

DOI Statement to the SWRCB Regarding the Narrative Salmon Doubling Objective

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November 15, 2004



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- This statement is being made as a follow up to the SWRCB's October 27 and 28 2004 Public Workshops.
- Interior believes that accomplishment of the narrative salmon doubling objective will entail a watershed and basin-wide approach. A comprehensive process in collaboration with the SWRCB and others is needed.
- Efforts in the Delta and the streams above the Delta must be actively coordinated to help insure that salmon populations double.



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- Coordination must ensure that these multi-agency efforts are effective, and
- Consistent with the ongoing recovery process of ESA listed winter-run and spring-run Chinook salmon as well as Central Valley steelhead.
- It is important to recognize that there may be potential conflicts in operations for meeting goals between management actions for salmon doubling in the Delta and management actions for salmon doubling in the upstream environments.



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- These potential conflicts exist due to the inherent uncertainty associated with water resources and biological resources.
- Actions to manage those resources may have different effects on management goals upstream and management goals in the Delta and those conflicts will need to be resolved.



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- The resolution of those conflicts will require that they be considered and coordinated in a flexible manner by all of the agencies involved including the SWRCB.
- The determination of salmon doubling goals and what is needed to achieve these goals is a very complex and complicated decision.



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- Consequently, Interior recommends that the narrative salmon doubling objective be addressed through an interactive and collaborative process among state and federal agencies (including the SWRCB) responsible for these public trust resources.
- Interior recommends that this collaborative process include the identification of general and/or specific actions the SWRCB could undertake to aid in achieving the doubling of all four runs of Chinook salmon while taking into account the recovery needs of Central Valley steelhead.



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- Interior recommends that the Final Anadromous Fish Restoration Program (AFRP) Plan, January, 2001 (see the CD (Exhibit 17) and attachment 2 submitted on Oct. 27, 2004) be considered in this collaborative process as a baseline in determining accomplishments in meeting the narrative salmon doubling objective.
- Interior recommends that in any other actions that come before the SWRCB, the overall goal of salmon doubling is considered.
- Interior recommends that in any other actions that come before the SWRCB, the specific protection needs of Central Valley steelhead are considered.
- Interior recommends that the SWRCB coordinate with state and federal agencies when either Delta or upstream actions, including determination of flow and water quality objectives to address Chinook salmon doubling, are undertaken by the SWRCB regarding the WQCP so that such actions meet overall goals and do not conflict with each other.
- Interior recommends that the SWRCB provide the coordination and assistance required to improve water quality and biological monitoring and mitigation for anadromous fish populations in the Sacramento-San Joaquin and Bay-Delta watershed.
- Interior recommends that the SWRCB engage in the proposed collaborative process.



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- Interior recommends that the SWRCB not change the WQCP narrative salmon doubling objective at this time.
- As the recommended collaborative process proceeds, Interior will be able to address the SWRCB with specific recommendations re: any amendments to the WQCP narrative salmon doubling objective, including whether to incorporate a steelhead doubling objective.
- To assist the SWRCB in its periodic review process, the FWS has provided two CDs (Exhibits 11, 16 and 17) with numerous data files and documents. We will briefly summarize them in the following slides:



Anadromous Fish Restoration Program (AFRP) Background

October 1992 – CVPIA Section 3406 (b)(1) mandated Interior to:

develop a program to ensure that natural production of anadromous fish in Central Valley rivers and streams will be sustainable, on a long-term basis, at levels not less than twice the 1967-1991 average (i.e. CVPIA authorized the AFRP doubling goal)



AFRP Background

1993 – DOI established the AFRP with FWS as lead

May 1995 - AFRP Working Papers produced in collaboration with multi-agency technical teams (see Exhibit 17, attachment 2, N.,O.,P.)

December 1995 - Draft AFRP Restoration Plan

1996 - Interior began implementation of the AFRP Restoration Plan

May 1997-Revised Draft AFRP Restoration Plan

January 2001- Final AFRP Restoration Plan (see Exhibit 17, attachment 2, M.)

January 2001- CVPIA Record of Decision



AFRP Restoration Plan

AFRP Restoration Plan (2001) described purposes, goals, objectives, scientific basis, implementation principles, process, priorities, monitoring, evaluation, and public involvement to achieve the doubling goal.





AFRP Plan

- AFRP Restoration Plan developed preliminary estimated production targets for doubling (Exhibit 17,M, AFRP 2001,Appendix B) on all Central Valley rivers and streams.
- Doubling goals were developed for all four races of Chinook salmon:
 - Winter-run Chinook salmon,
 - Spring-run Chinook salmon,
 - Late Fall and Fall-run Chinook Salmon



AFRP Plan

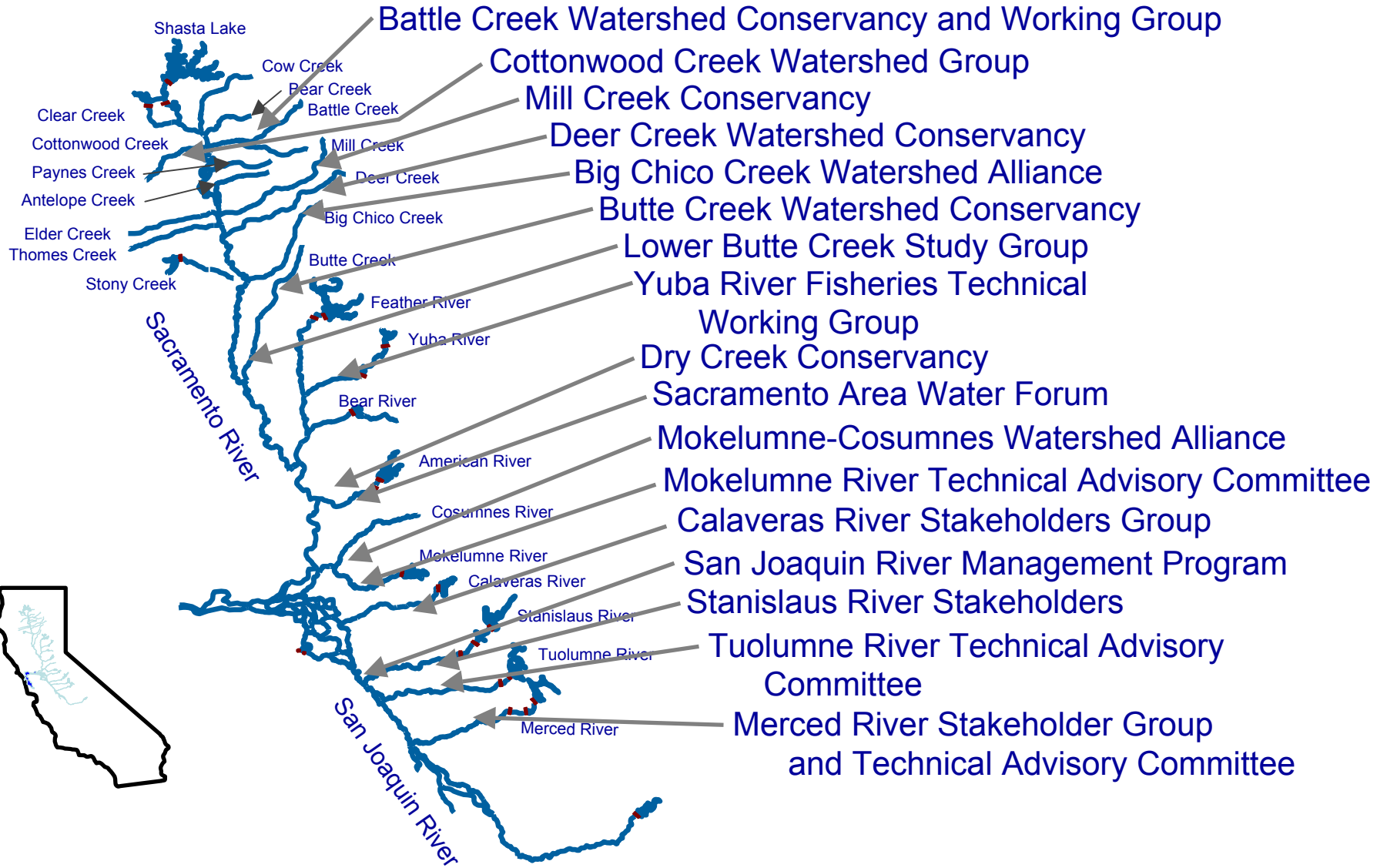
- AFRP identified limiting factors for all Central Valley rivers and streams.
- AFRP identified and prioritized restoration actions and evaluations for each Central Valley stream and the Bay-Delta.



AFRP Plan

- The watershed of highest priority for restoration is the Sacramento – San Joaquin Delta (Exhibit 17,M., AFRP 2001).
- The following watersheds are assigned equal priority but rank below the Delta: the Sacramento and American Rivers, tributaries of the Sacramento that have spring-run Chinook salmon, and the mainstem San Joaquin and tributaries downstream of the Mendota Pool.

AFRP Watershed groups:



AFRP Funded Projects



Since 1996, over \$32 million in AFRP funds have been invested in more than 200 restoration projects.





AFRP Plan

- AFRP works with agencies, partners and stakeholders to implement restoration actions using CVPIA and CalFed funding.
- AFRP coordinates with agencies, partners, and stakeholders on evaluating doubling goal progress.



AFRP Plan

- AFRP defined natural production, Central Valley rivers and streams, long-term basis, and sustainable (Exhibit 17,M., AFRP 2001, Appendix A).

Sustainable – “capable of being maintained at target levels without direct human intervention in spawning, rearing, or migration”

There is an element of time implicit in sustainability.



AFRP Plan

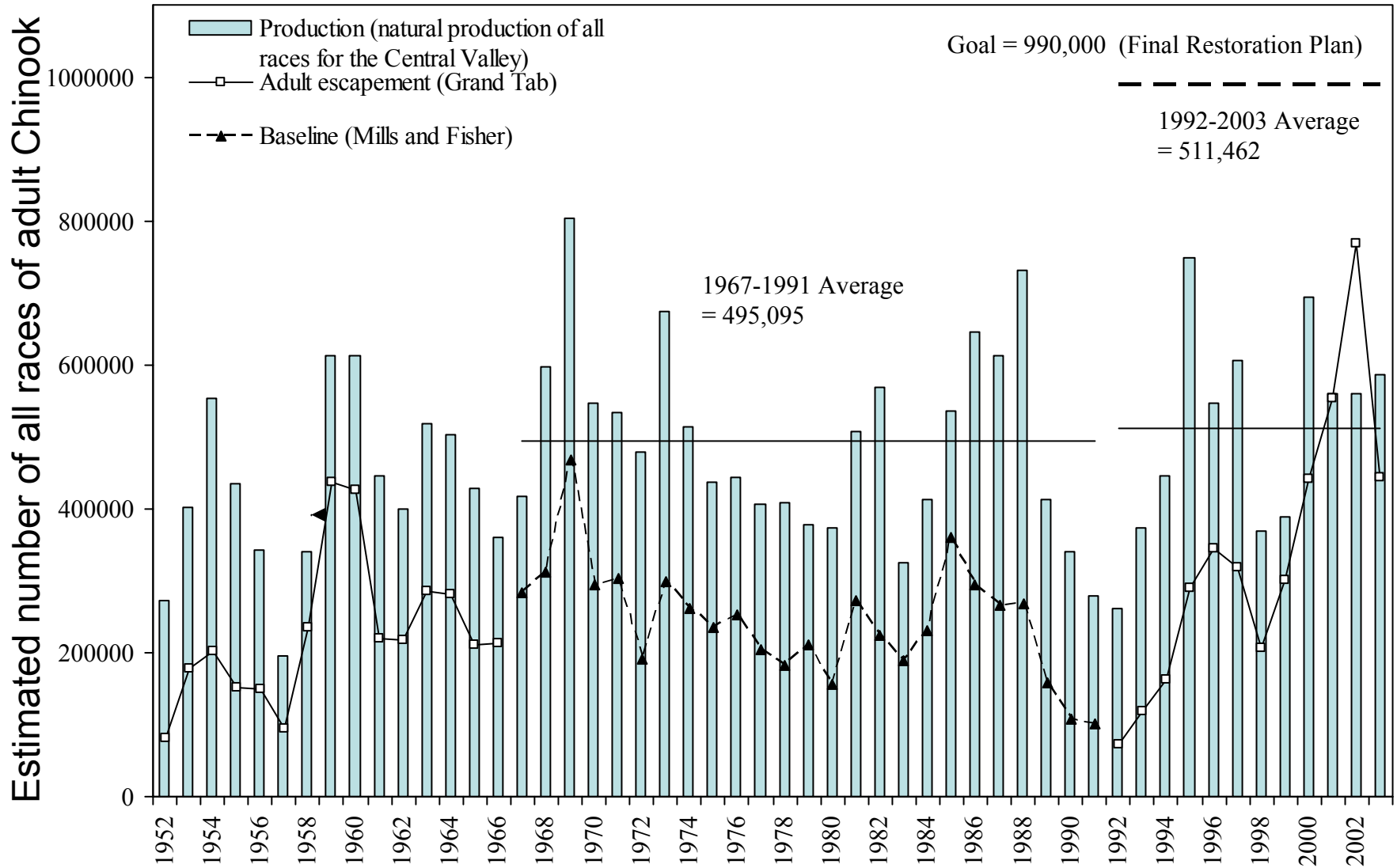
- Newman and Hankin produced a report for FWS: “Statistical procedures for defining and detecting the CVPIA natural Chinook salmon doubling goal” (Exhibit 17, Attachment 2, I.)
- This report substantiates the complexities and challenges in measuring and determining doubling and sustainability.



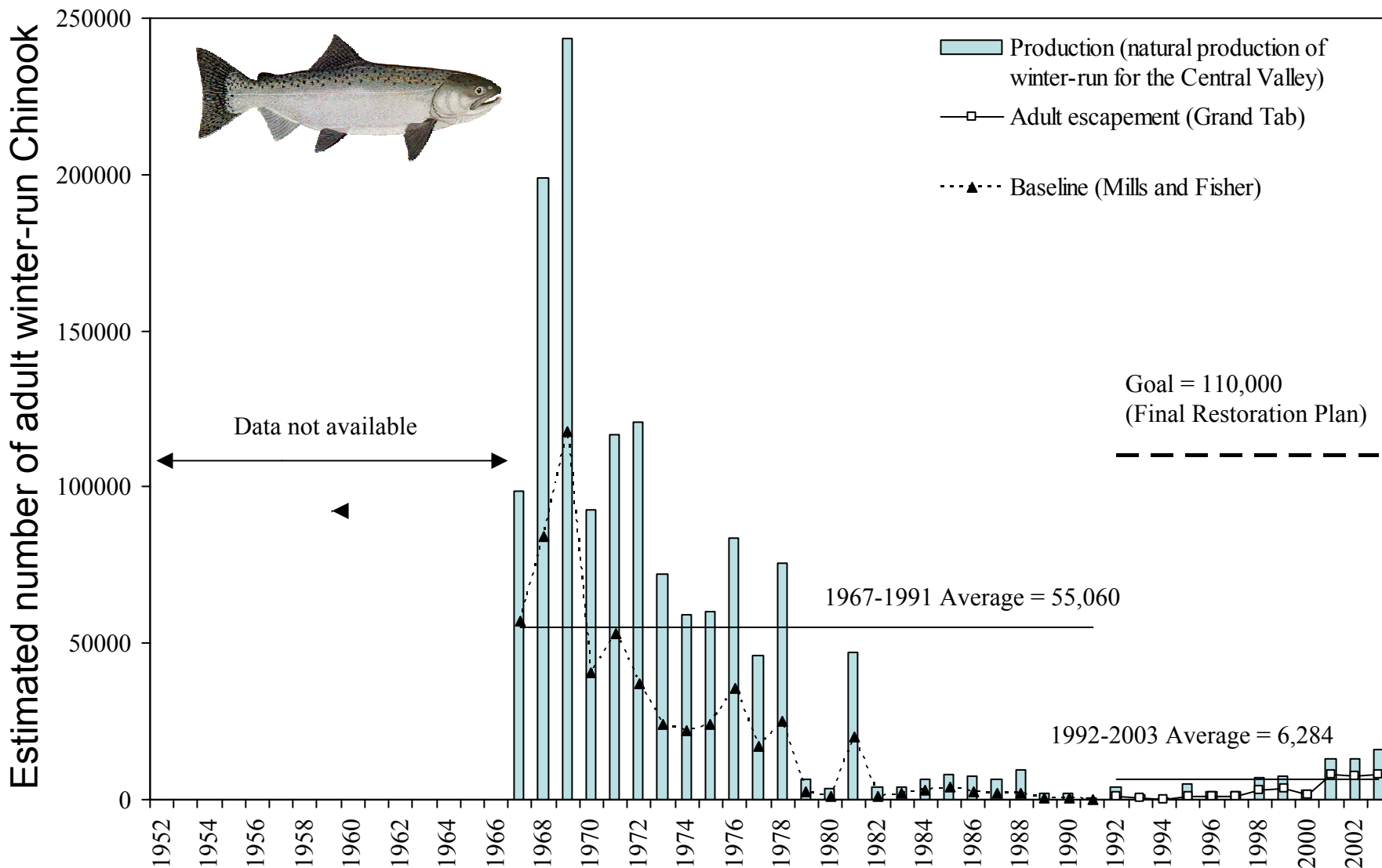
AFRP Plan

- The next few slides represent some of the data collected to date that AFRP is beginning to evaluate (Exhibit 17, Attachment 2, K.), and illustrate the data's complexity.
- The AFRP includes restoration goals for winter-run Chinook salmon, spring-run Chinook salmon, late fall-run Chinook salmon, fall-run Chinook salmon, and steelhead.

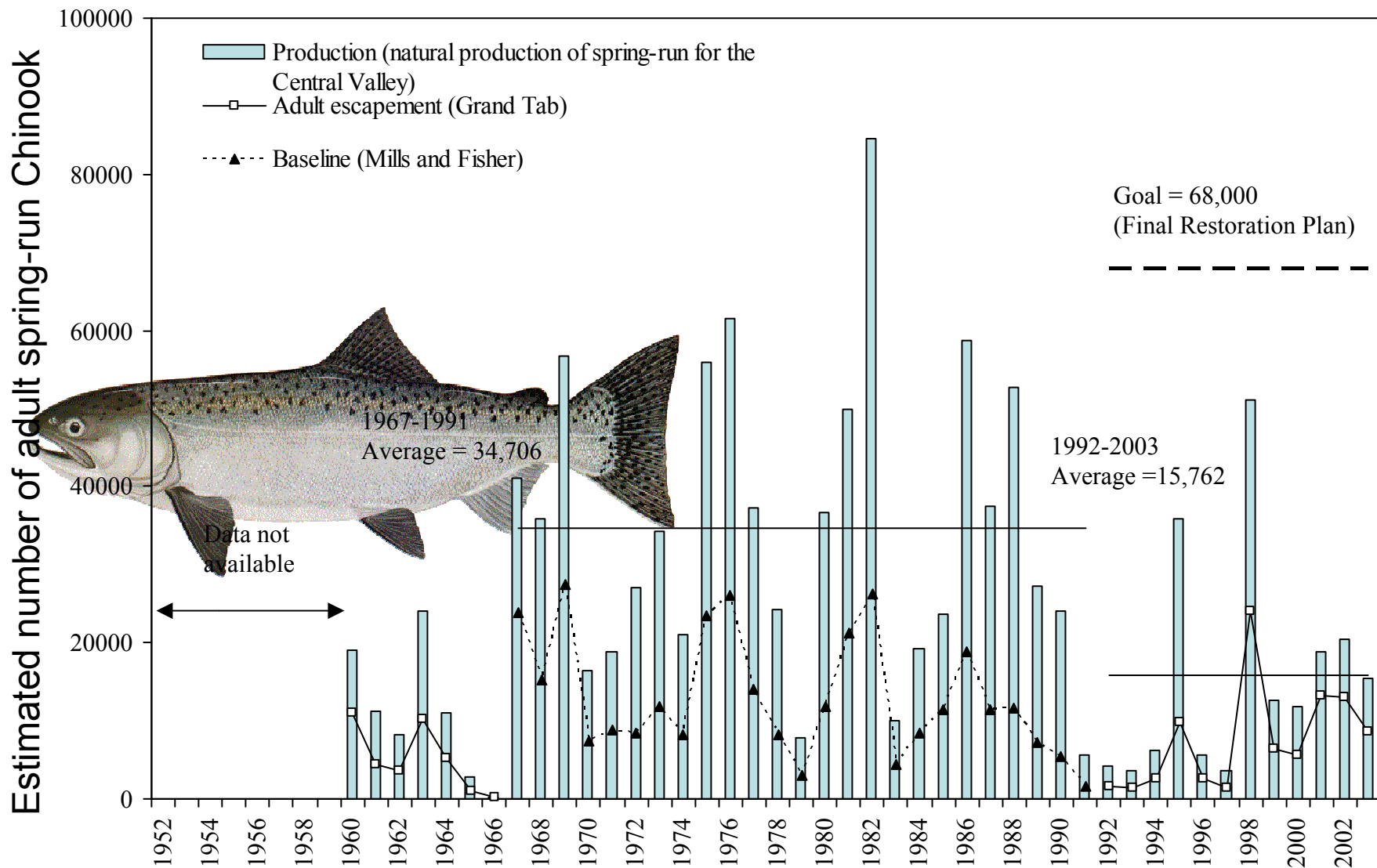
All Runs – Central Valley Wide



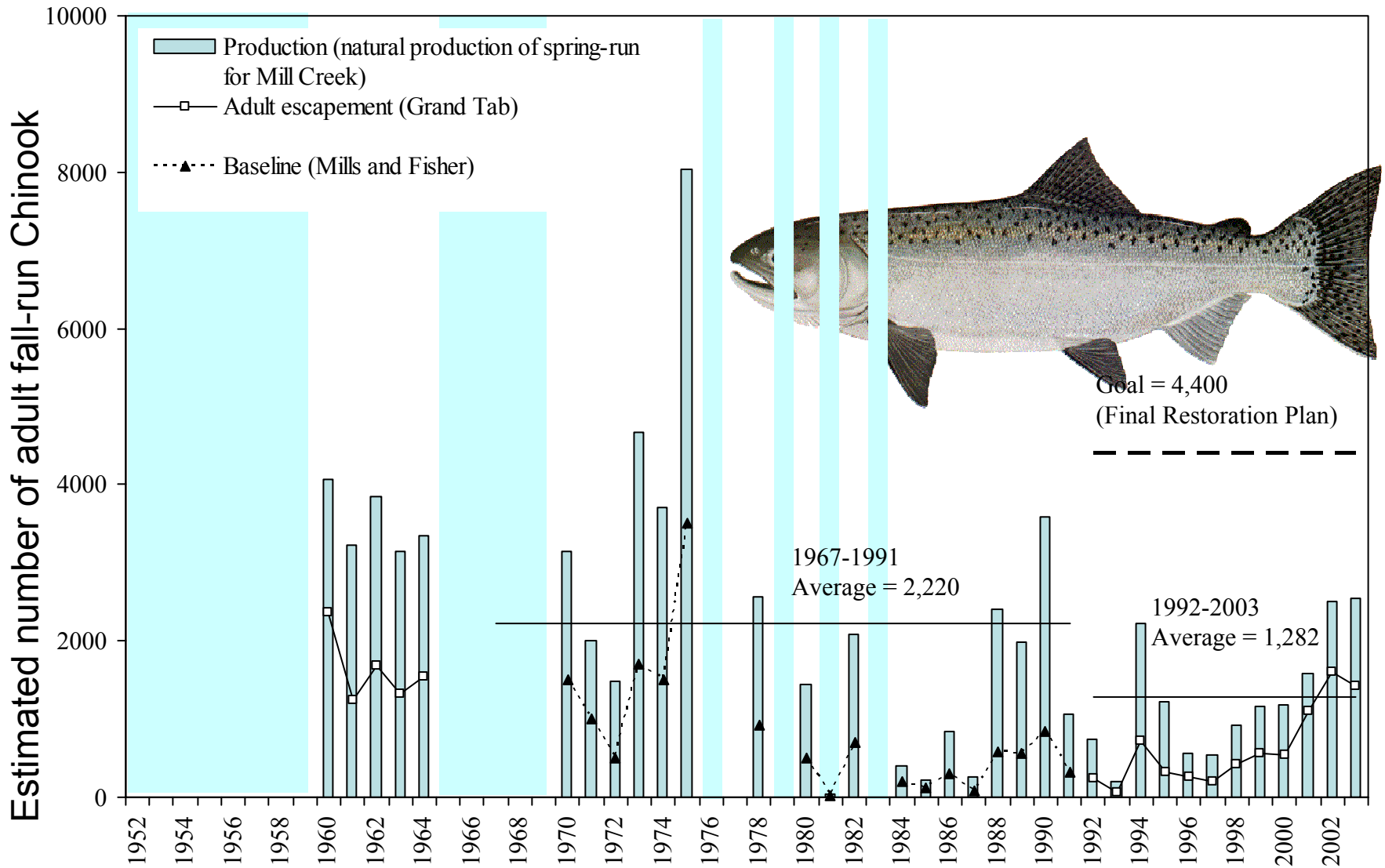
Winter Run – Central Valley Wide



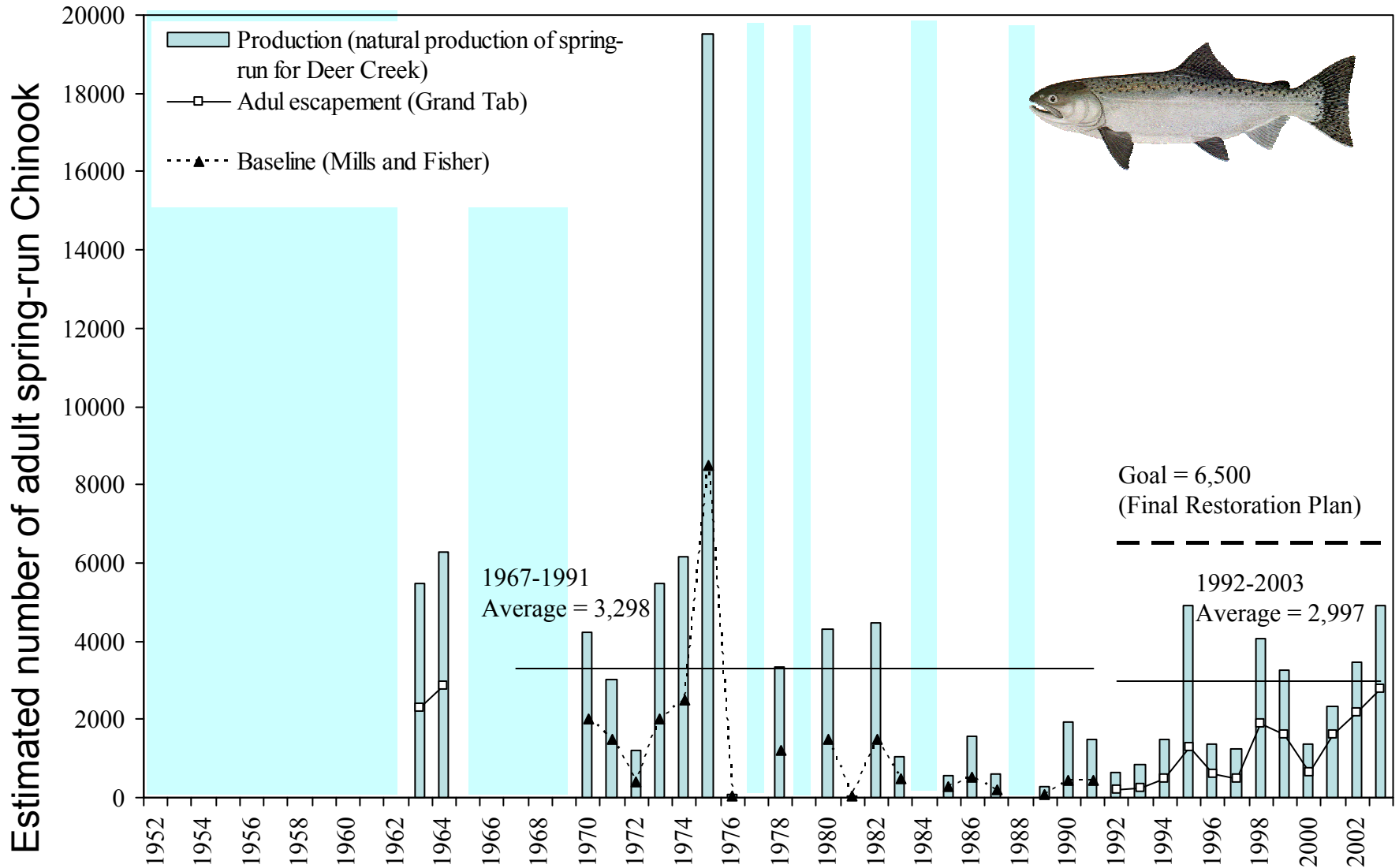
Spring Run – Central Valley Wide



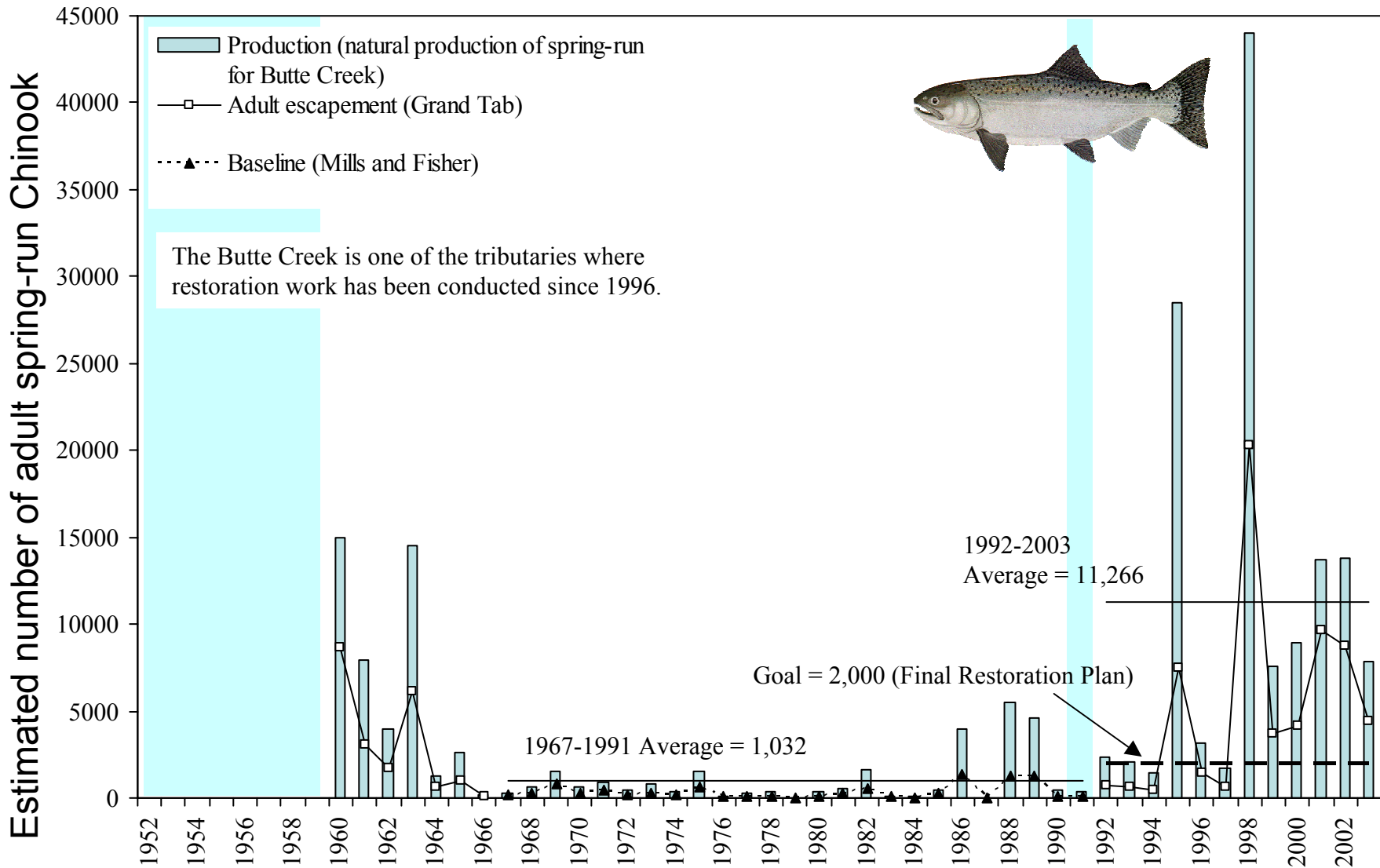
Spring Run – Mill Creek



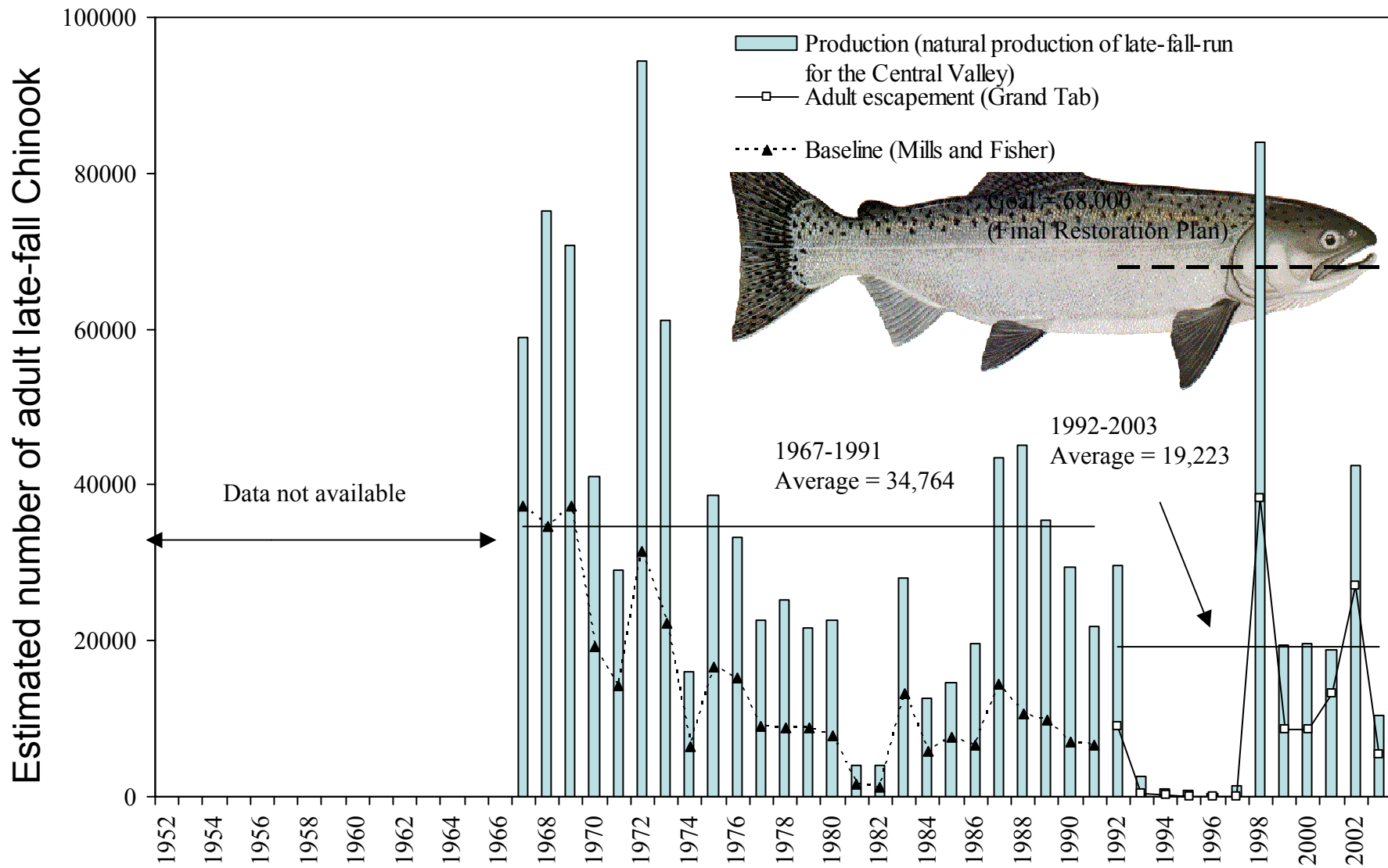
Spring Run – Deer Creek



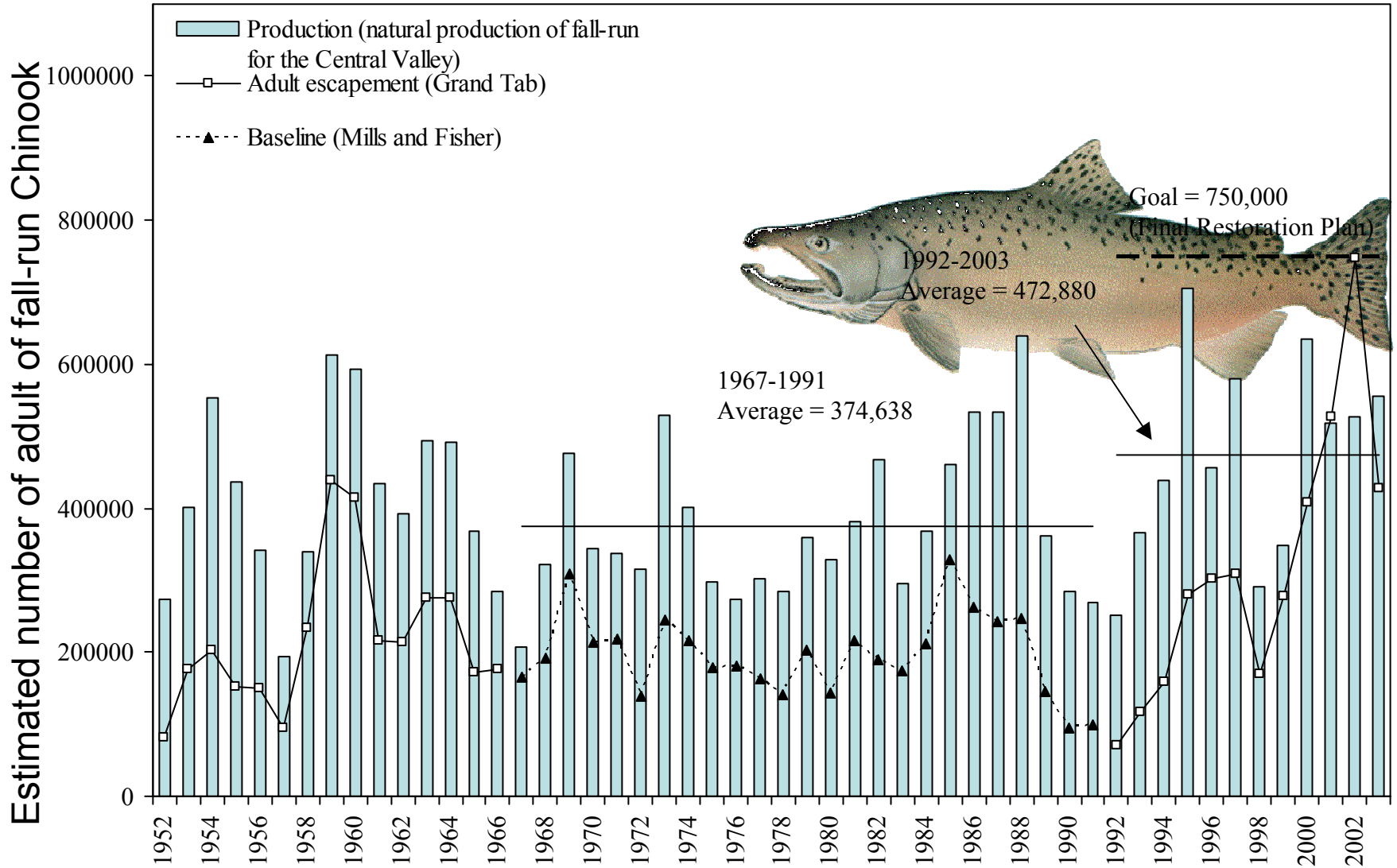
Spring Run – Butte Creek



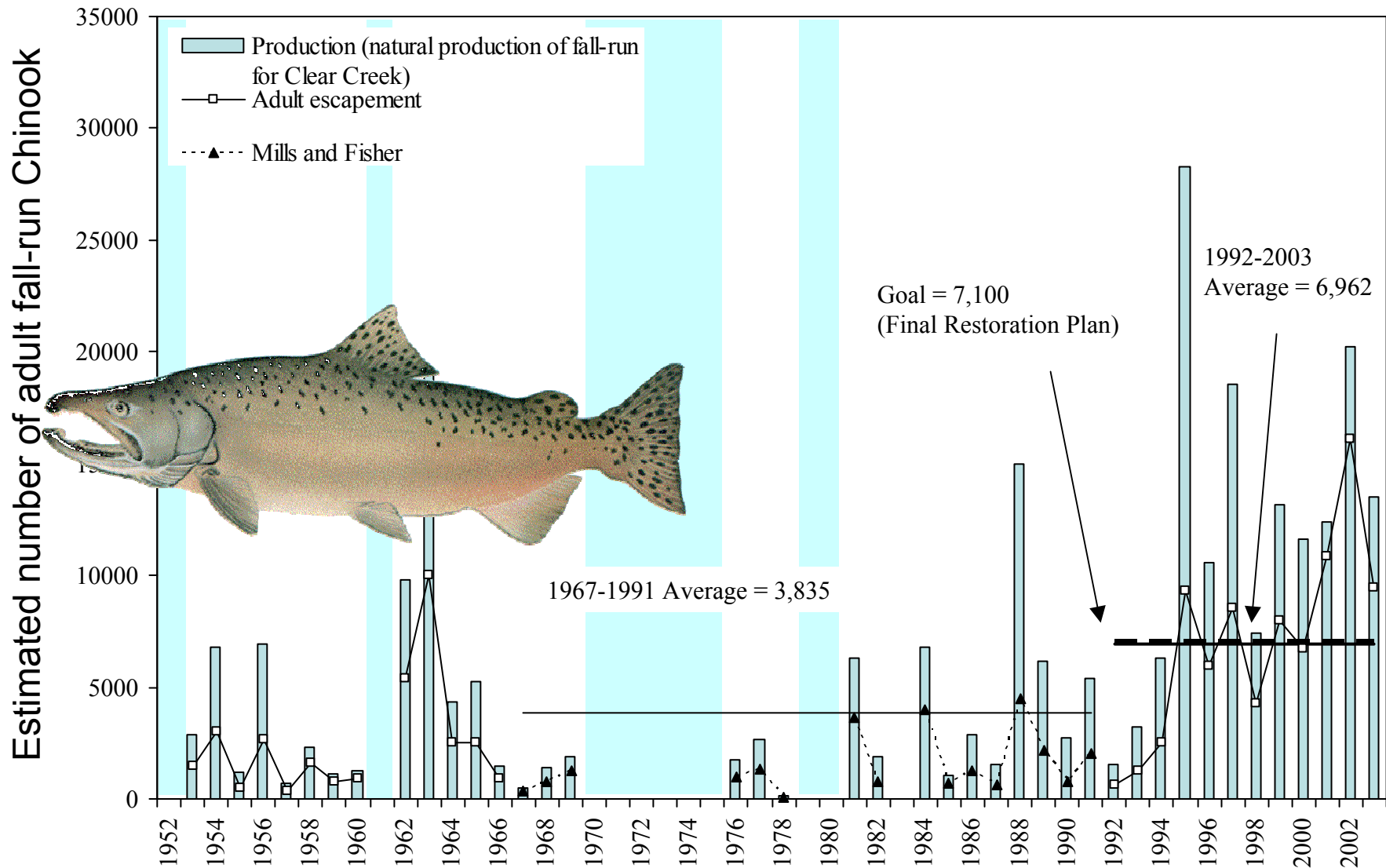
Late-Fall Run – Central Valley Wide



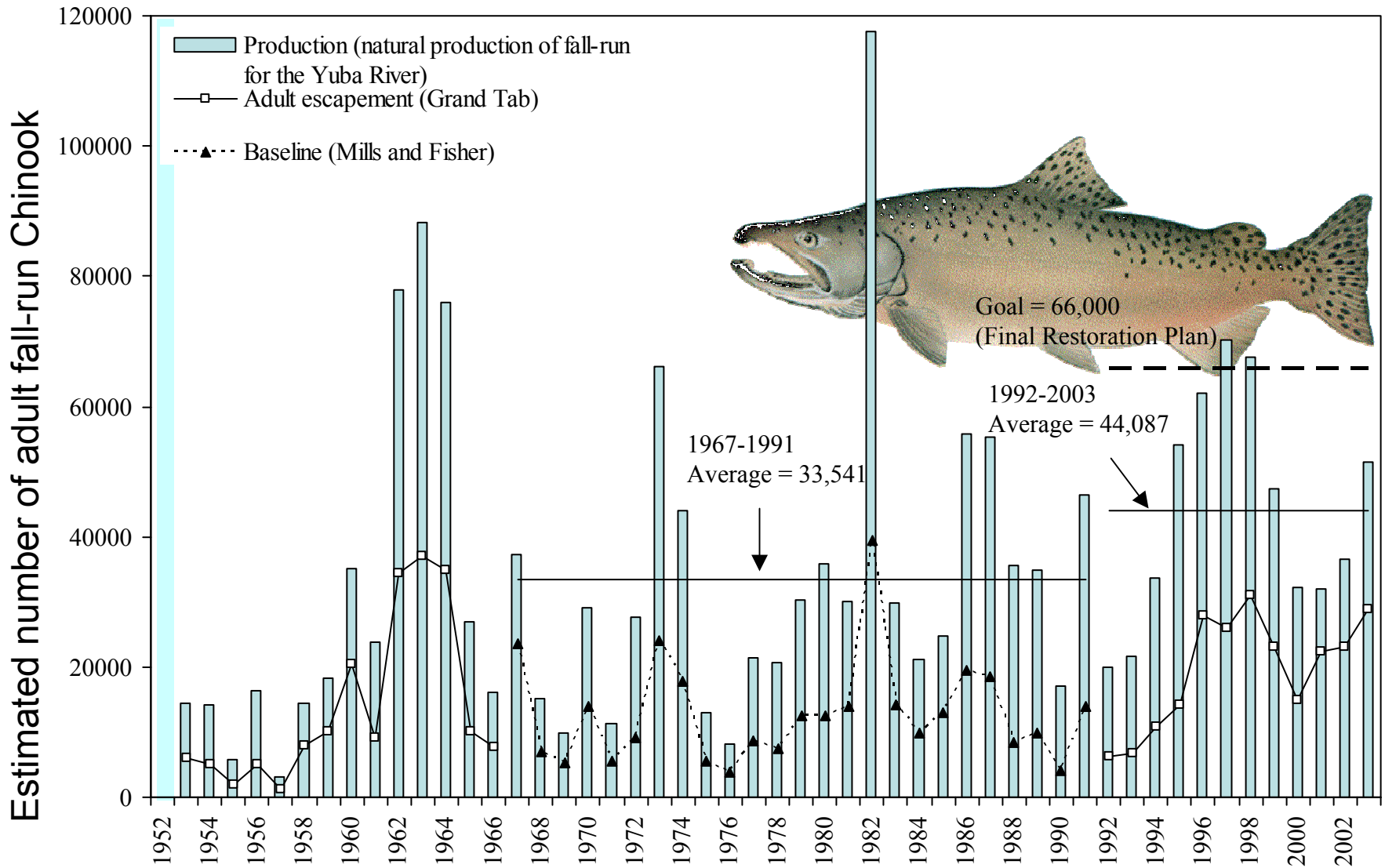
Fall Run – Central Valley Wide



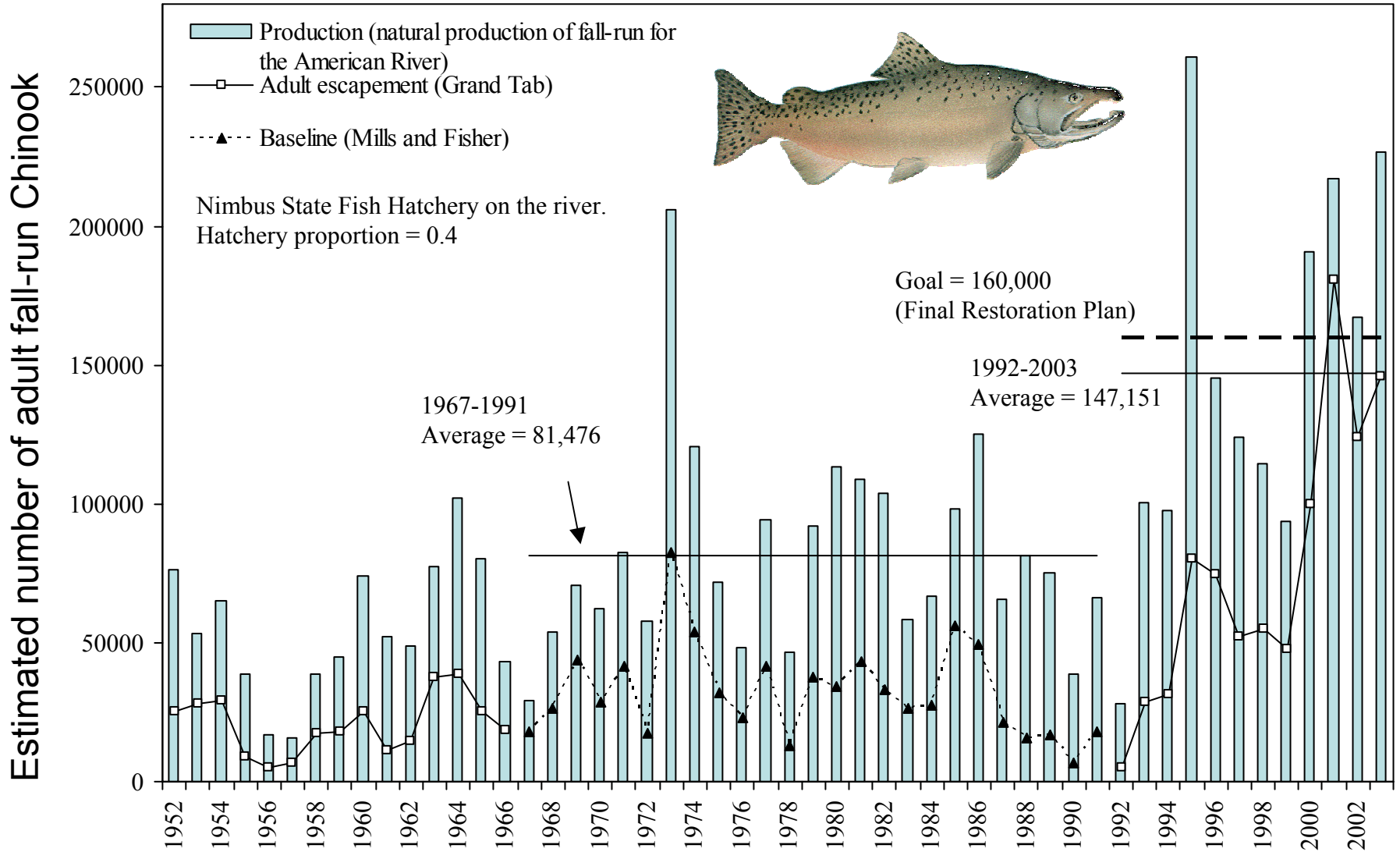
Fall Run – Clear Creek



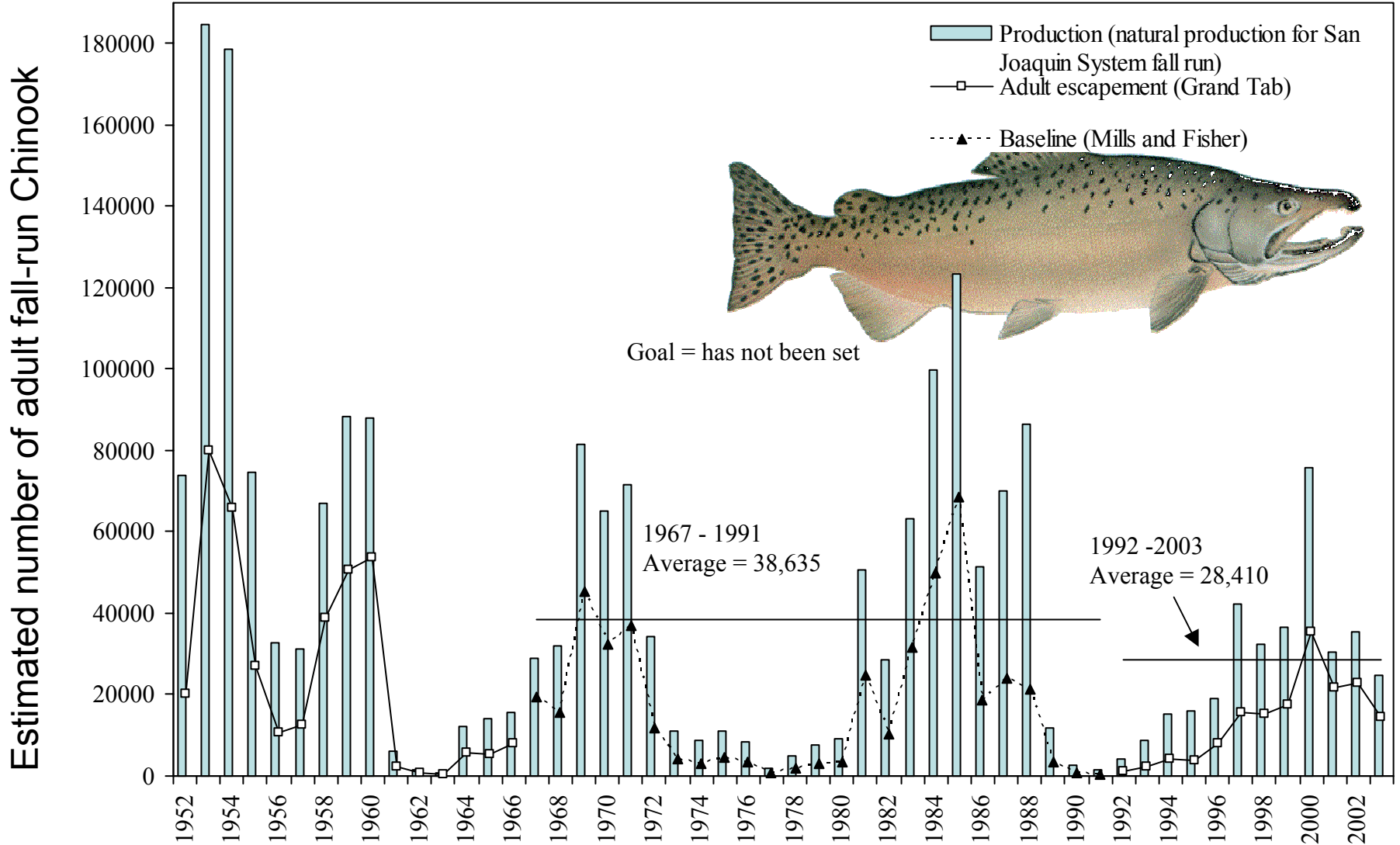
Fall Run – Yuba River



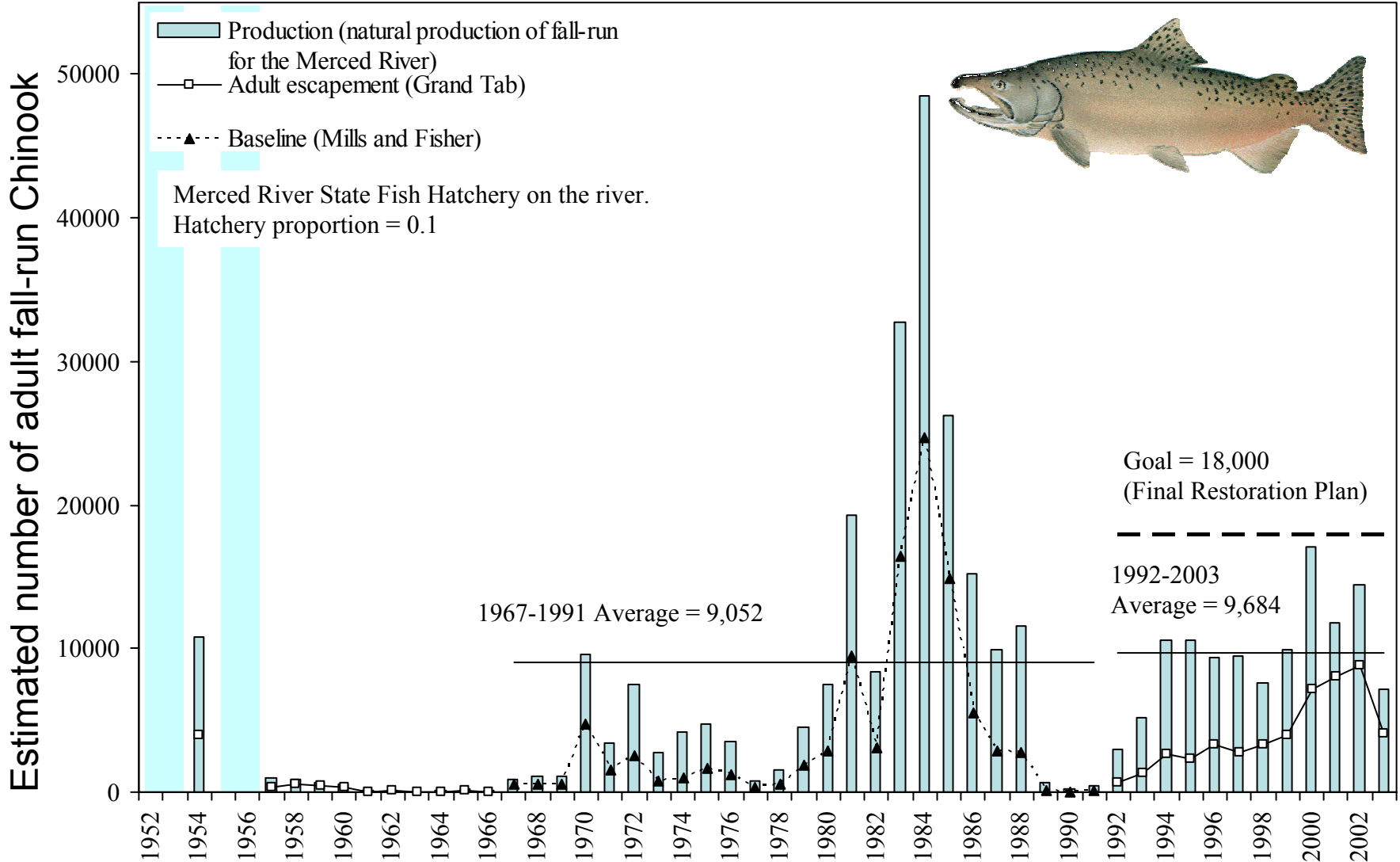
Fall Run – American River



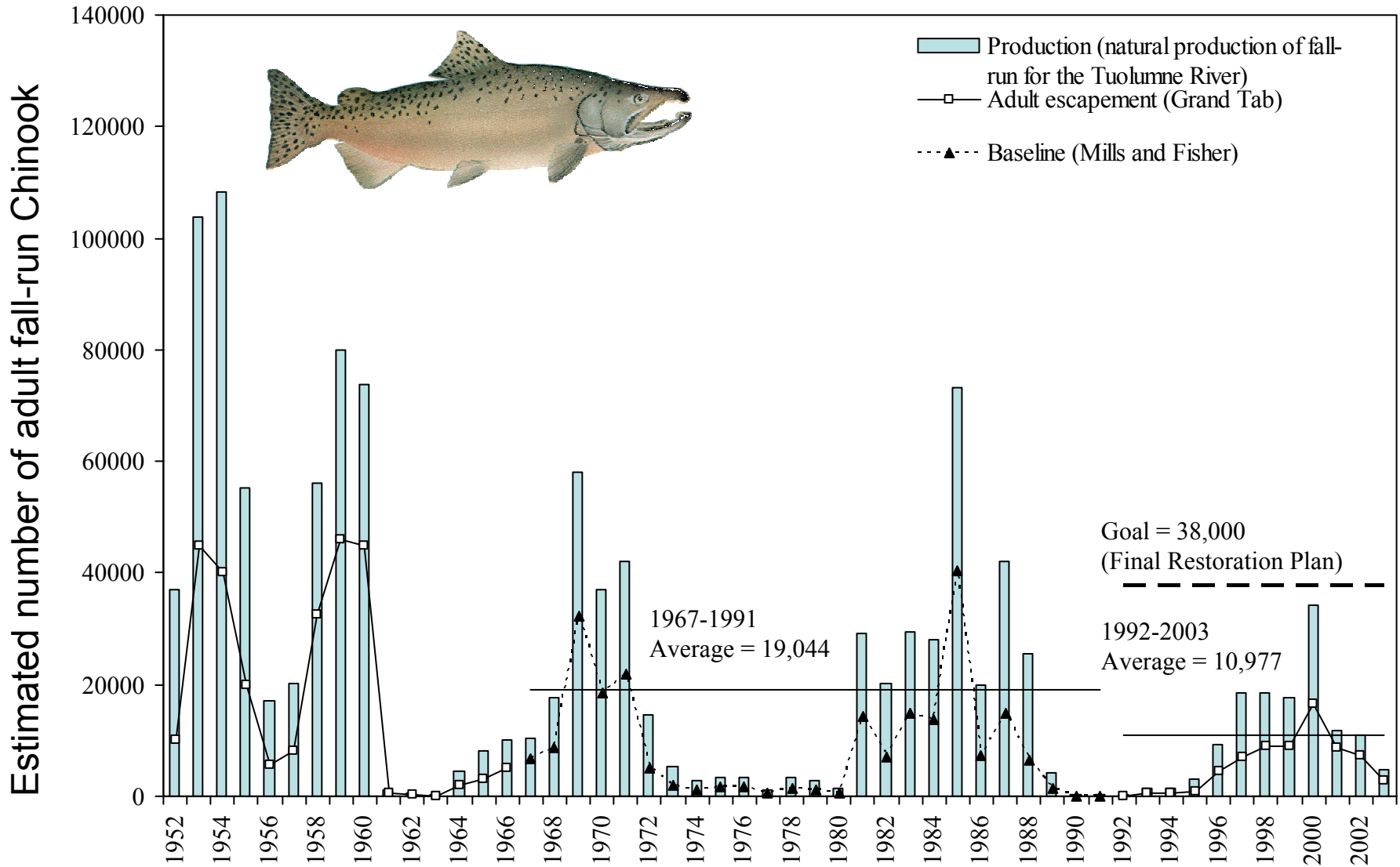
Fall Run – San Joaquin Basin



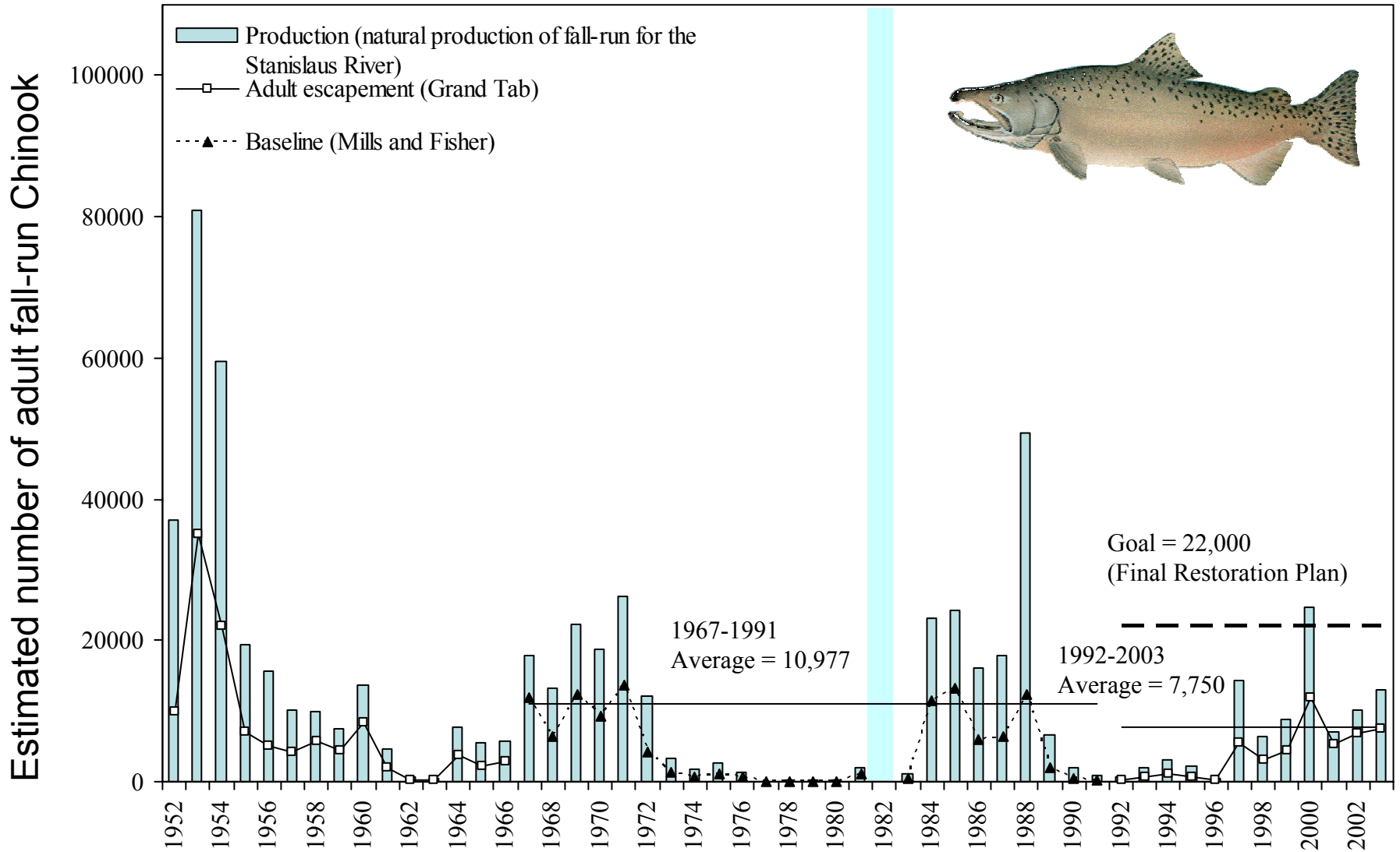
Fall Run – Merced River



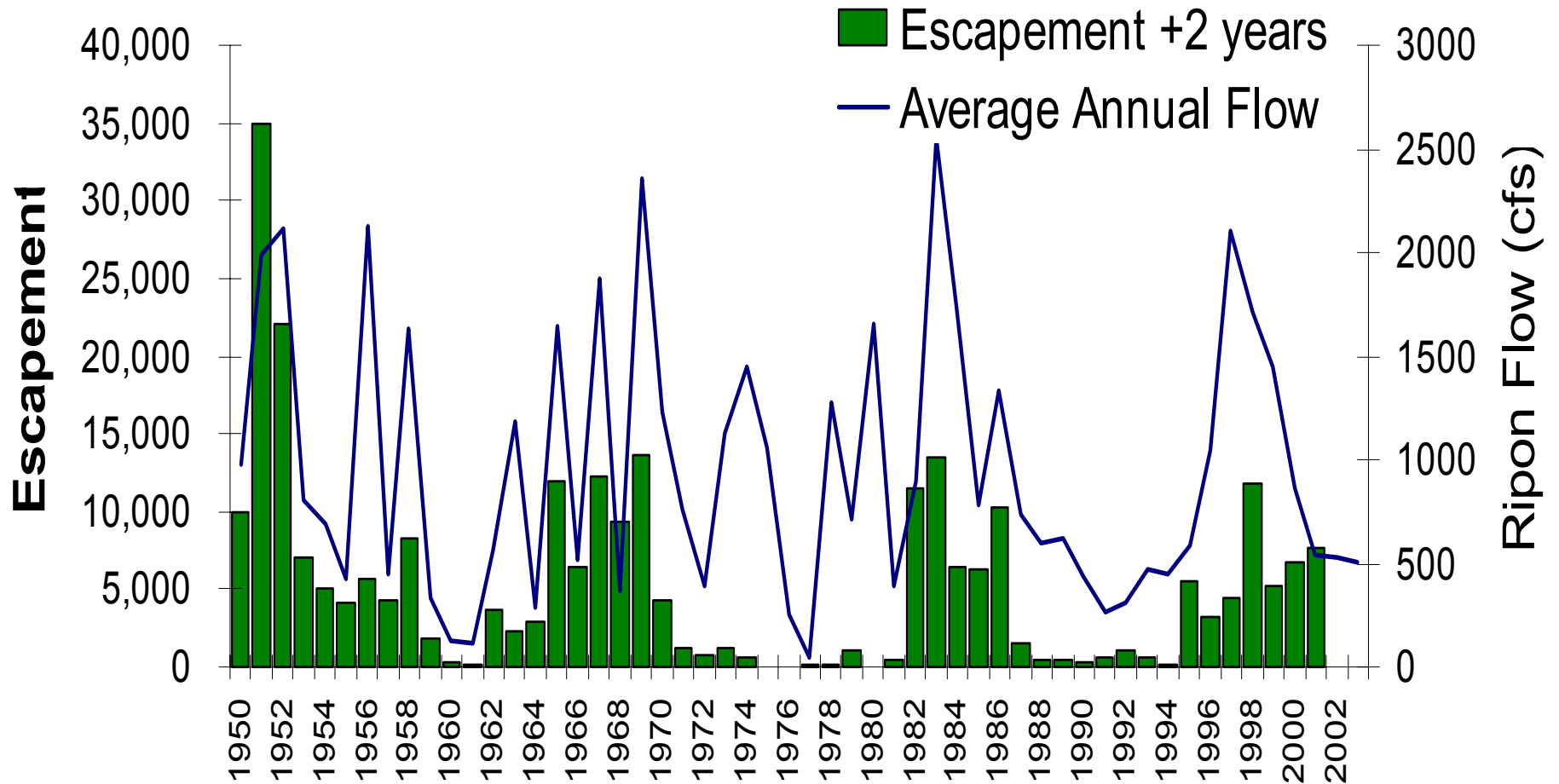
Fall Run – Tuolumne River



Fall Run – Stanislaus River

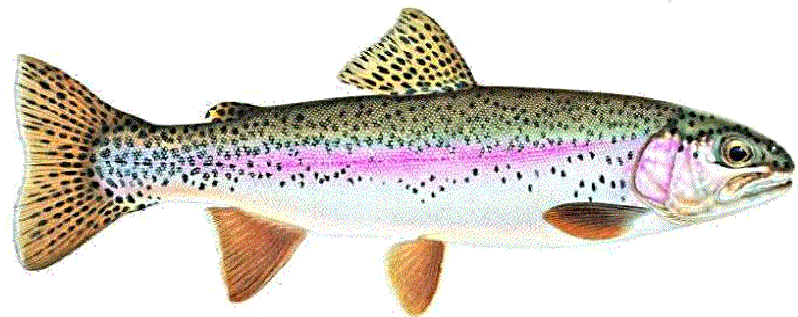


Stanislaus River Fall Run Escapement and Flow



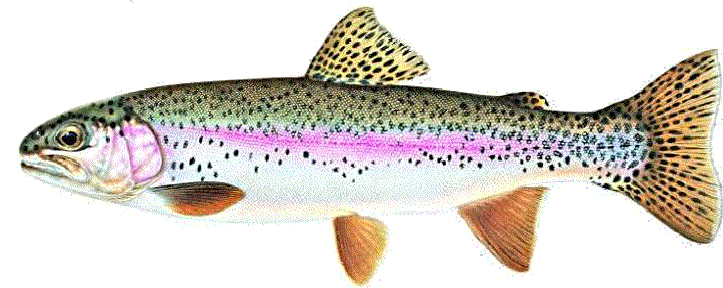
Steelhead

- Distribution and timing is poorly understood
- Limited data indicate migration during winter and spring
- Upstream rearing 1+ years

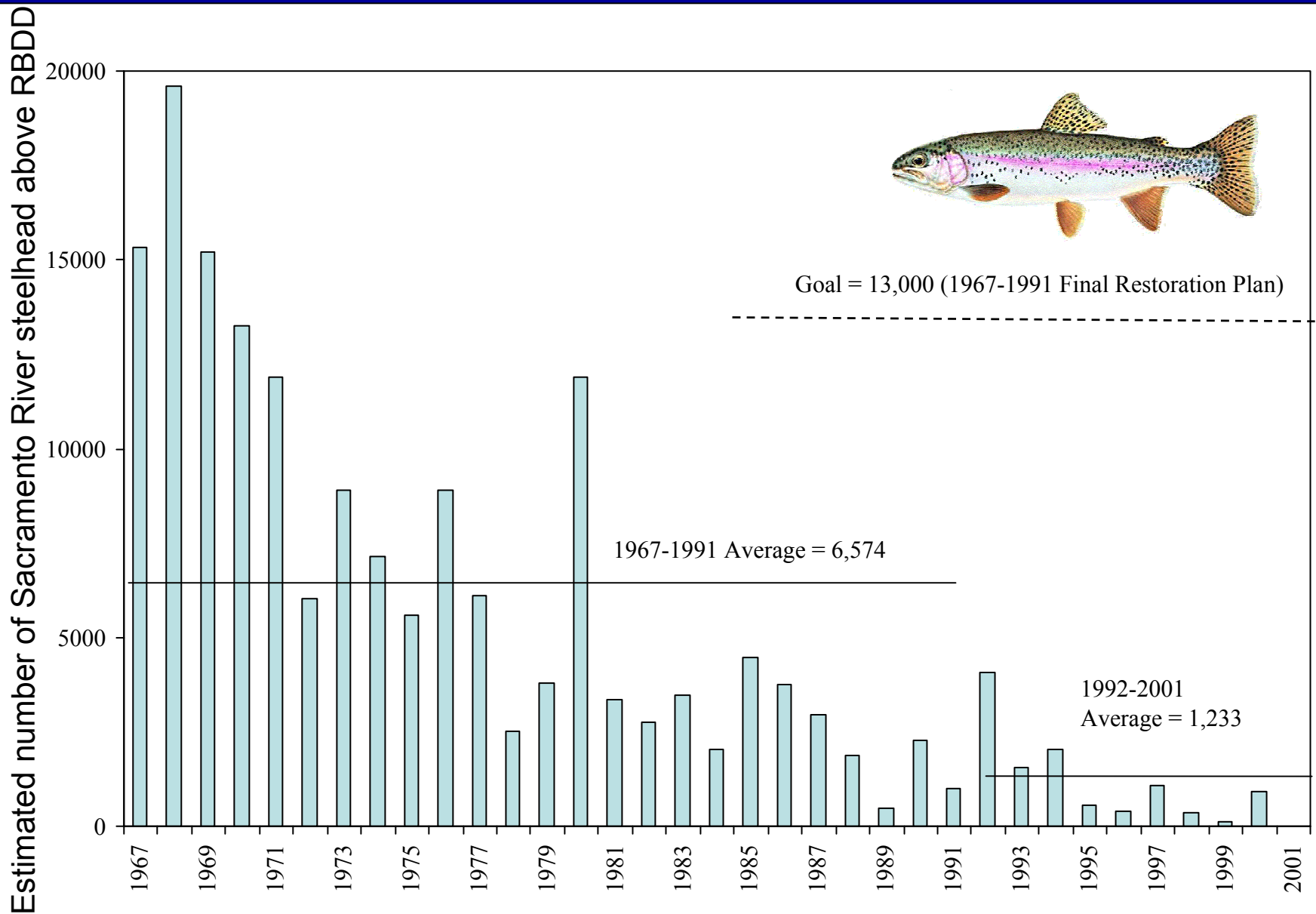


Steelhead

- Cool water through the summer is necessary
- WQCP must consider effects of Delta actions on upstream temperatures.



Steelhead – Sacramento River





AFRP Activities

- Due to the very complex data and the challenges described above, AFRP believes an interactive and collaborative process is necessary.
- The AFRP is currently working with others and the CalFed Science Program to convene a salmonid workshop in the summer of 2005.



AFRP Activities

The salmonid workshop will:

- Address status and trends of salmonid populations in Central Valley rivers and streams
- Assess metrics to address population changes relative to habitat (e.g., measure doubling and sustainability)

AFRP Preliminary Findings

- Restoration activities are progressing well on many Central Valley streams in collaboration with other CVPIA programs, CalFed, and other partners.
- However, restoration activities are not progressing well on several streams.
- Consequently, assistance from the SWRCB in the collaborative process may be required to achieve salmon doubling goals.

Interior's Recommendations Regarding Narrative Salmon Doubling Objective

In summary, DOI recommends no changes to the WQCP salmon narrative at this time.

DOI recommends that the salmon narrative be addressed through an interactive and collaborative process among state and federal agencies (including the SWRCB) responsible for these very significant public trust resources.



Interior's Recommendations

1. FWS has addressed the goal of doubling production of Chinook Salmon in the Final AFRP Plan, January 2001 (Exhibit 17); this may be considered as a baseline for the collaborative process in determining accomplishments in meeting this objective.
2. Include in any actions that the SWRCB undertakes consideration of the specific protection needs of Central Valley steelhead, a federally listed species under Endangered Species Act jurisdiction.
3. Coordinate with state and federal agencies when either Delta or upstream actions, including determination of flow and water quality objectives to address Chinook salmon doubling, are undertaken by SWRCB regarding the WQCP so that actions meet overall goals and do not conflict with one another.
4. Consider in any other actions that come before the SWRCB the overall goal of doubling of Chinook Salmon.
5. Provide the coordination and assistance required to improve water quality and biological monitoring and mitigation for anadromous fish populations in the Sacramento-San Joaquin and Bay-Delta watersheds.

