

# FRPTC Update

presented to: FN Forum  
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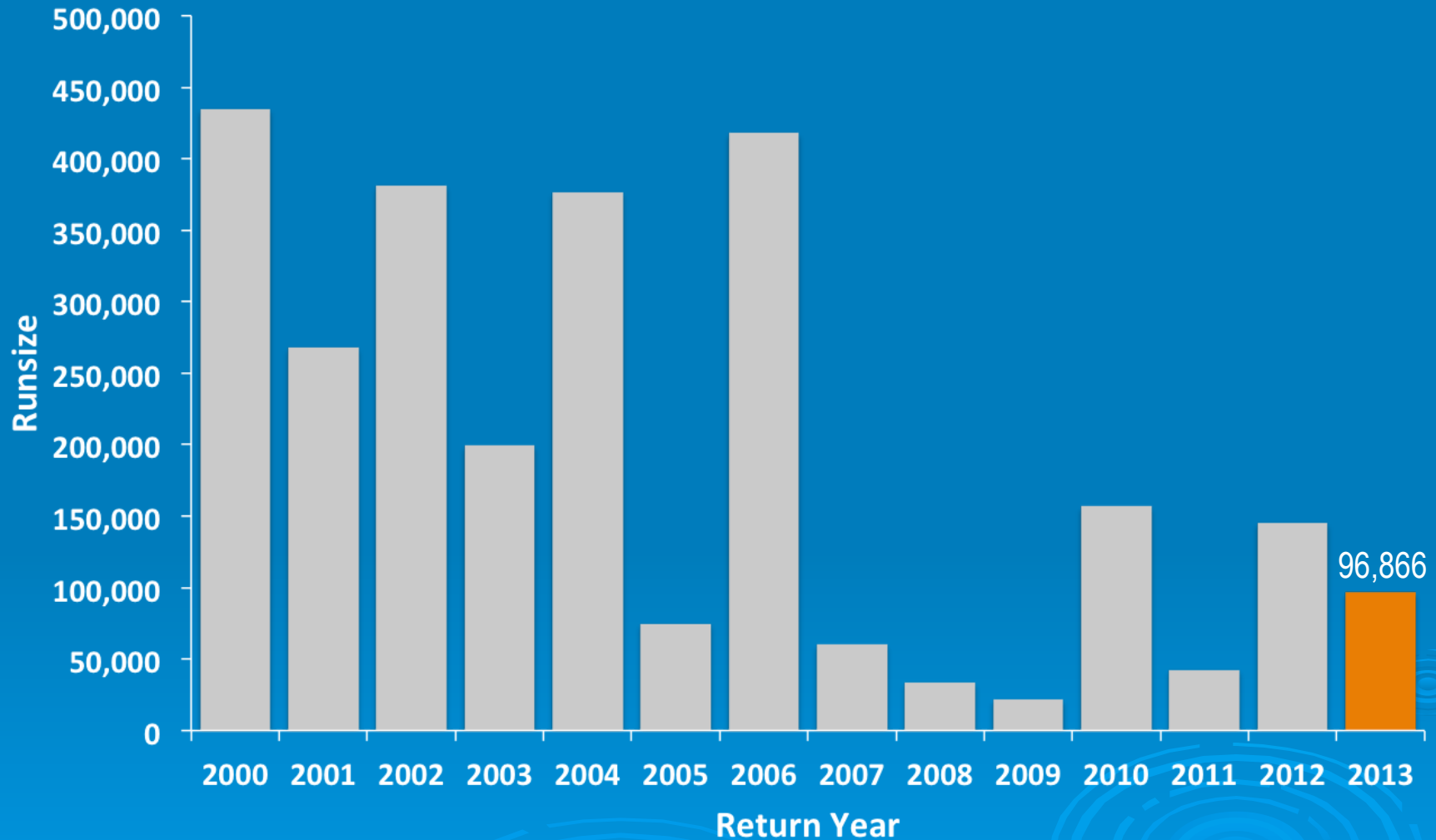
# Outline

- Washington State sockeye & pink forecasts
- Management Adjustment options
- Late Run options

# Washington Forecasts

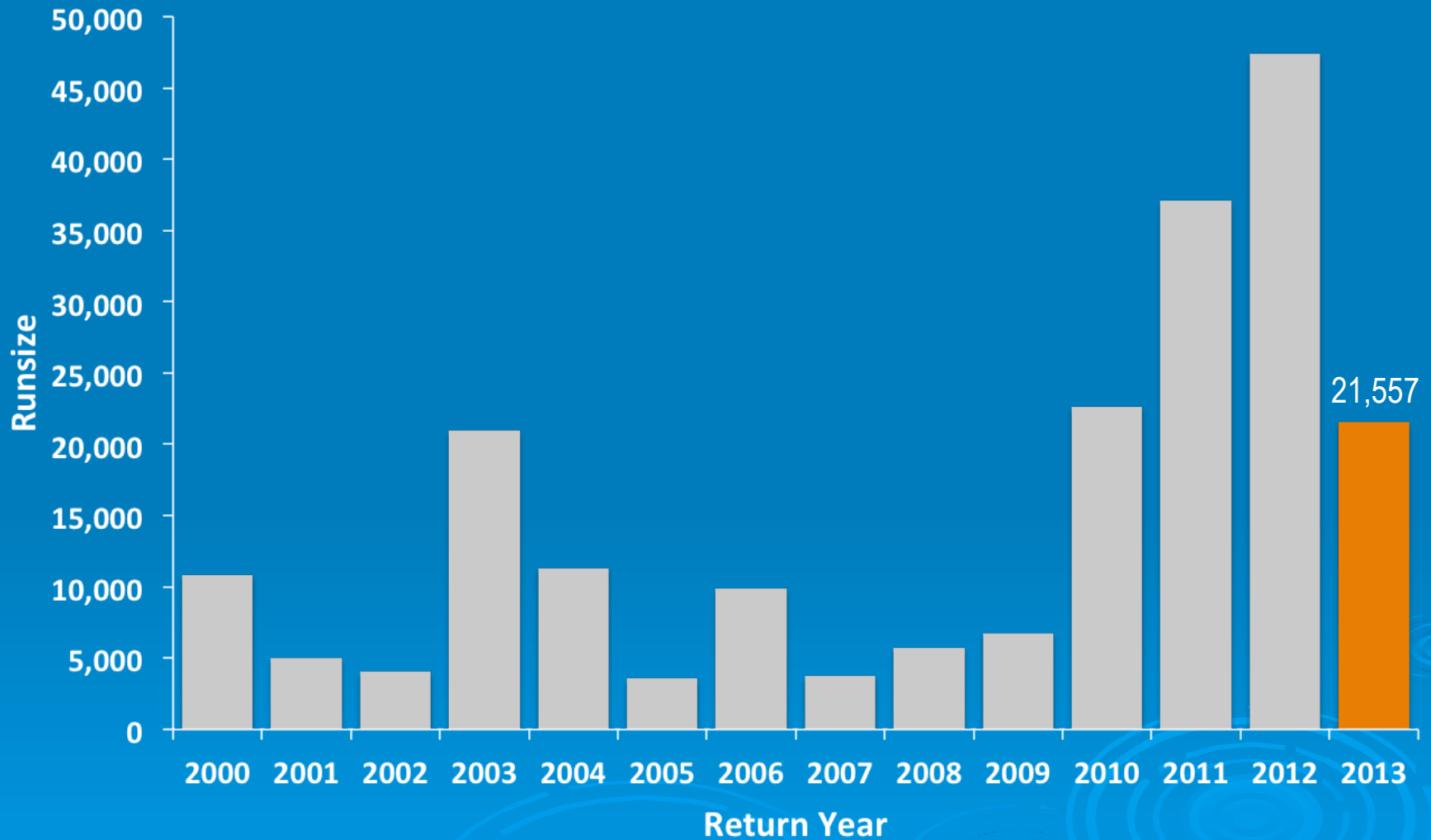
2013 Sockeye & Pink

# LAKE WASHINGTON SOCKEYE



source: A. Dufault (WDFW)

# BAKER LAKE SOCKEYE



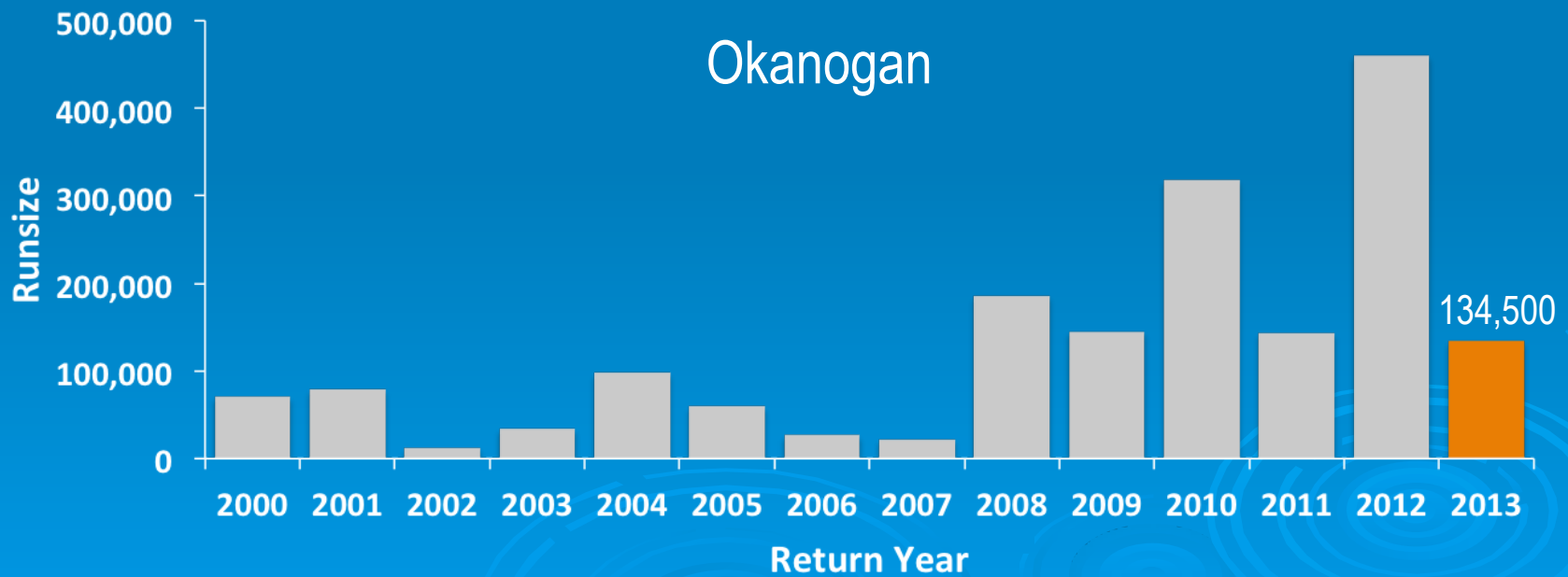
source: A. Dufault (WDFW)

# COLUMBIA RIVER SOCKEYE

## Wenatchee

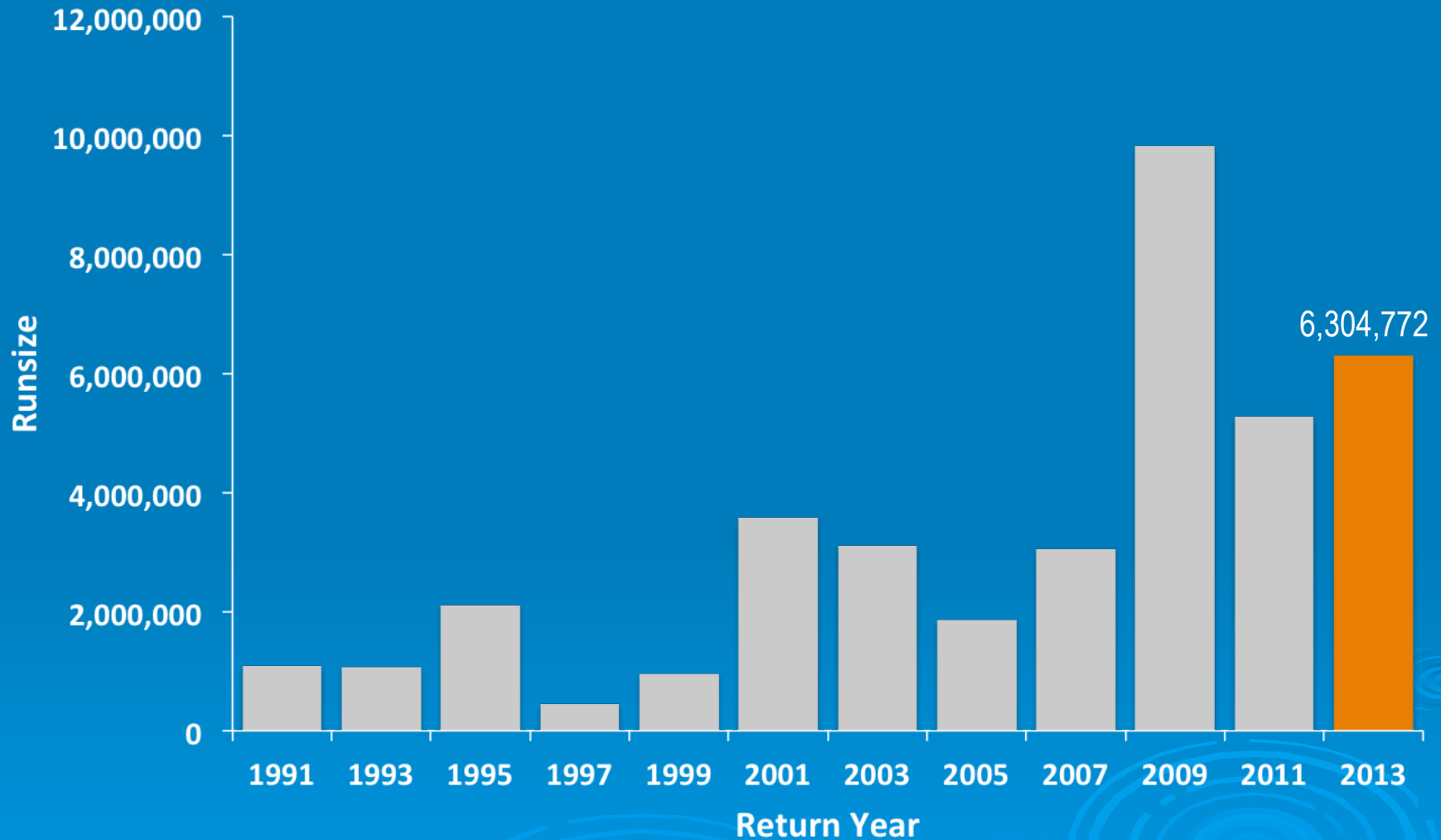


## Okanogan



source: A. Dufault (WDFW)

# PUGET SOUND PINK



source: A. Dufault (WDFW)

# Fraser Sockeye & Pink

technical update



# Management Adjustments

## ➤ Early Stuart

- pre-season: long term median
- continues to be estimated in-season using temperature and discharge models

## ➤ Summers in 2012

- Harrison assigned fixed value (based on historic estimates) – Summer pMA is weighted to take into account the abundance of Harrison in relation to the rest of the Summers
- remainder of Summers - pMA based on modelled estimates using in-season temperature & discharge values

# Early Summer MA

- prior to 2012, only Pitt was treated separately (because they don't get directly counted at Mission, there is no DBE)
- in 2012:
  - Pitt assigned a fixed value (zero), weighted
  - Chilliwack assigned a fixed value (based on historic estimates), weighted
  - remainder of Early Summers – pMA based on modelled estimates using in-season temperature & discharge values

# Late Run Delay

- Late run pMA model is dependent on having an estimated 50% date at Mission
- have not used a consistent method from year to year for accounting for anticipated DBE
- in 2012
  - understanding that there was no method to detect the timing of Late Run at Mission and therefore, no way to update the pMA in-season
  - pre-season decision to use a  $pMA = 0.97$ , which assumed a delay of 16 days
  - post-season estimate of delay was zero days

# 2013 Late Run: Abundance Considerations

- 2013 is the second off-cycle line for Late Shuswap, but Late Shuswap still represents 19% of p50 forecast
- Weaver and Birkenhead are expected to contribute most (78%) of the Late-run forecast (p50).
- The Late-run is forecast to return at less than 20% of the abundance of the Summer-run (p50).

# 2013 Late Run: Assessment Considerations

- The low relative abundance of Late-run sockeye could impact:
  - Accuracy and precision of stock ID estimates
  - Likelihood of early upstream migration if Late-run sockeye migrate upstream with Summer-run (SWTS hypothesis).
- Delay in Georgia Strait had increased on the cycle and in 2010 and 2011, but no delay was evident in 2012.
- Differences between estimates (and en-route mortality) has been less than on the 2012 cycle but larger than most years on the 2010 and 2011 cycles (Late Shuswap years).

# What's next?

Estimated Late-run Delay in the Strait of Georgia ( # of days )

2012 cycle Weaver		2013 cycle Weaver		2010 cycle Adams		2011 cycle Adams	
1996	22	1997	15	1998	20	1999	16
2000	1	2001	0	2002	22	2003	1
2004	0	2005	0	2006	5	2007	0
2008	0	2009	16	2010	13	2011	18
2012	0	2013	?				

# Other Items

- pre-season planning model
  - “next generation” model
- in-season pink estimation model
  - updating assumptions about catchability
- total run size numbers
  - 2009-2012