

NMFS Responses to the 2010 OCAP Integrated Annual Review Panel Recommendations

- 2011 Integrated Annual Review
 - November 8-9, 2011

Proposal Adjustments to NMFS' RPA Actions

Proposal:

- OMR formula to manage OMR flow
- OMR Flow Management: Export reduction floor
- OMR flow management: 2nd OMR Trigger
- Incorporate NOAA's National Weather Service's 90-day climate predictions
- Provide flexibility in implementing Stanislaus pulse flows

Status:

- Ongoing discussions between the agencies
- Incorporated in the 2009 RPA with 2011 amendments
- Incorporated in the 2009 RPA with 2011 amendments
- Outstanding effort
- Incorporated in the 2009 RPA with 2011 amendments

Next steps – Joint FWS and NMFS Activities

Recommendation:

- Adjusted flow transition protocol
- Standardizing format for future annual reviews.
- Incorporation of study findings

Response:

- USFWS and NMFS continue to work with Project Agencies to develop an integrated protocol
- Considerable efforts. You tell us.
- Ongoing

Next steps –NMFS Activities

Recommendation:

- Formal adjustments to the RPA
- Corrections to the second trigger in Action IV.2.3
- Improve SRTTG documentation.
- Temperature prediction tools for the Sacramento River.

Response:

- Incorporated in the 2009 RPA with 2011 amendments
- Incorporated in the 2009 RPA with 2011 amendments
- Work in progress.
- Work in progress.

Next steps –NMFS Activities

Recommendation:

- Better integrate springtime flows in the San Joaquin River tributaries.
- Decrease time to report data from the fish facilities.
- Temperature management on Clear Creek.

Response:

- Non-issue for 2011
- Considerable efforts and success in 2011
- Ongoing

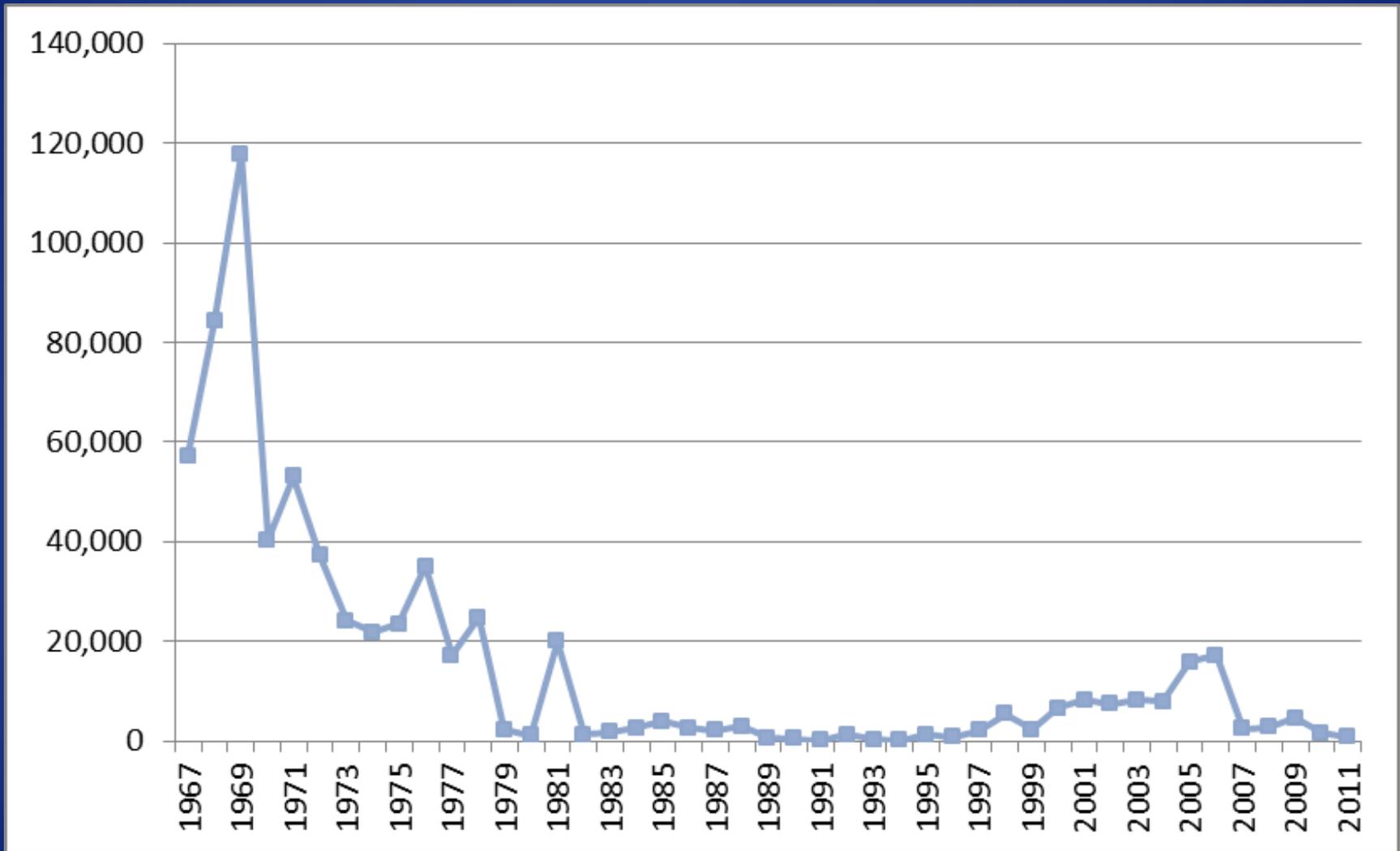


Winter-run Chinook Salmon Escapement in 2011

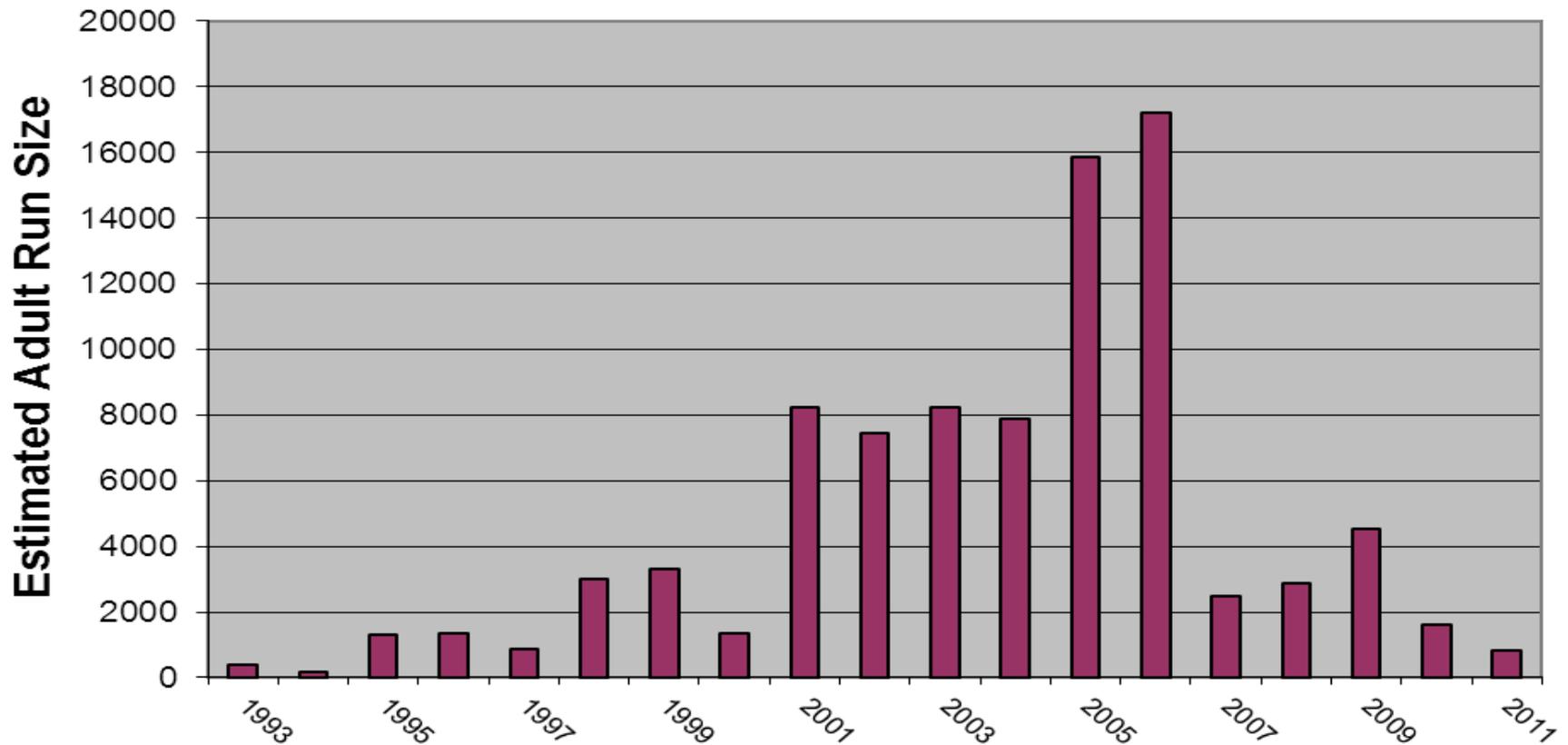


November 8, 2011
by Garwin Yip, NMFS

Winter-Run Chinook salmon Abundance

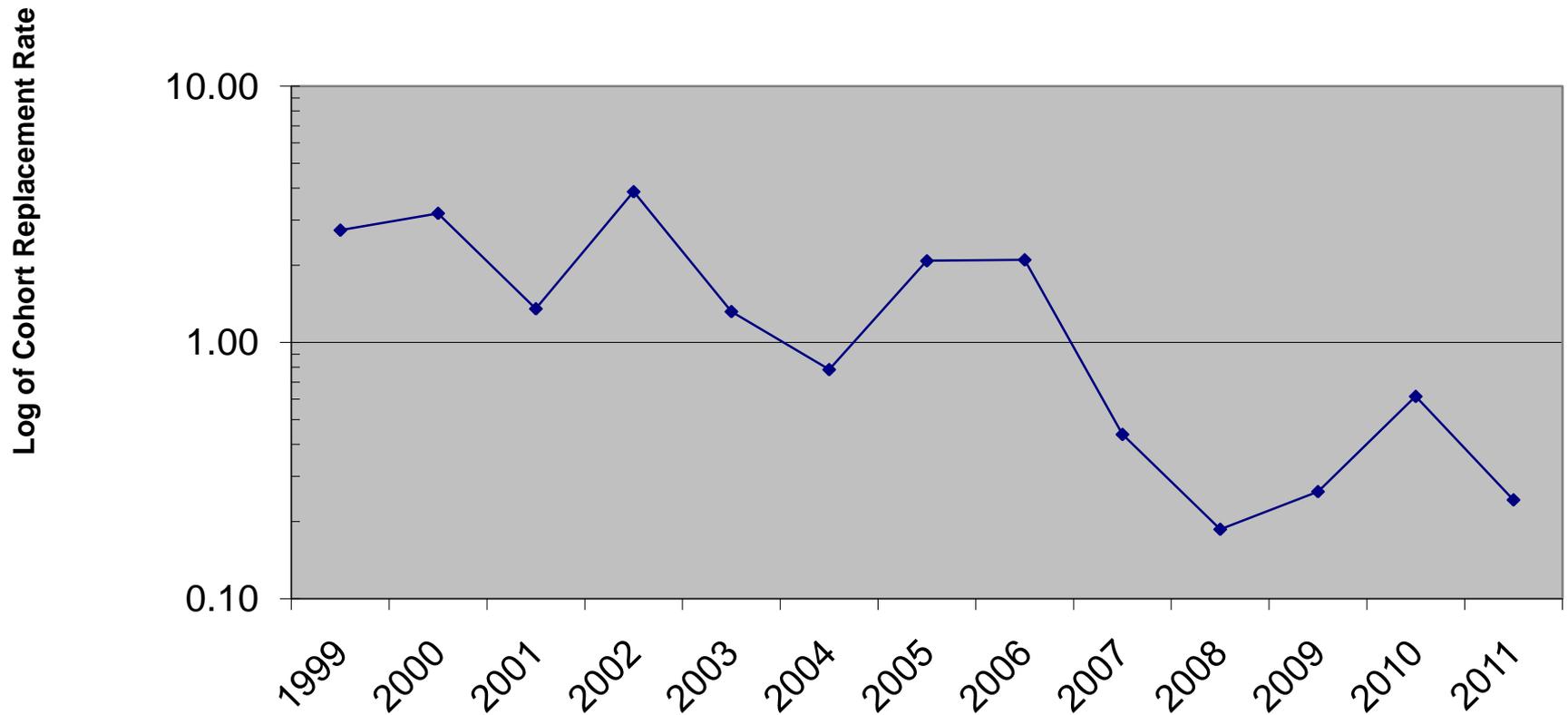


Winter-run Population Estimate from Carcass Surveys 1993 - 2011

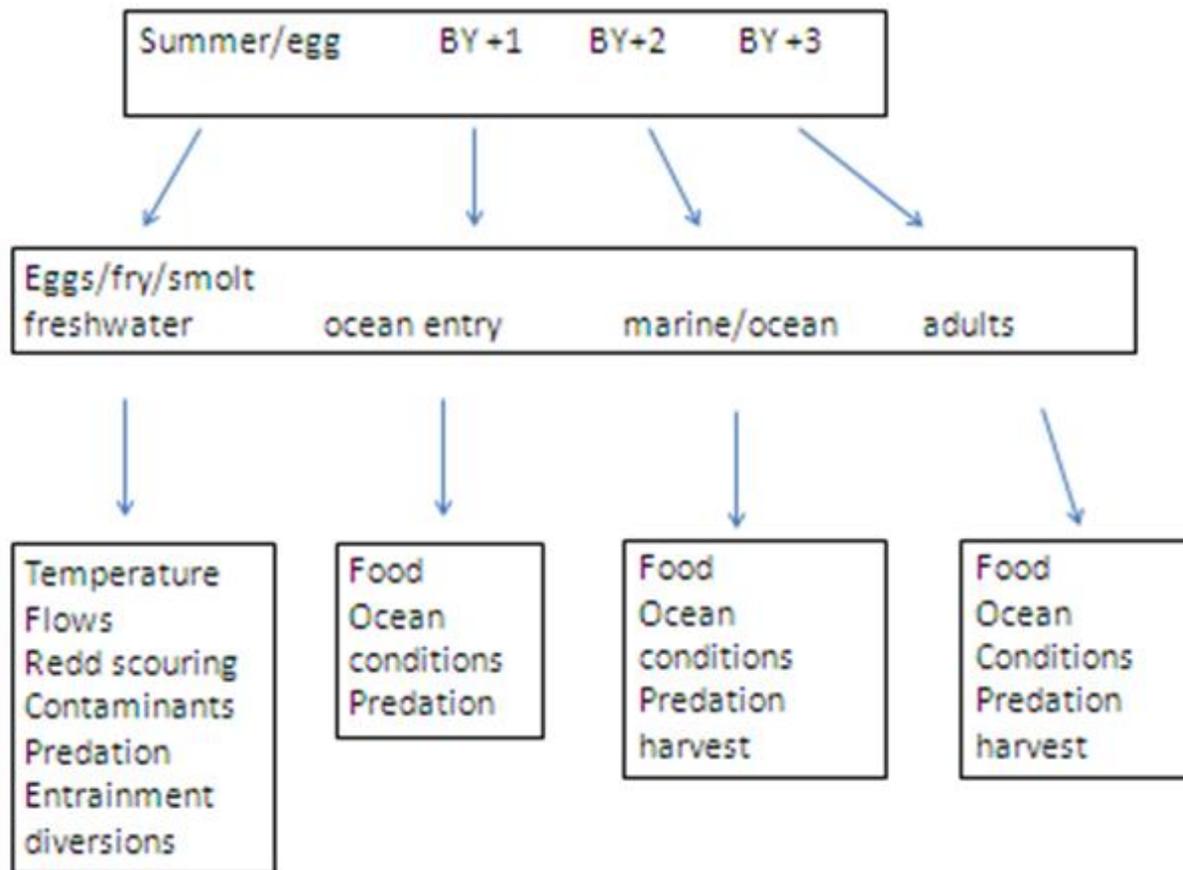


Winter-run Chinook salmon Cohort Replacement Rate

Winter-run Population Trend based on Adults in the Carcass Surveys from 1999 - 2011

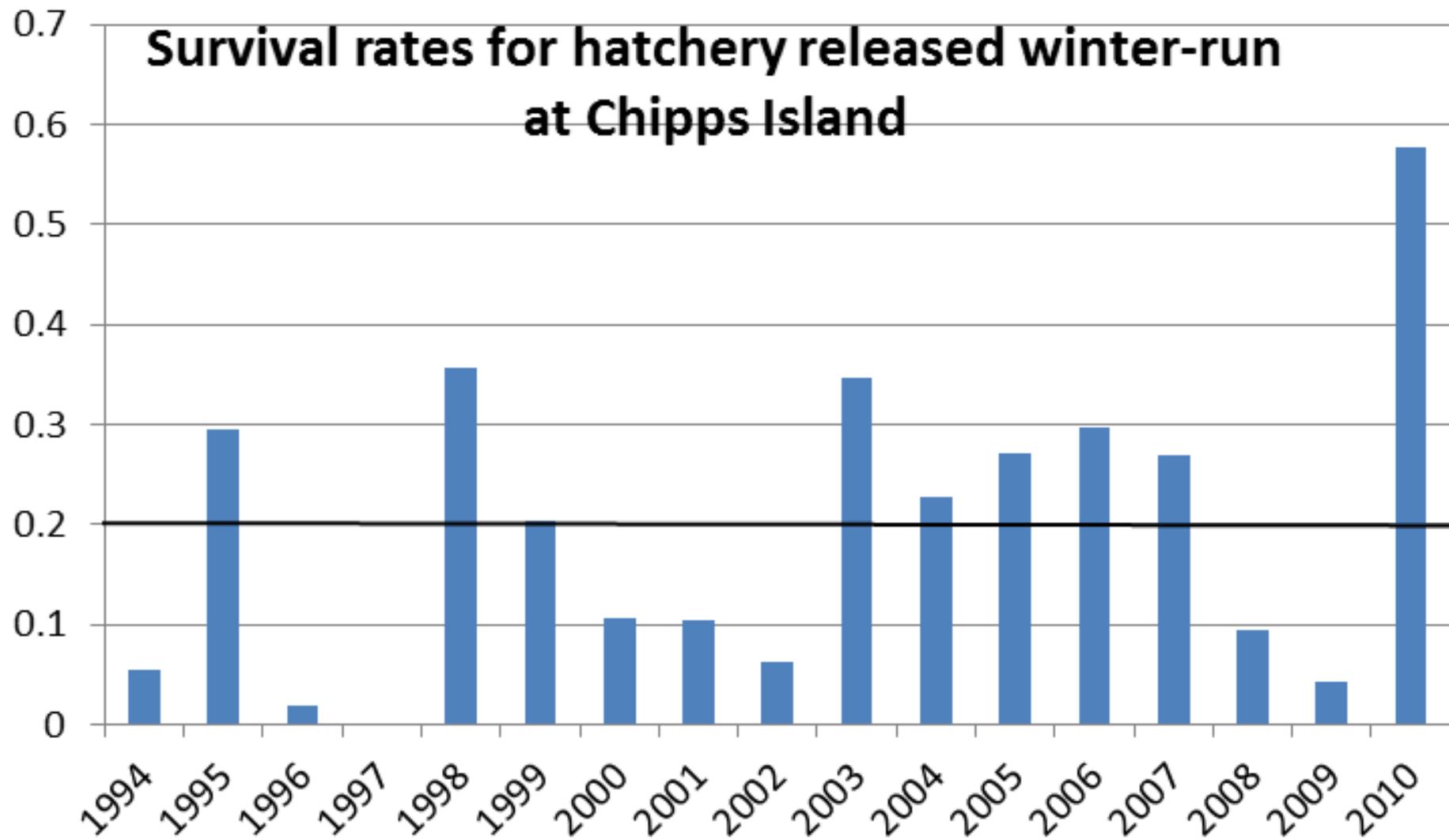


Conceptual Model of a Winter-Run Cohort



Potential Stressors

- Water quantity
- Water quality
- Hatchery effects
- Prespawn mortality
- In-river survival to Chipps Island
- Delta conditions
- Entrainment at CVP/SWP export pumps
- Ratio of Exports to Delta inflows (E/I)
- Ocean harvest
- Ocean conditions
- Synergistic effects



Winter-run loss as a percent of juvenile production

