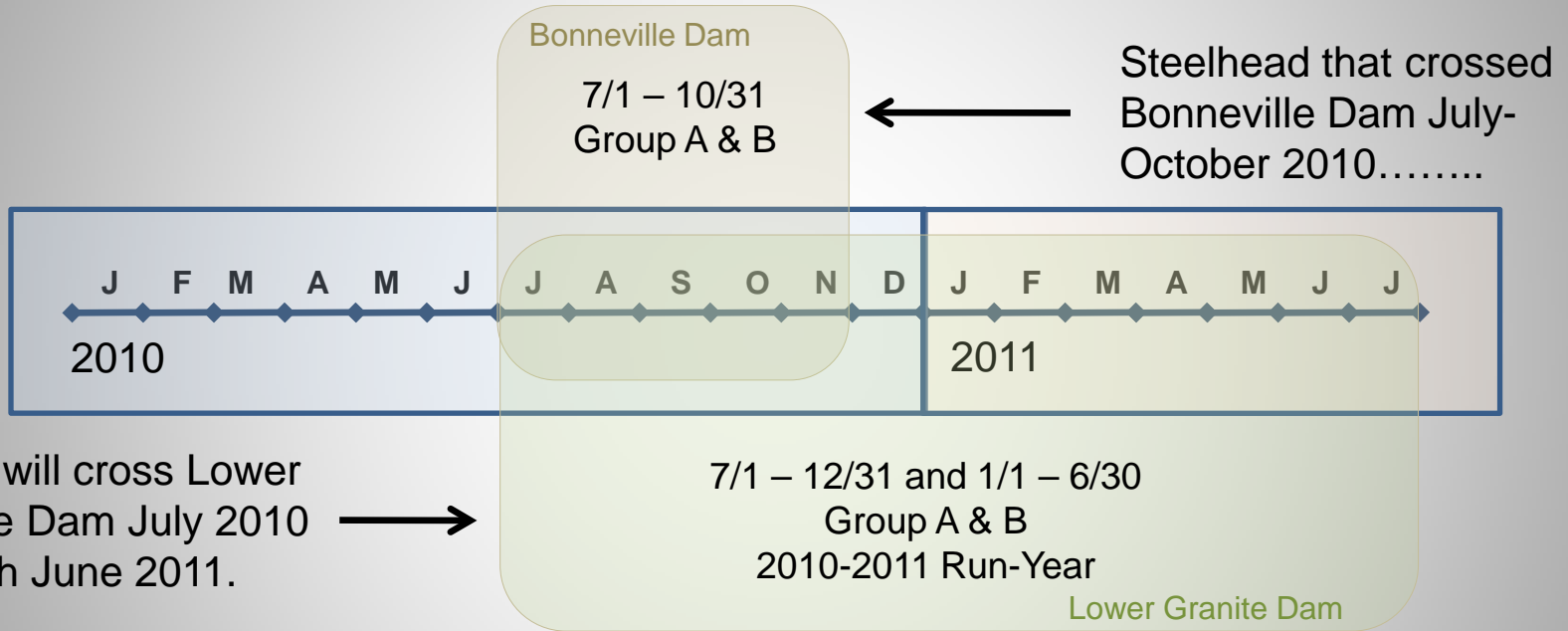
SOCKEYE SALMON

Estimated Return Of

Species: Sockeye Salmon
Run: Snake River
Origin: Wild and Hatchery
Period: 2000 – 2010 and 2011 Forecast



Summer Steelhead Run-Years



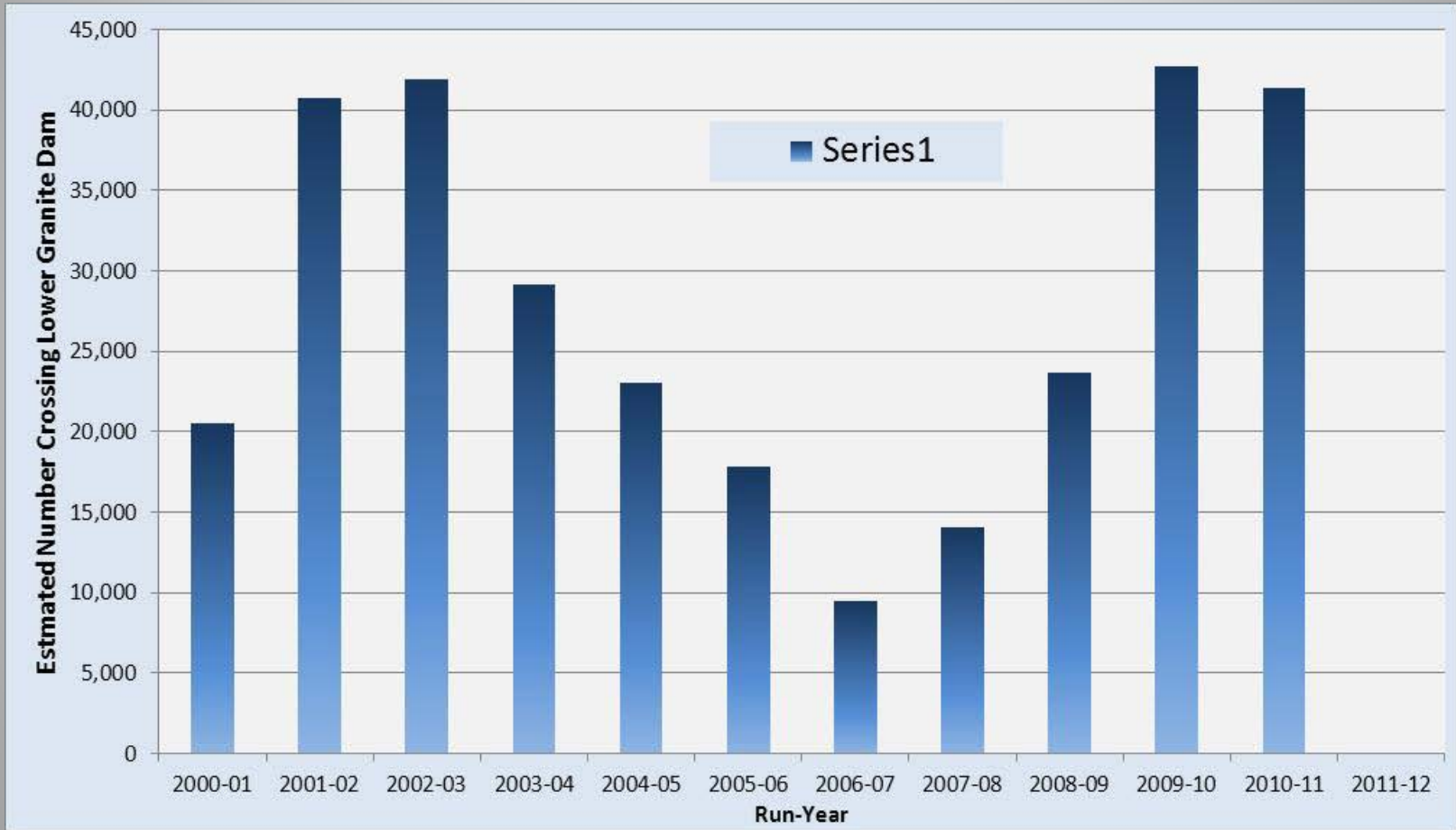
.....will cross Lower Granite Dam July 2010 through June 2011. →



SUMMER STEELHEAD

Estimated Return Of

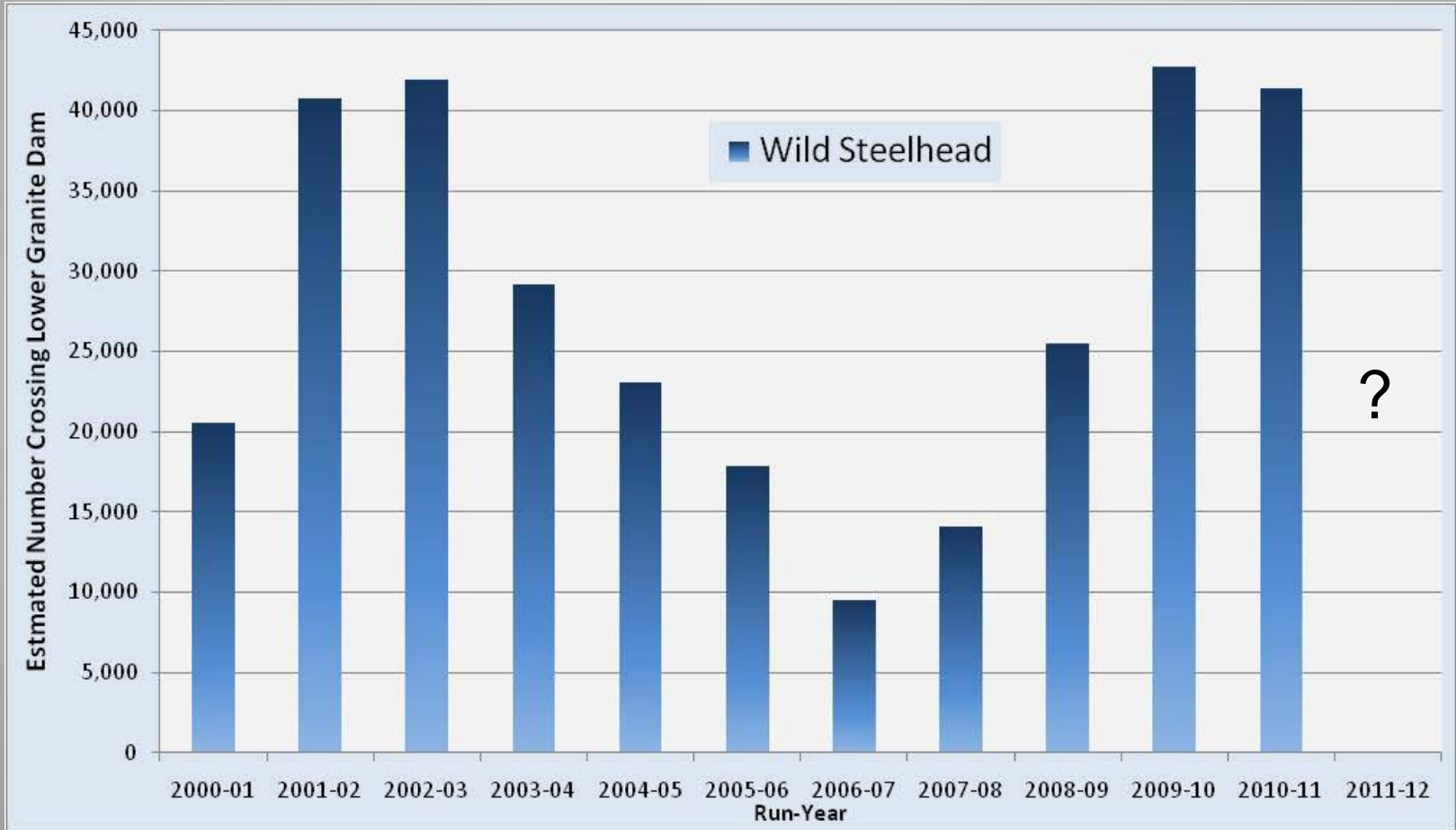
Species: Steelhead
Run: Summer, A and B
Origin: Wild
Period: 2000 – 2010



SUMMER STEELHEAD

Estimated Return Of

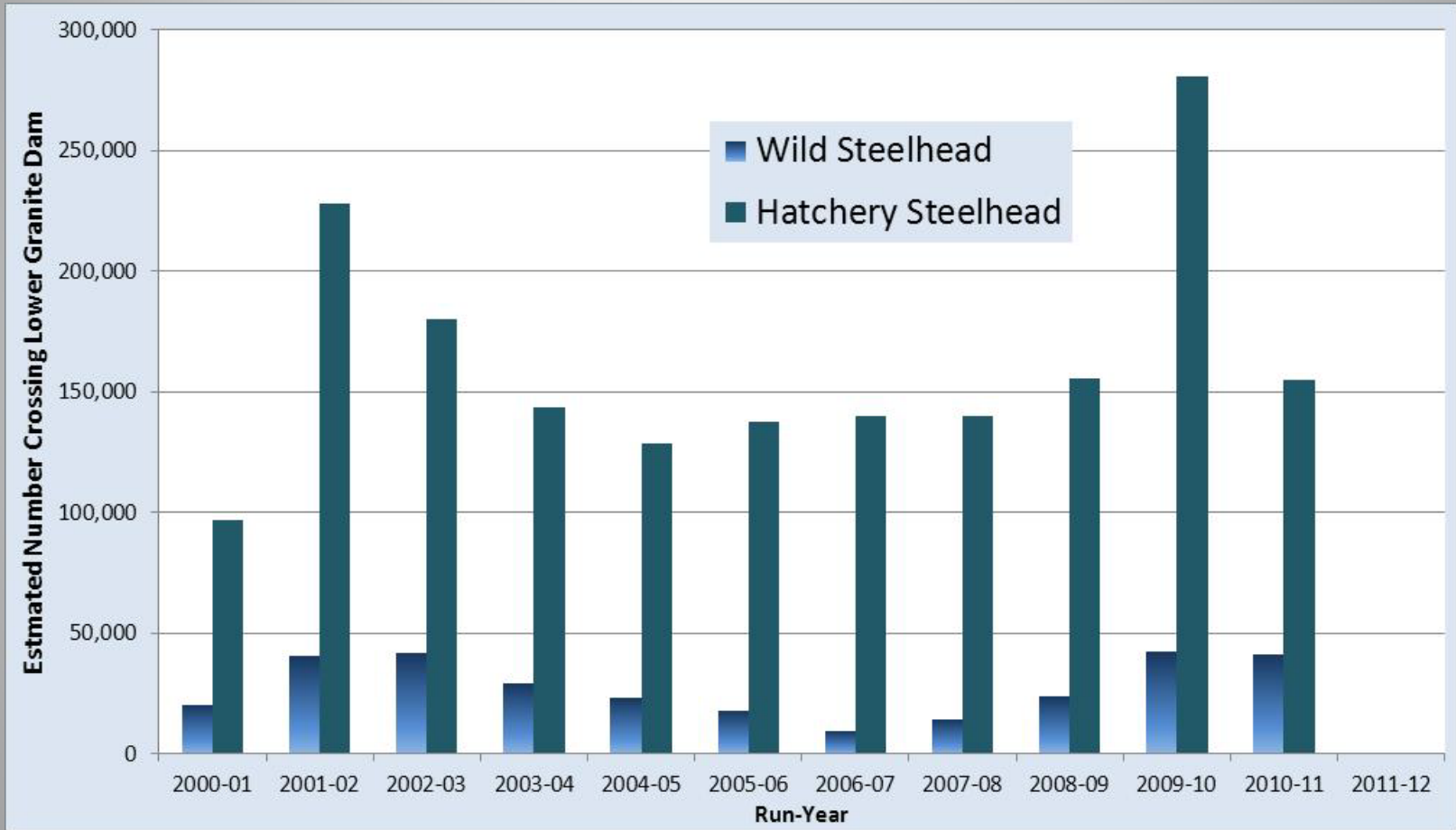
Species: Steelhead
Run: Summer, A and B
Origin: Wild and Hatchery
Period: 2000 – 2010



SUMMER STEELHEAD

Estimated Return Of

Species: Steelhead
Run: Summer, A and B
Origin: Wild and Hatchery
Period: 2000 – 2010



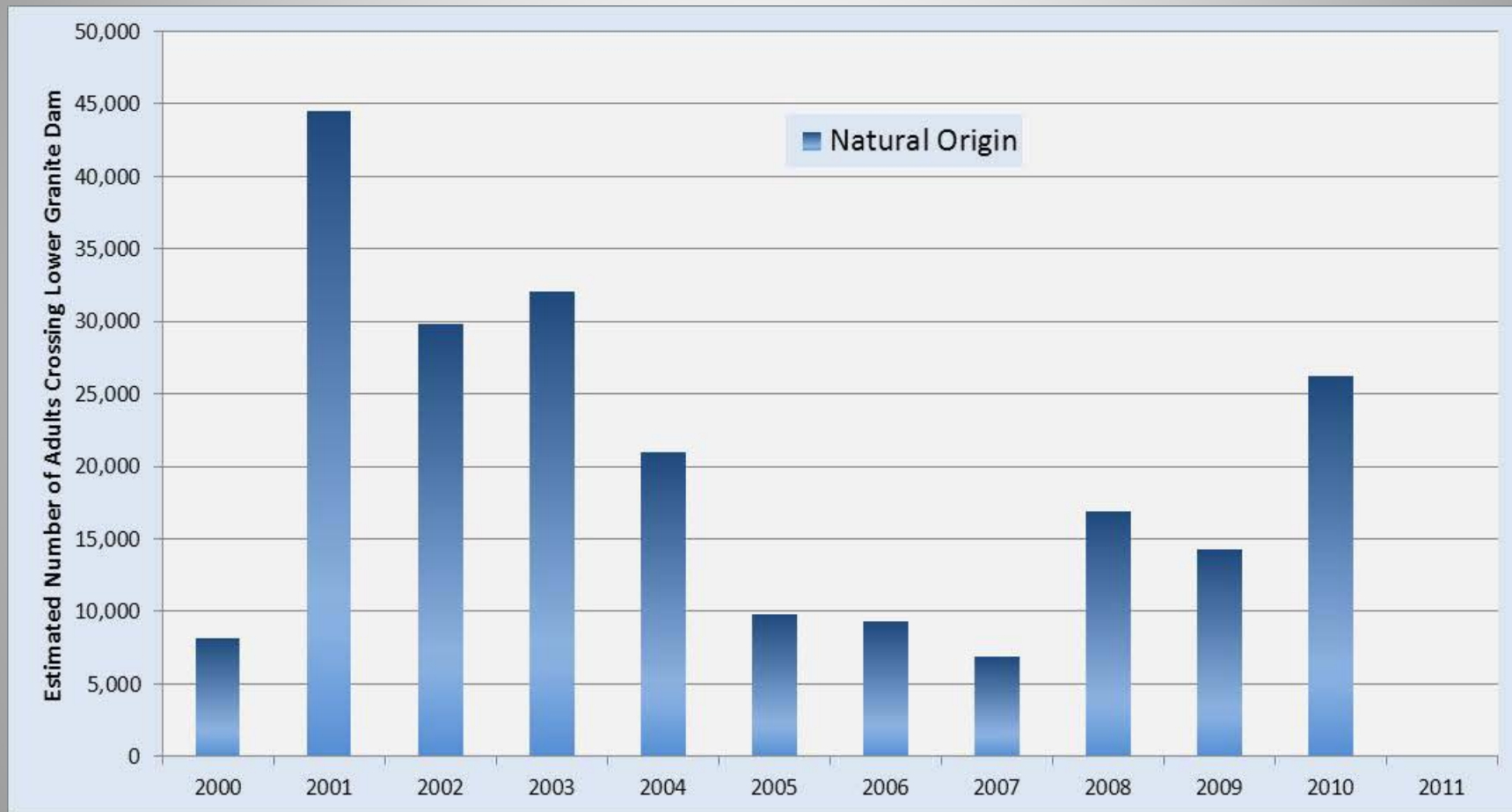
CHINOOK SALMON – SPRING/SUMMER



CHINOOK SALMON

Estimated Return Of

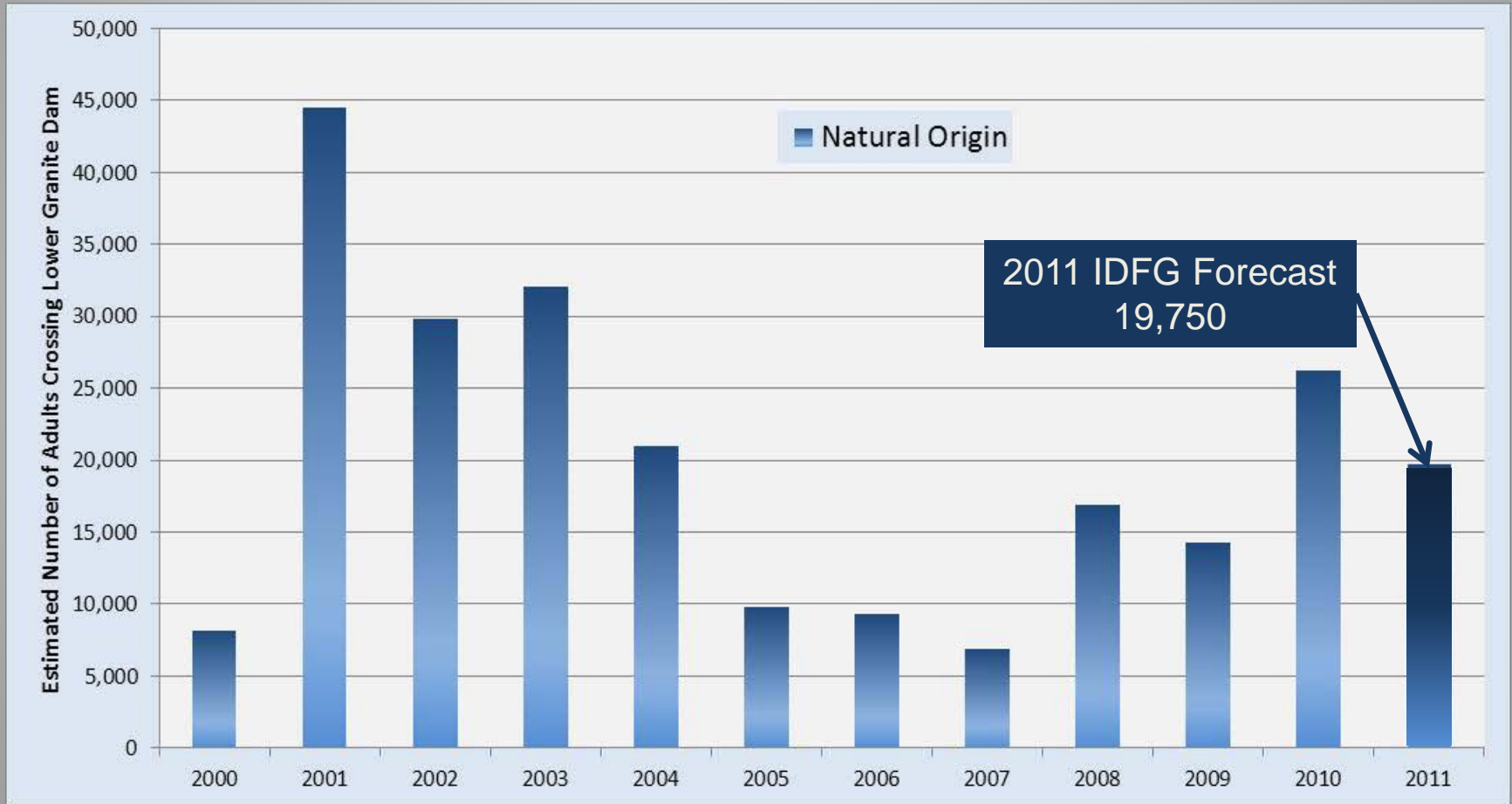
Species: Chinook Salmon
Run: Spring/Summer
Origin: Natural
Period: 2000 – 2010



CHINOOK SALMON

Estimated Return Of

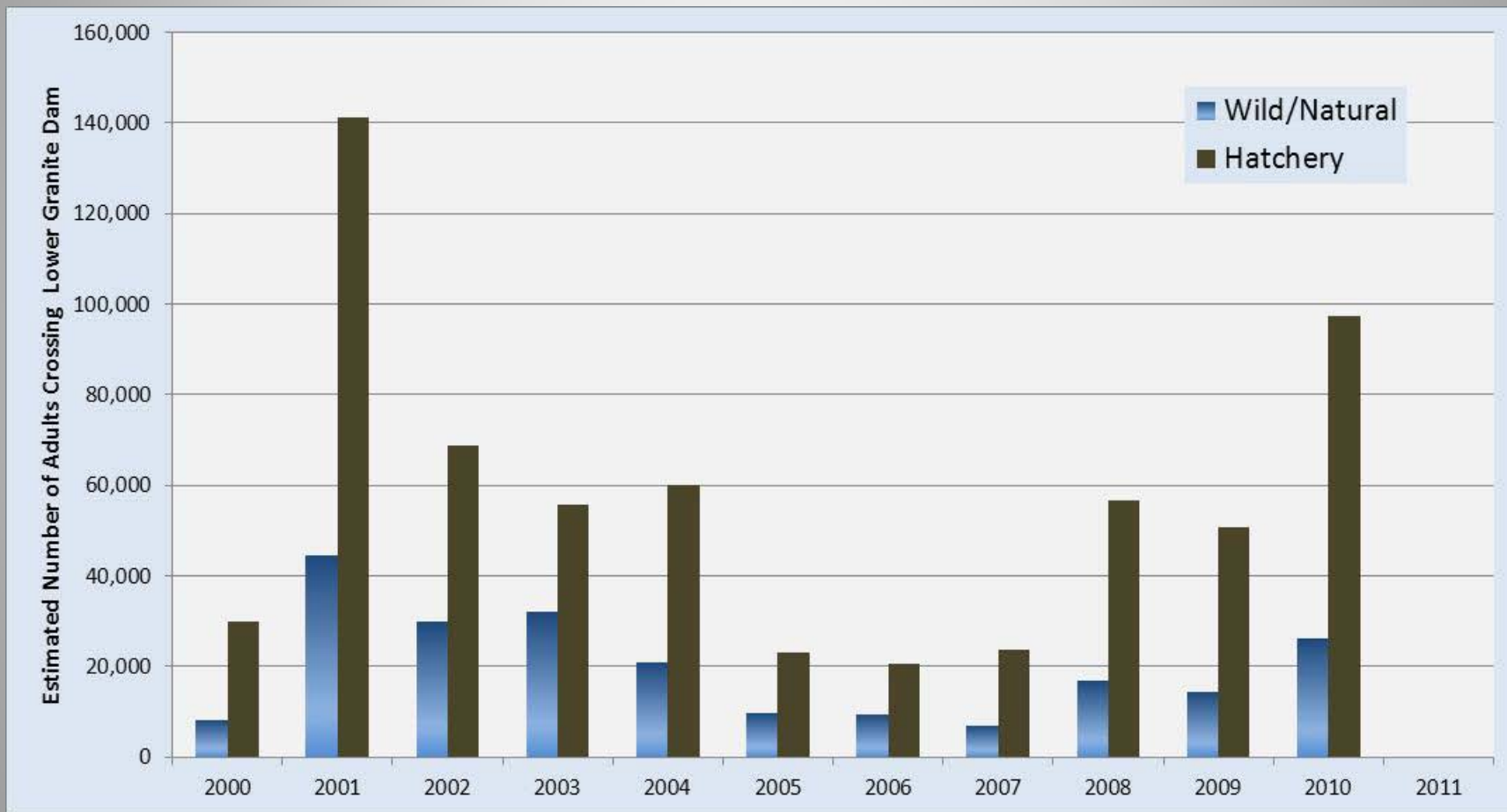
Species: Chinook Salmon
Run: Spring/Summer
Origin: Natural
Period: 2000 – 2010 and **2011 forecast**



CHINOOK SALMON

Estimated Return Of

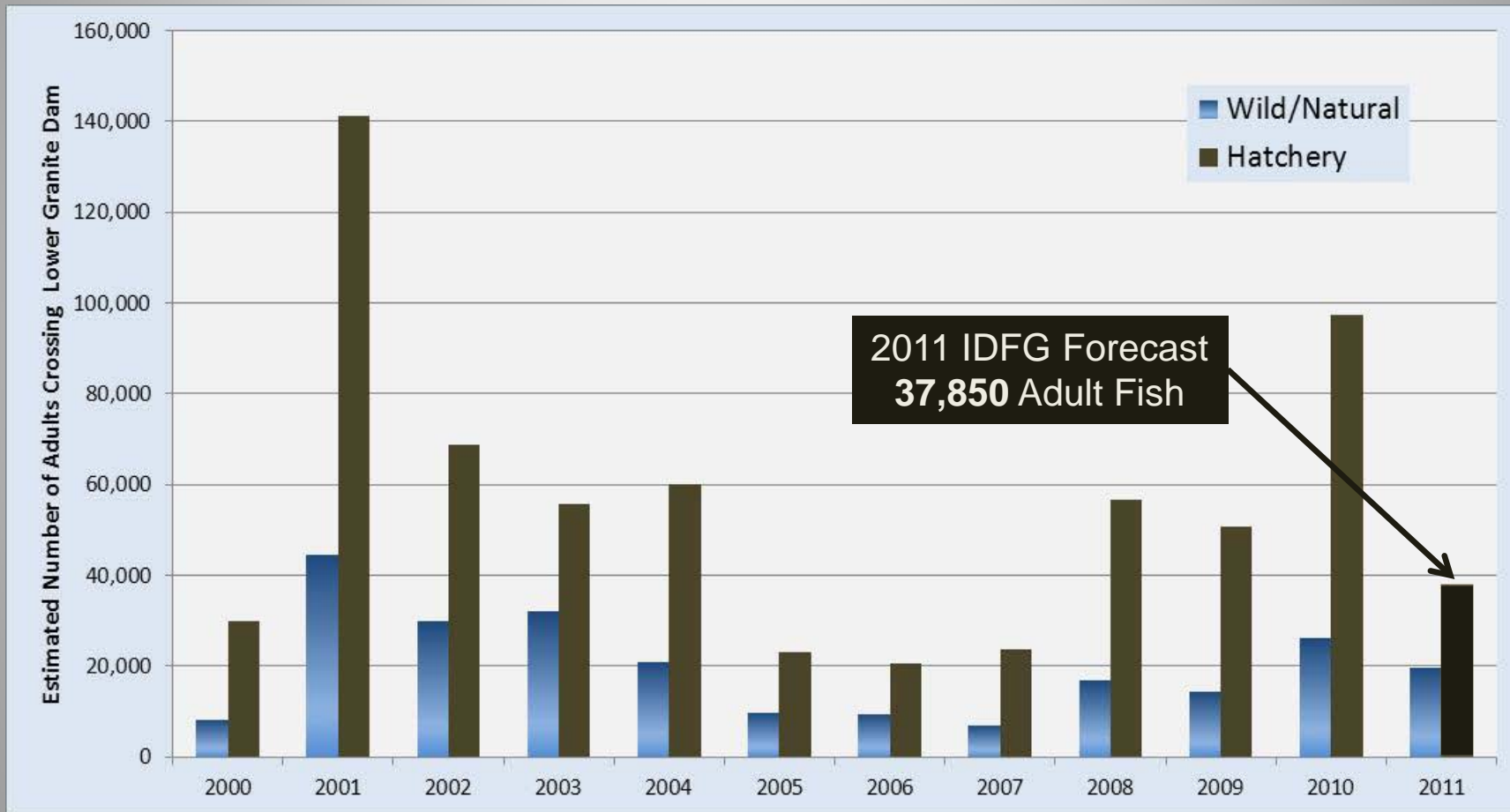
Species: Chinook Salmon
Run: Spring/Summer
Origin: Natural and Hatchery
Period: 2000 – 2010



CHINOOK SALMON

Estimated Return Of

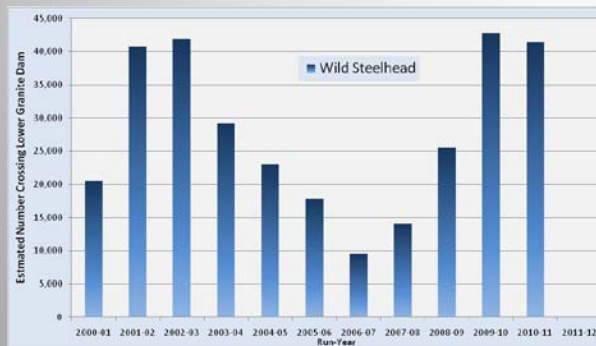
Species: Chinook Salmon
Run: Spring/Summer
Origin: Natural and Hatchery
Period: 2000 – 2010 and **2011 forecast**



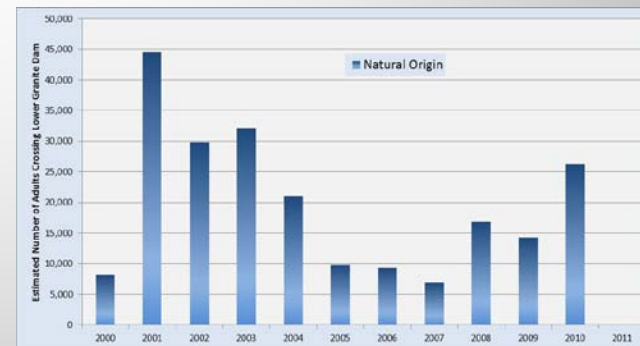
Update on M&E

- Genetics projects were initiated after the “fast-track” process to shift to a new genetic baseline (old = uSAT, new = SNP)
- The purpose of the genetic sampling is to break the aggregate wild/natural return at Lower Granite into reporting groups
 - This can be done with either technique, SNPs might be more accurate

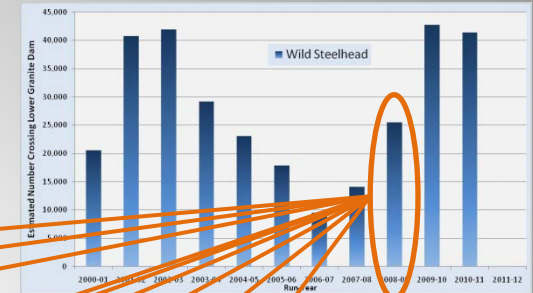
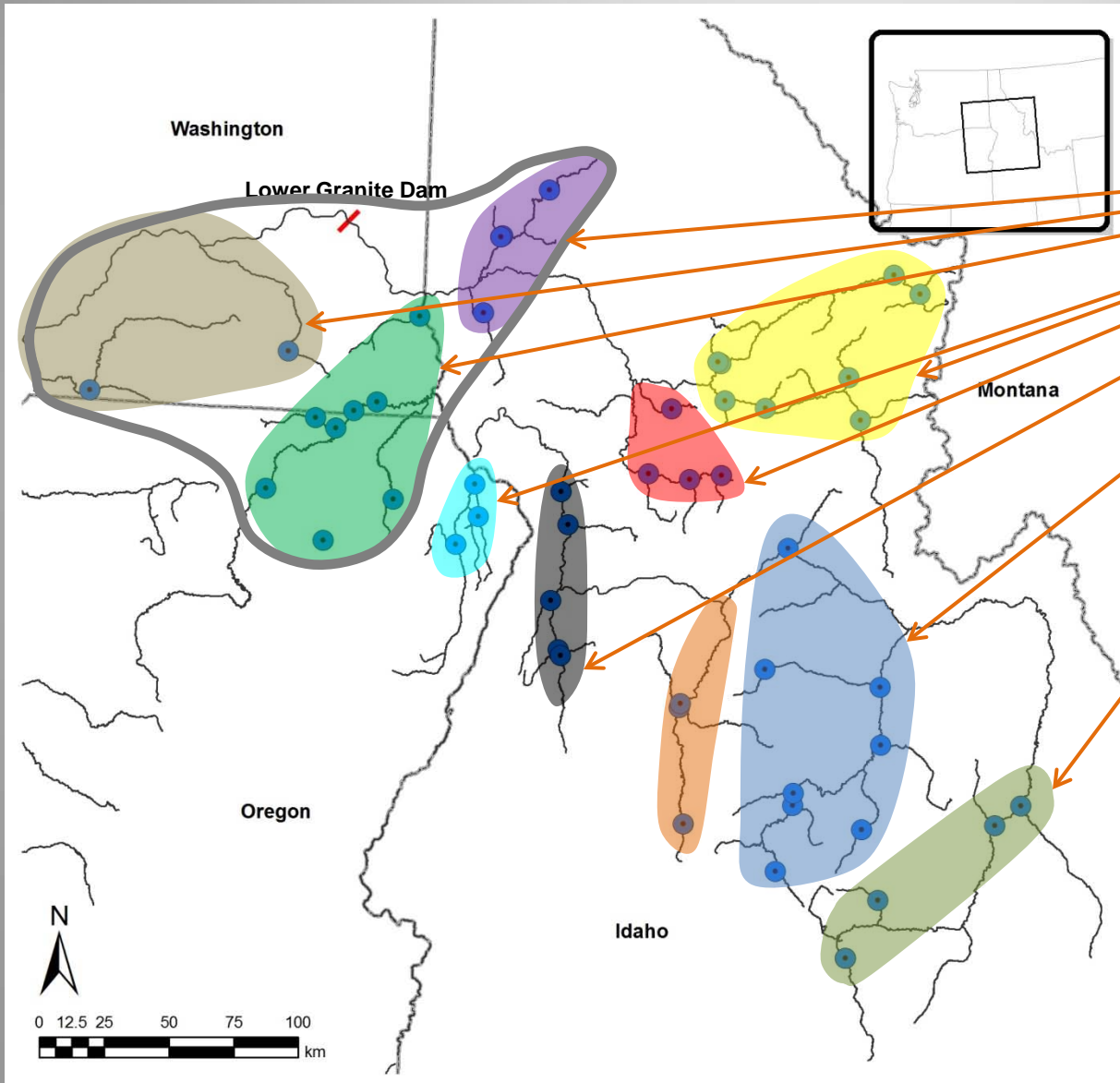
Wild Steelhead



Wild Sp/Su Chinook



Snake River Wild Steelhead



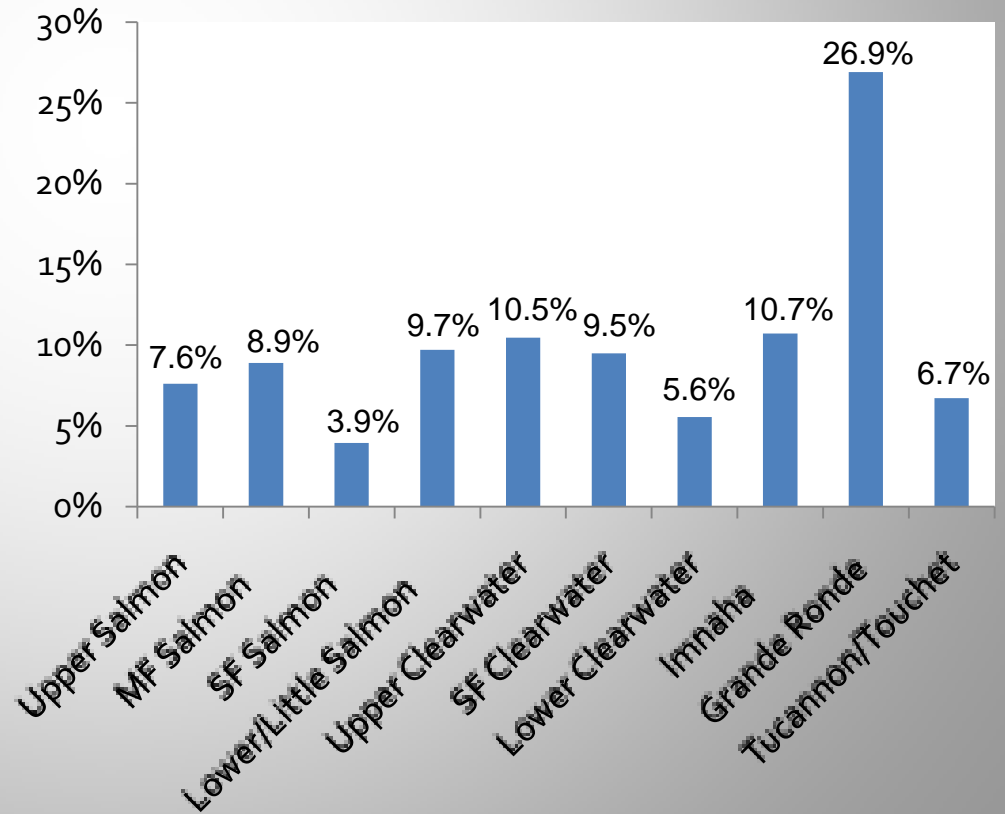
- SNP baseline able to break apart...
 - lower Clearwater R.
 - Grande Ronde
 - Tucannon/Touchet
- Previously, there was one estimate for these three pooled reporting units

Preliminary results for Snake River Wild Steelhead

2008-09 Run-year

Reporting Group	Proportion	Abundance
Upper Salmon	7.6%	1,943
MF Salmon	8.9%	2,270
SF Salmon	3.9%	1,006
Lower/Little Salmon	9.7%	2,479
Upper Clearwater	10.5%	2,673
SF Clearwater	9.5%	2,423
Lower Clearwater	5.6%	1,417
Imnaha	10.7%	2,737
Grande Ronde	26.9%	6,870
Tucannon/Touchet	6.7%	1,713
Total	100.0%	25,530

Salmon R.	7,698
Clearwater R.	6,513
Imnaha	2,737
Grande Ronde	6,870
Tucannon/Touche	1,713



Preliminary results for Snake River Wild Steelhead 2008-09 Run-year

Reporting Group	Proportion	Abundance	Sex				1-Ocean vs. 2-Ocean			
			Male %	Female %	Males	Females	1-Ocean %	2-Ocean %	1-Ocean	2-Ocean
Upper Salmon	7.6%	1,943	35%	65%	683	1,260	68%	32%	1,314	629
MF Salmon	8.9%	2,270	22%	78%	497	1,772	39%	61%	894	1,376
SF Salmon	3.9%	1,006	24%	76%	237	769	4%	96%	40	966
Lower/Little Salmon	9.7%	2,479	40%	60%	992	1,487	NA	NA	NA	NA
Upper Clearwater	10.5%	2,673	26%	74%	691	1,982	23%	77%	617	2,056
SF Clearwater	9.5%	2,423	32%	68%	781	1,642	19%	81%	452	1,971
Lower Clearwater	5.6%	1,417	NA	NA	NA	NA	NA	NA	NA	NA
Imnaha	10.7%	2,737	38%	63%	1,026	1,711	60%	40%	1,642	1,095
Grande Ronde	26.9%	6,870	44%	56%	3,016	3,854	58%	42%	3,994	2,876
Tucannon/Touchet	6.7%	1,713	NA	NA	NA	NA	NA	NA	NA	NA
Total	100.0%	25,530	33%	67%	8,425	17105	41%	59%	17,993	7,537

Questions?

