

Figure 1. Estimated yearly natural production and in-river escapement of all races of adult Chinook Salmon in the Central Valley rivers and streams. 1952 - 1966 and 1992 - 2007 numbers are calculated in CHINOOKPROD using CDFG Grand Tab in-river escapement data (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

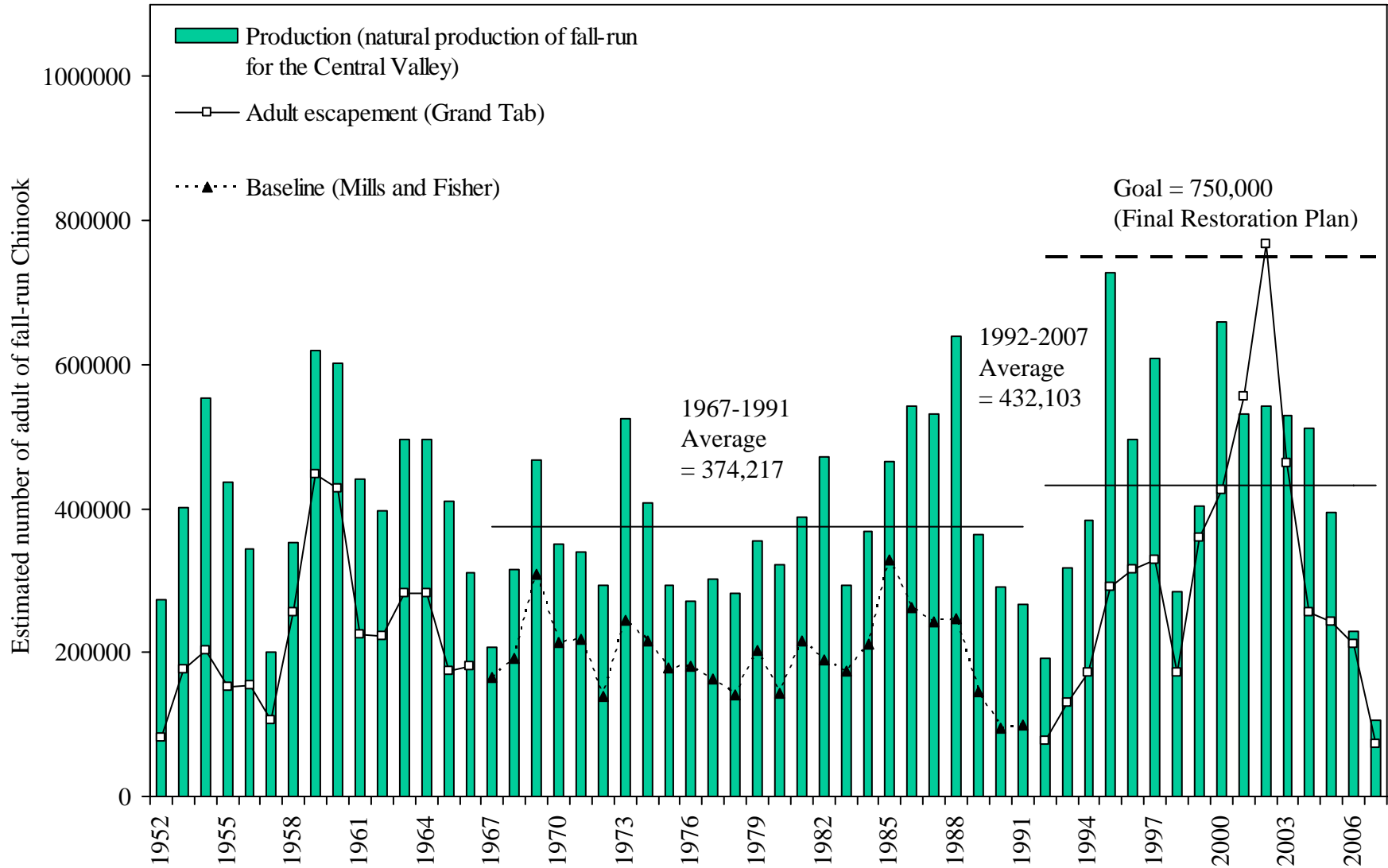


Figure 2. Estimated yearly natural production and in-river escapement of adult fall-run Chinook salmon in the Central Valley rivers and streams. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

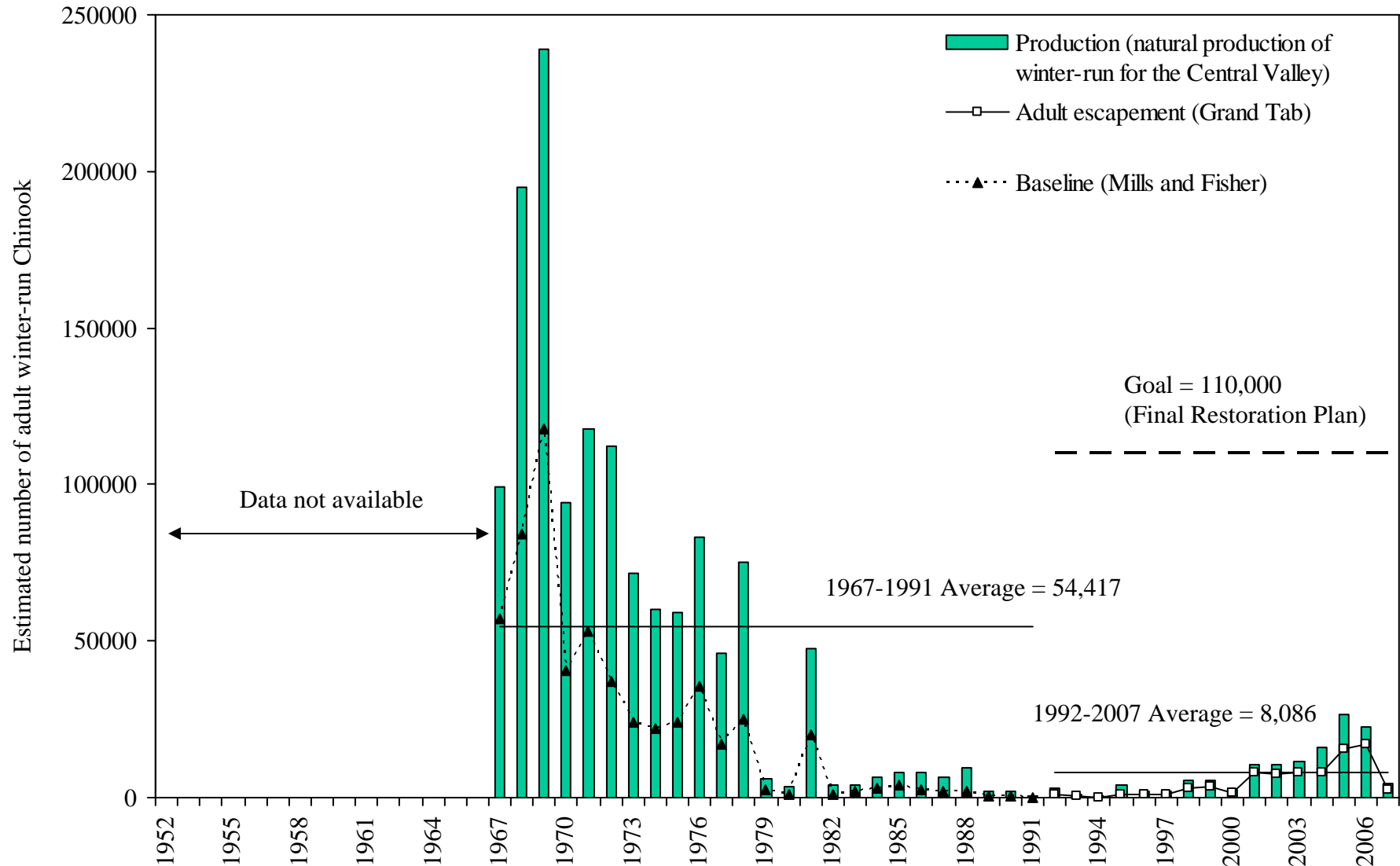


Figure 3. Estimated yearly adult natural production, and in river adult escapements of winter-run Chinook salmon in the Central Valley rivers and streams. 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967-1991) are from Mills and Fisher (CDFG, 1994).

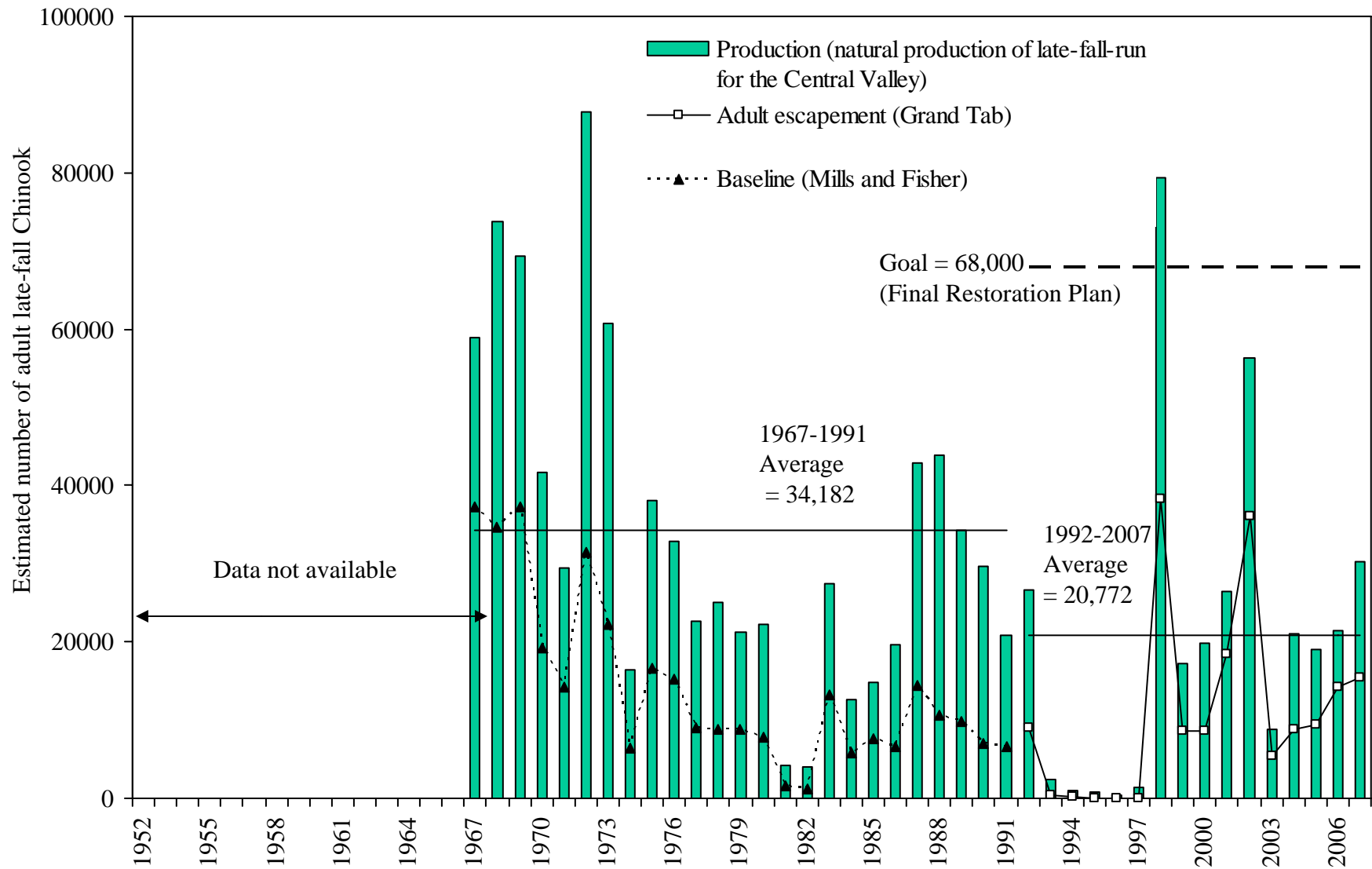


Figure 4. Estimated yearly adult natural production, and in-river adult escapements of late-fall-run Chinook salmon in the Central Valley rivers and streams. 1992 – 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

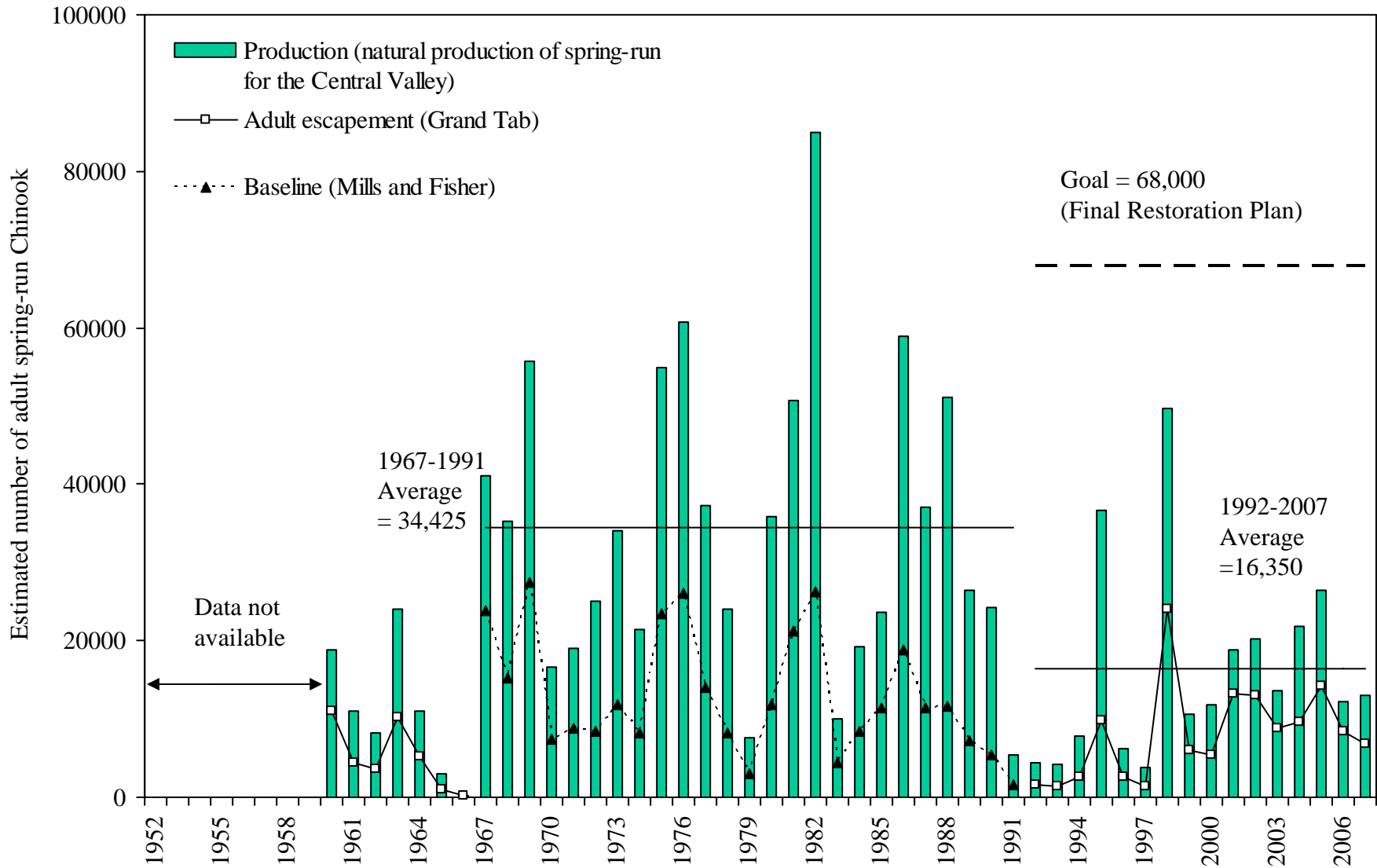


Figure 5. Estimated yearly adult natural production, and in-river adult escapements of spring-run Chinook salmon in the Central Valley rivers and streams. 1960 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

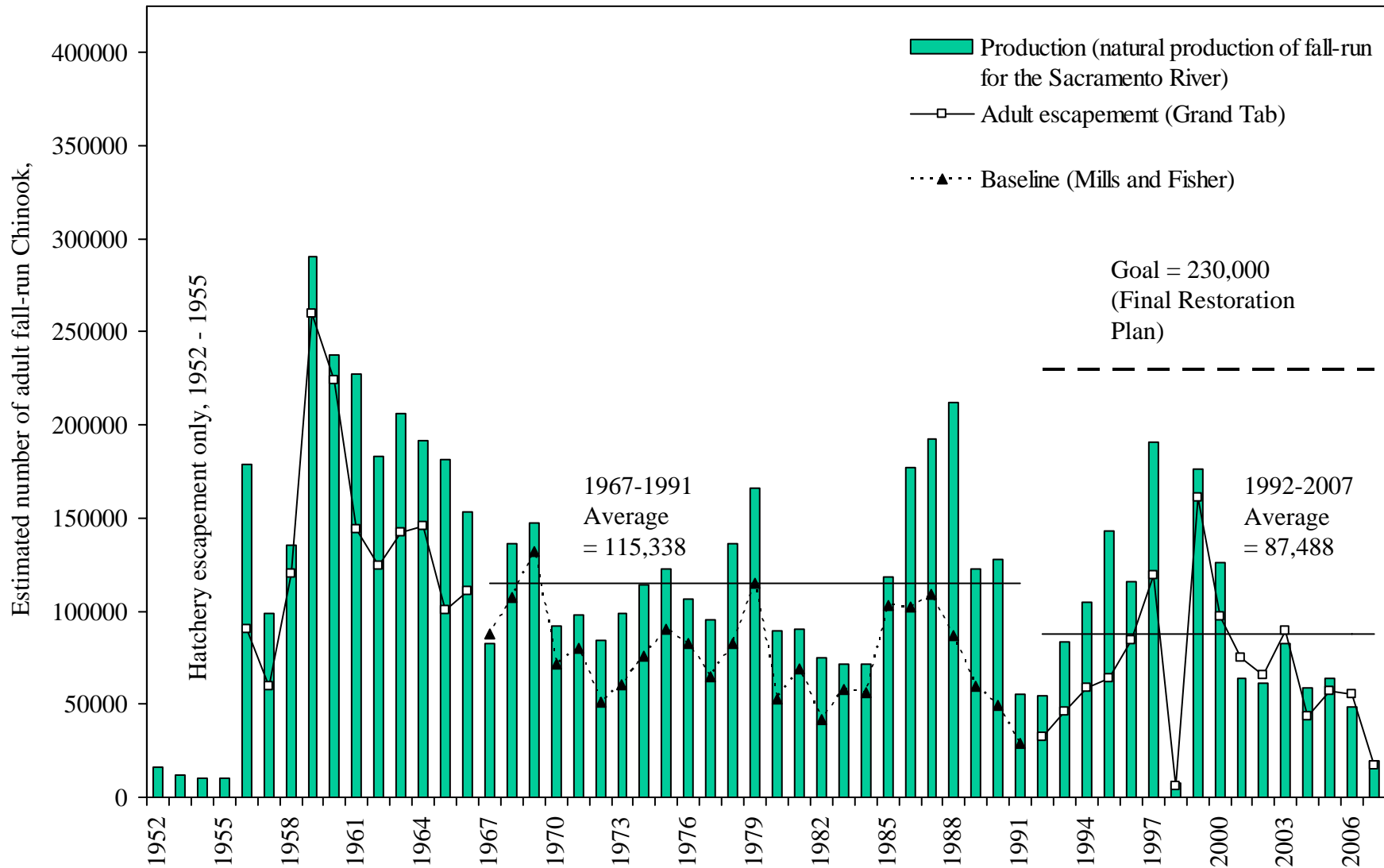


Figure 6. Estimated yearly adult natural production, and in-river adult escapements for the entire mainstem Sacramento River fall-run Chinook salmon. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

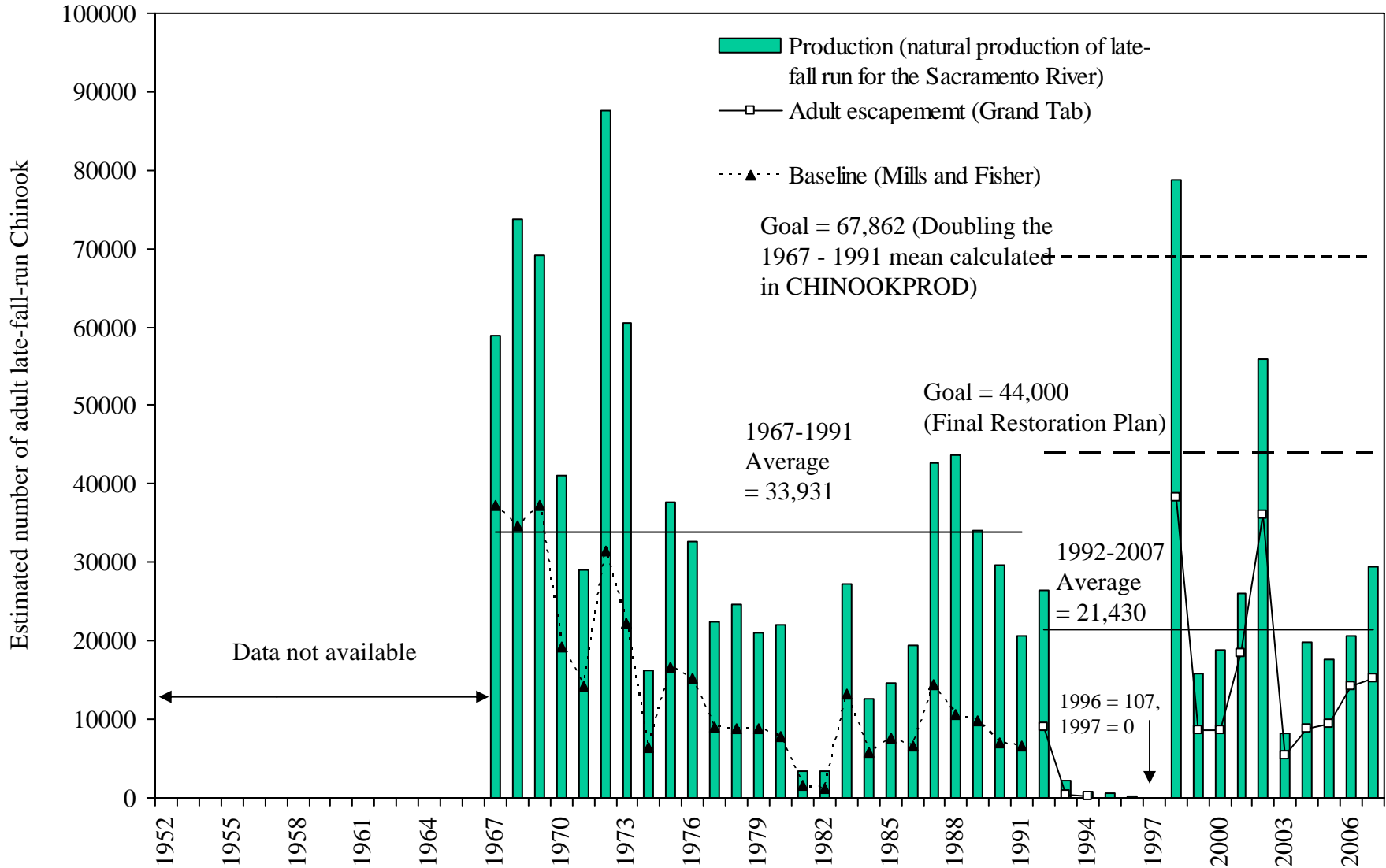


Figure 7. Estimated yearly adult natural production, and in-river adult escapements for above RBDD mainstem Sacramento River late-fall-run Chinook salmon. 1992 -2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 – 1991) are from Mills and Fisher (CDFG, 1994). Note that the doubling goal in the Final Restoration Plan is not double the 1967 – 1991 arithmetic mean as calculated in CHINOOKPROD.

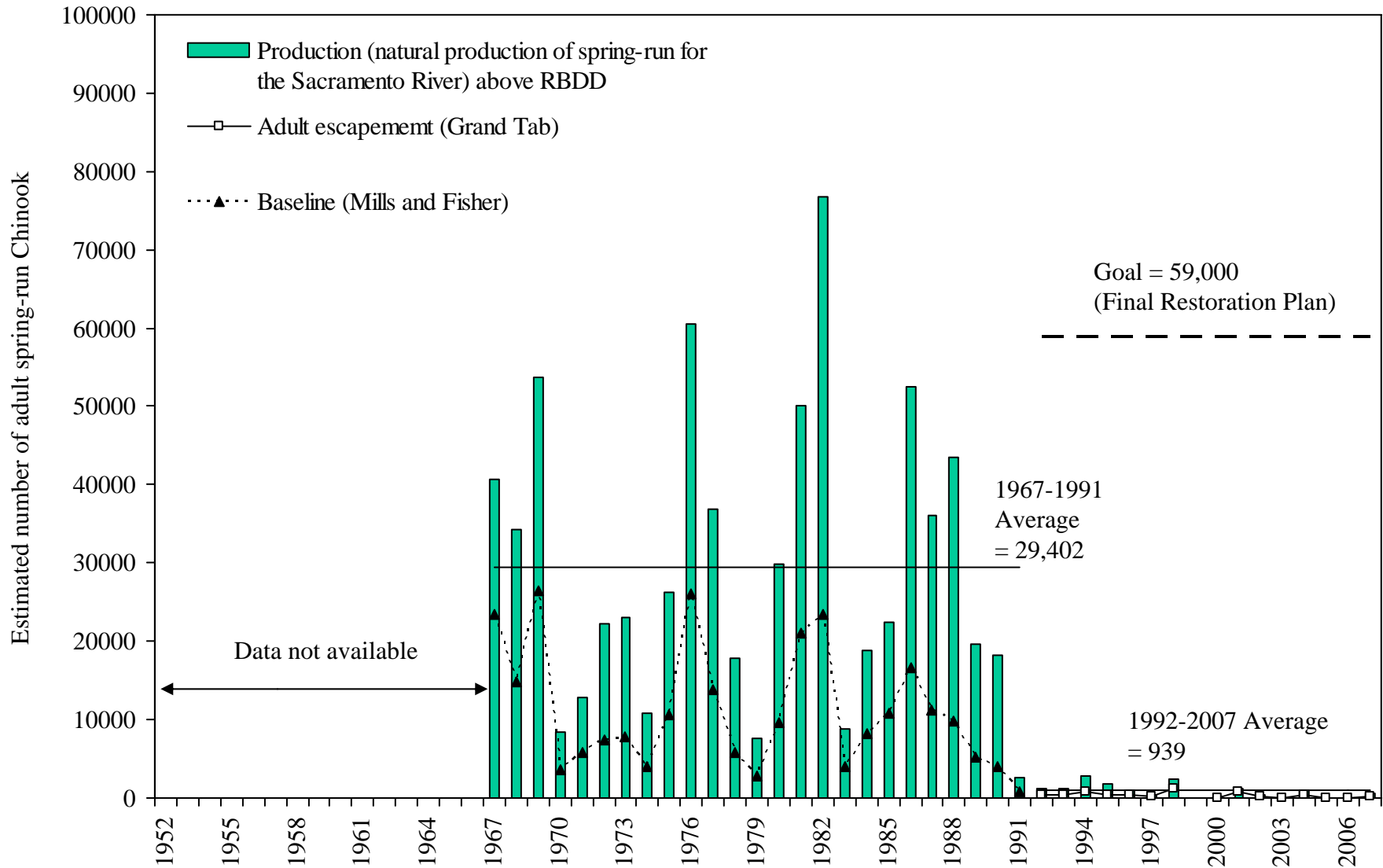


Figure 8. Estimated yearly adult natural production, and in river adult escapements for above RBDD mainstem Sacramento River spring-run Chinook salmon. 1992-2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

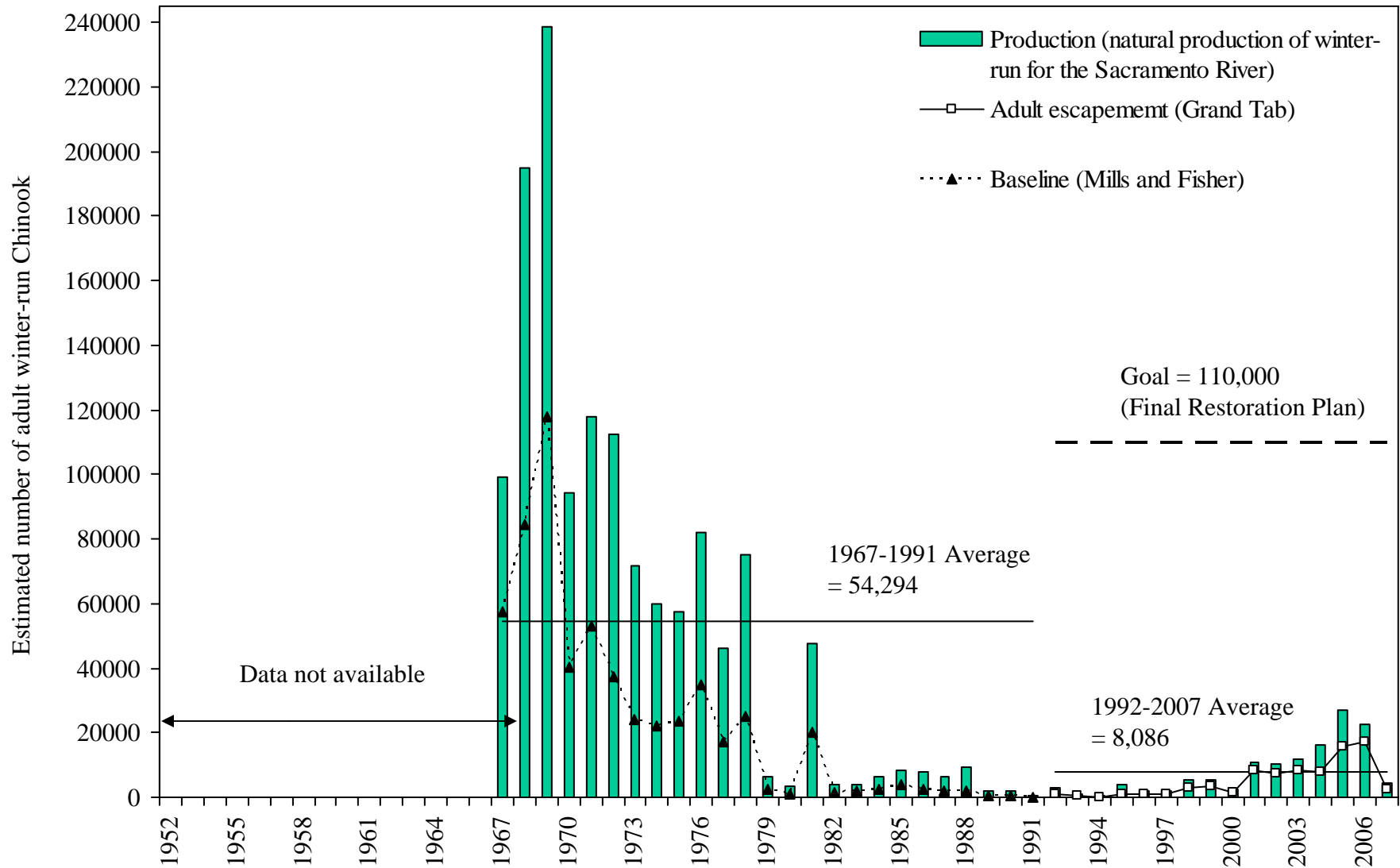


Figure 9. Estimated yearly adult natural production, and in river adult escapements for above RBDD mainstem Sacramento River winter-run Chinook salmon. 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

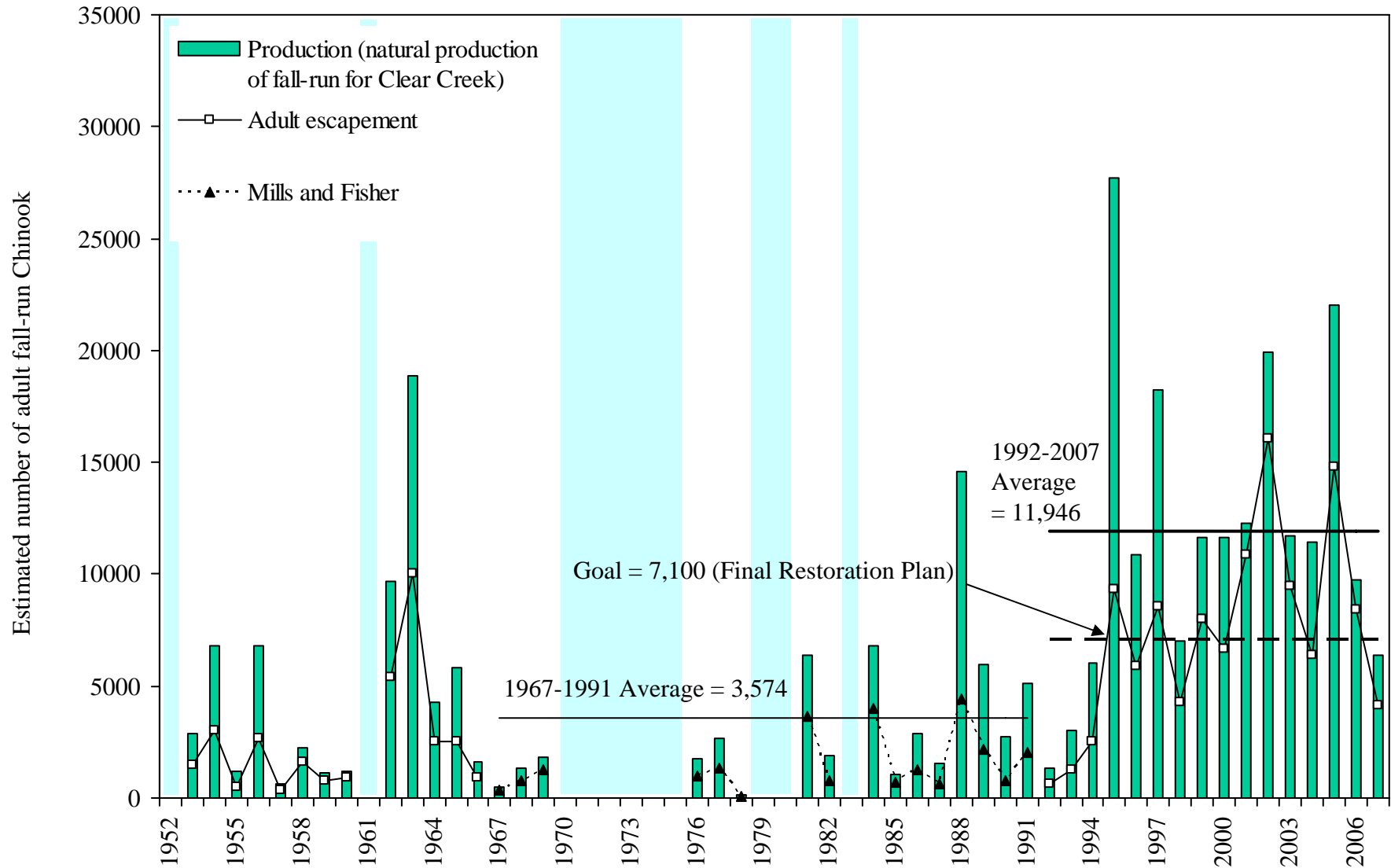


Figure 10. Estimated yearly adult natural production, and in river adult escapements of Clear Creek fall-run Chinook salmon.

□ = data was not available for 1952, 1961, 1970-1975, 1979 and 1980. 1953 – 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

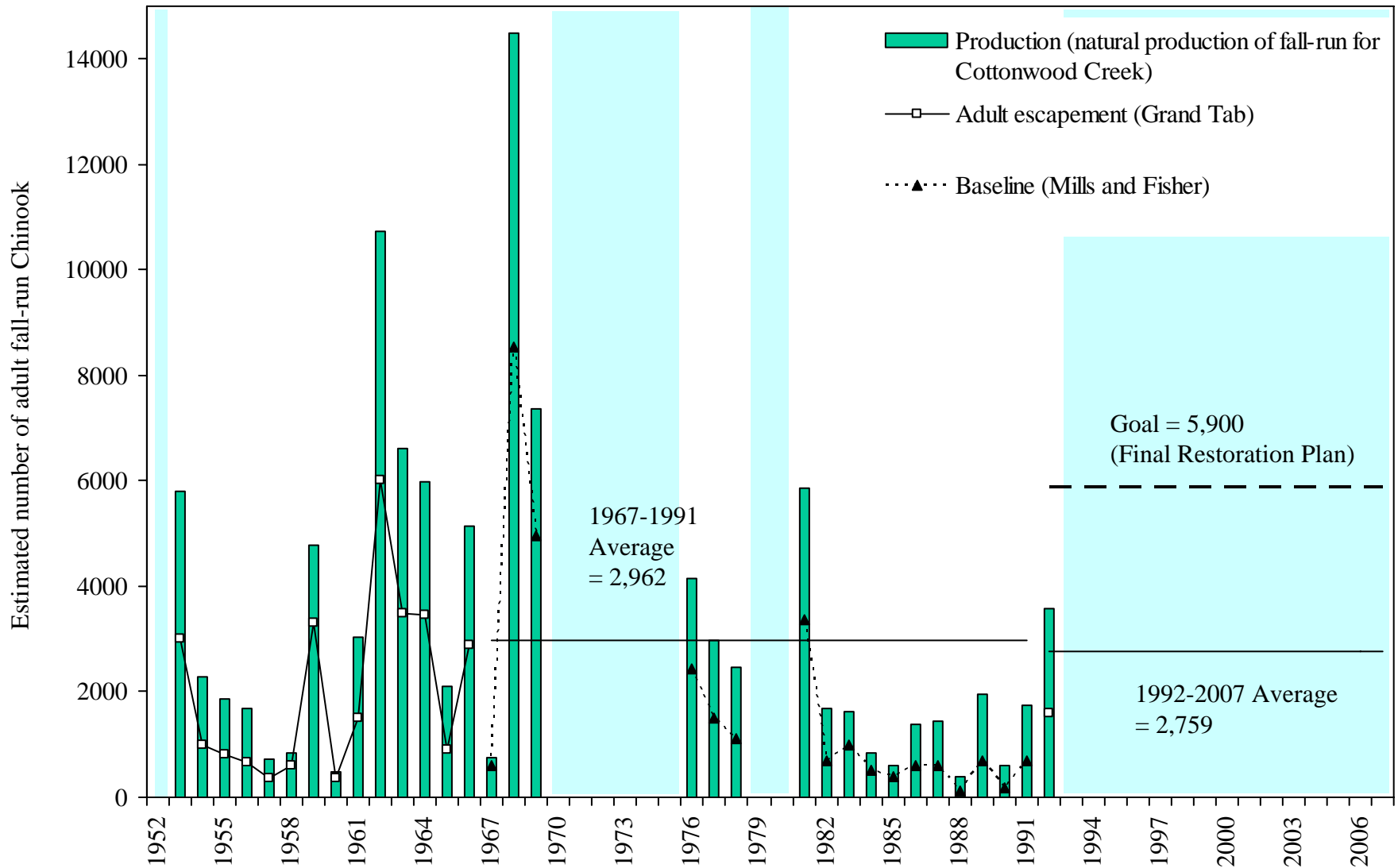


Figure 11. Estimated yearly adult natural production, and in river adult escapements of Cottonwood Creek fall-run Chinook salmon.
 = data was not available for 1952, 1970 - 1975, 1979 - 1980 and 1993 - 2005. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

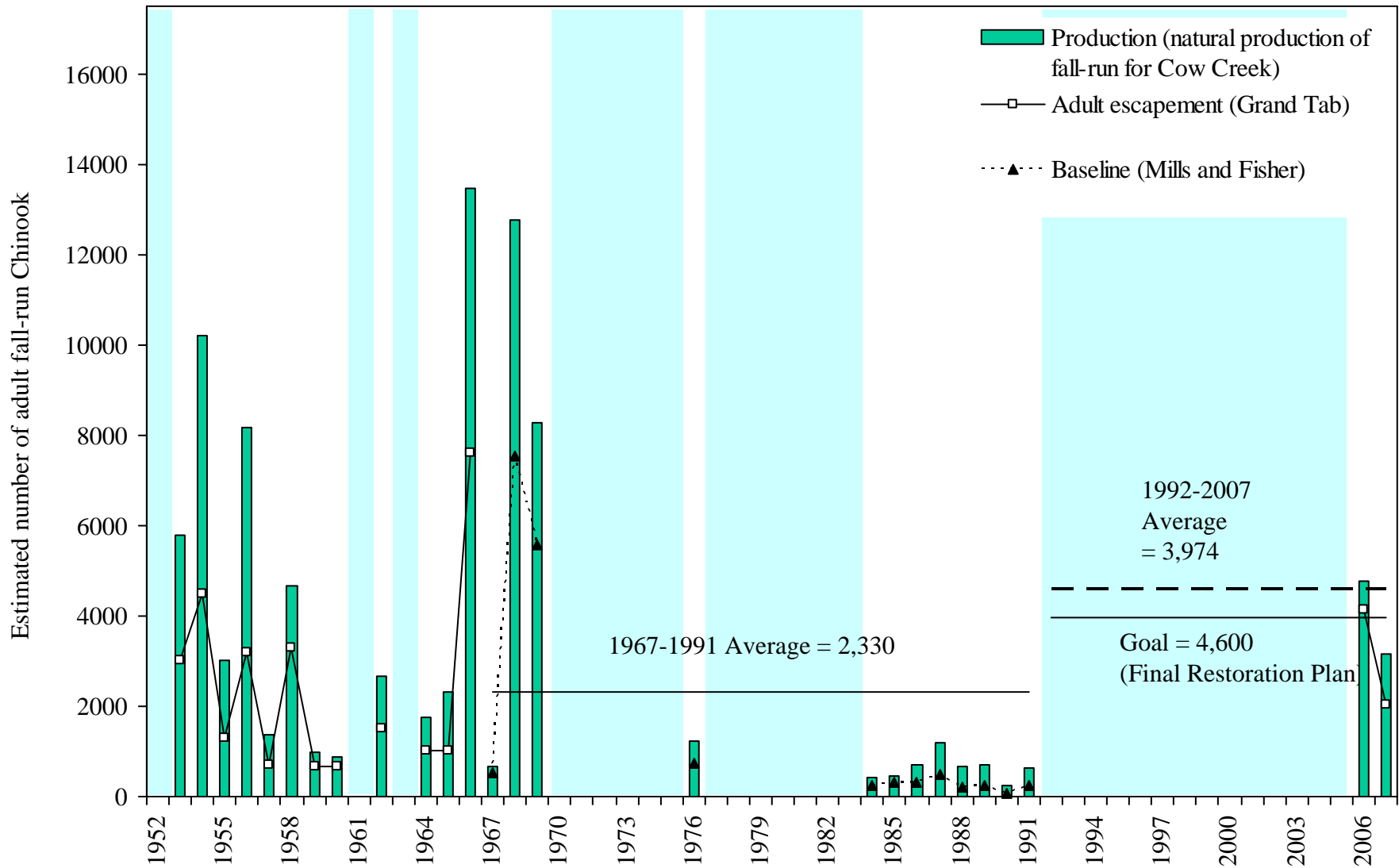


Figure 12. Estimated yearly natural production, and in river escapements of Cow Creek adult fall-run Chinook salmon.
 [Light blue box] = data was not available for 1952, 1961, 1963, 1970 - 1975, 1977 - 1983, and 1992 - 2005. 1952 - 1966 and 1992-2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

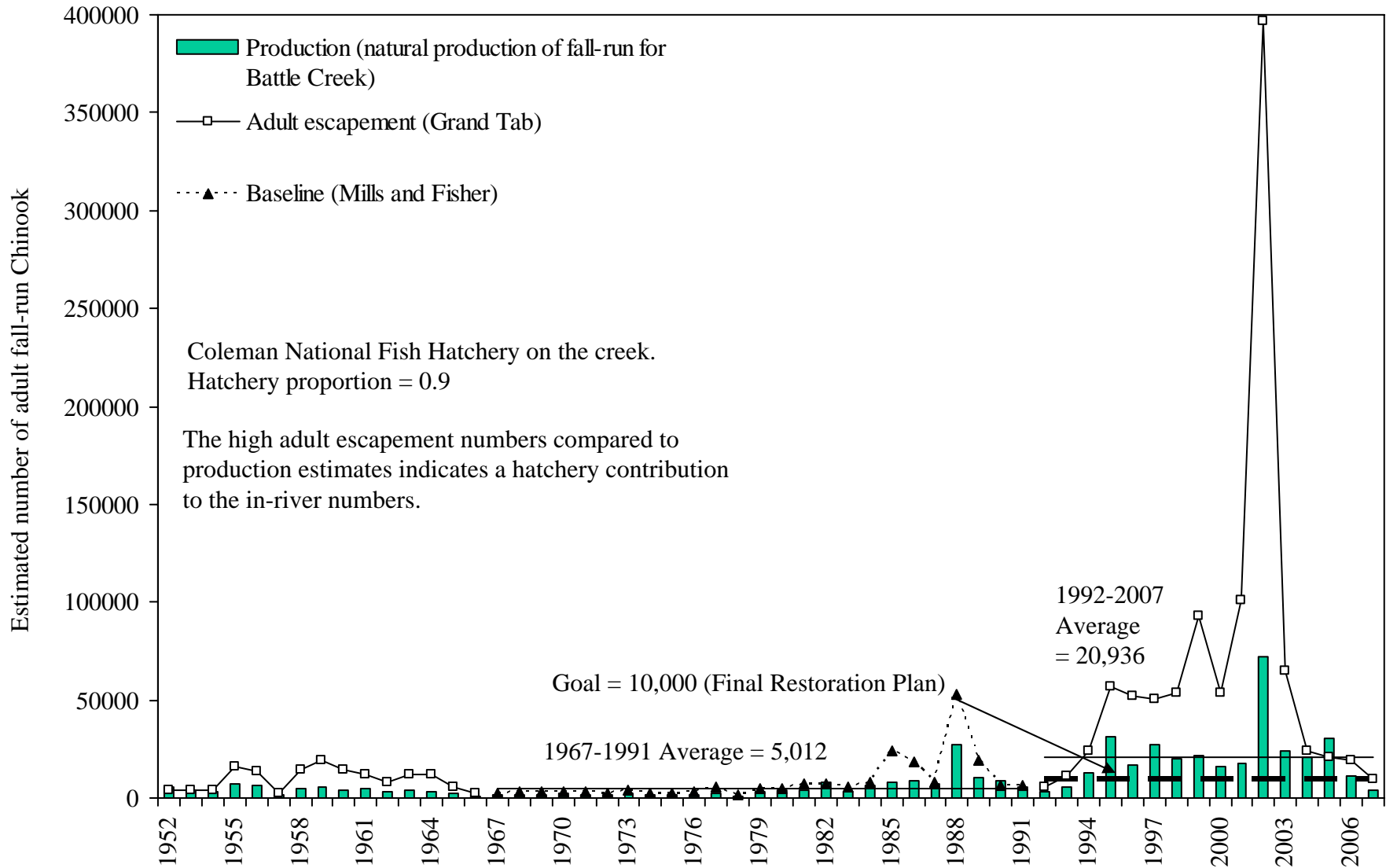


Figure 13. Estimated yearly natural production, and in river escapements of Battle Creek adult fall-run Chinook salmon. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

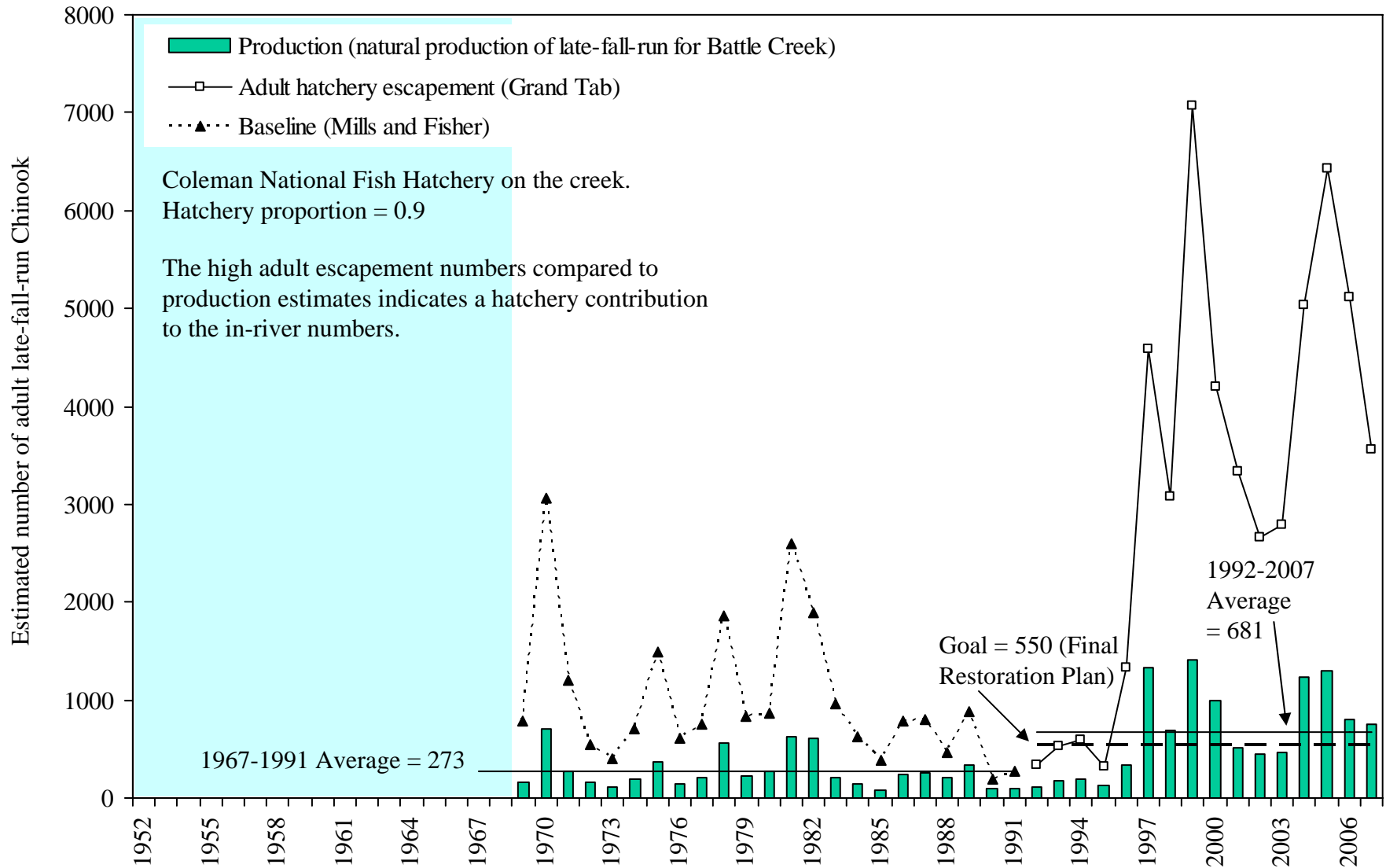


Figure 14. Estimated yearly natural production calculated from hatchery returns (in river returns were not available), and hatchery returns of Battle Creek adult late-fall-run Chinook salmon. 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). □ = data was not available for 1952-1968. Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

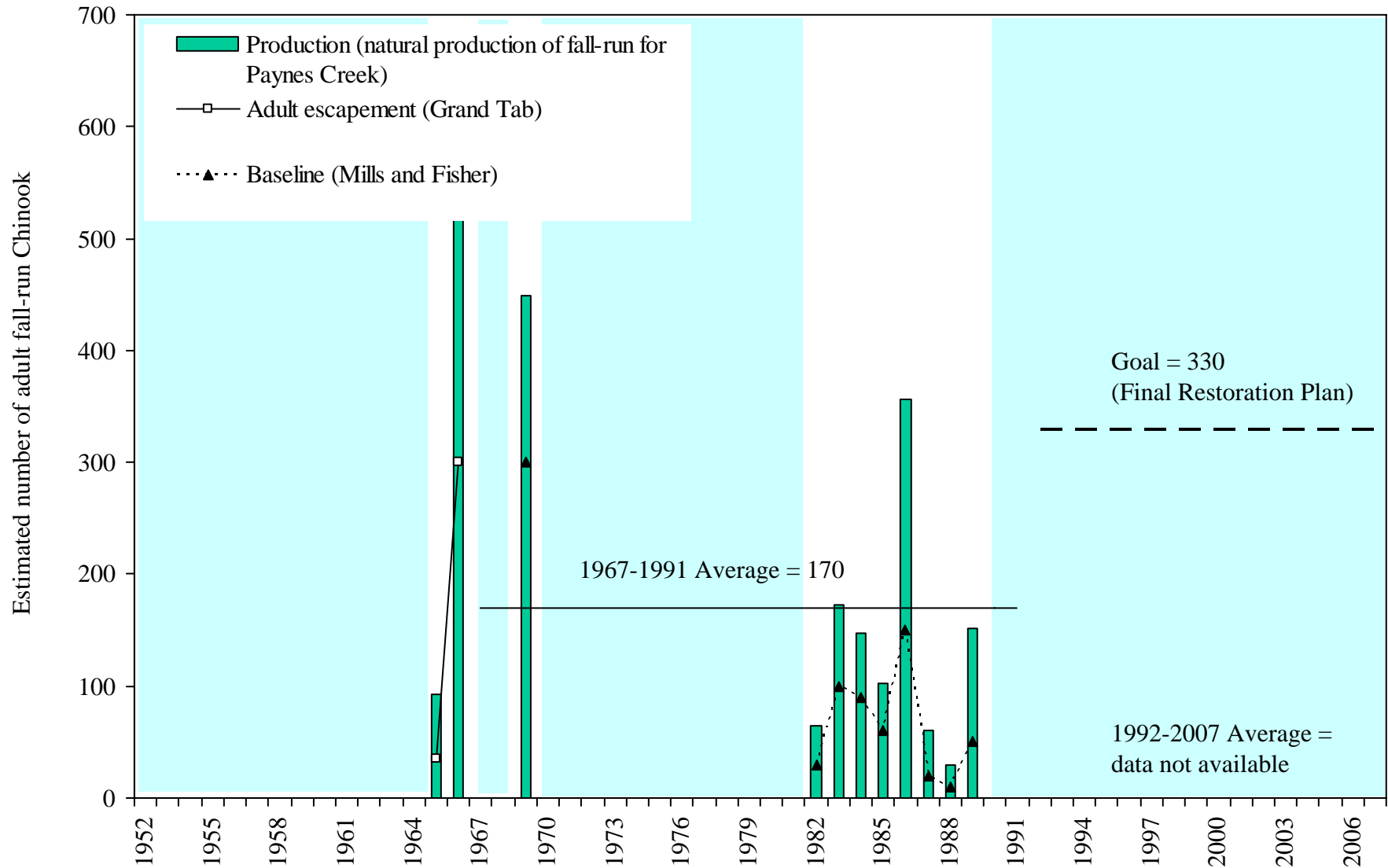


Figure 15. Estimated yearly natural production, and in river escapements of Paynes Creek adult fall-run Chinook salmon.
 [Light blue box] = data was not available for 1952 - 1964, 1967 - 1968, 1970 - 1981, and 1990 - 2007. 1965-1966 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

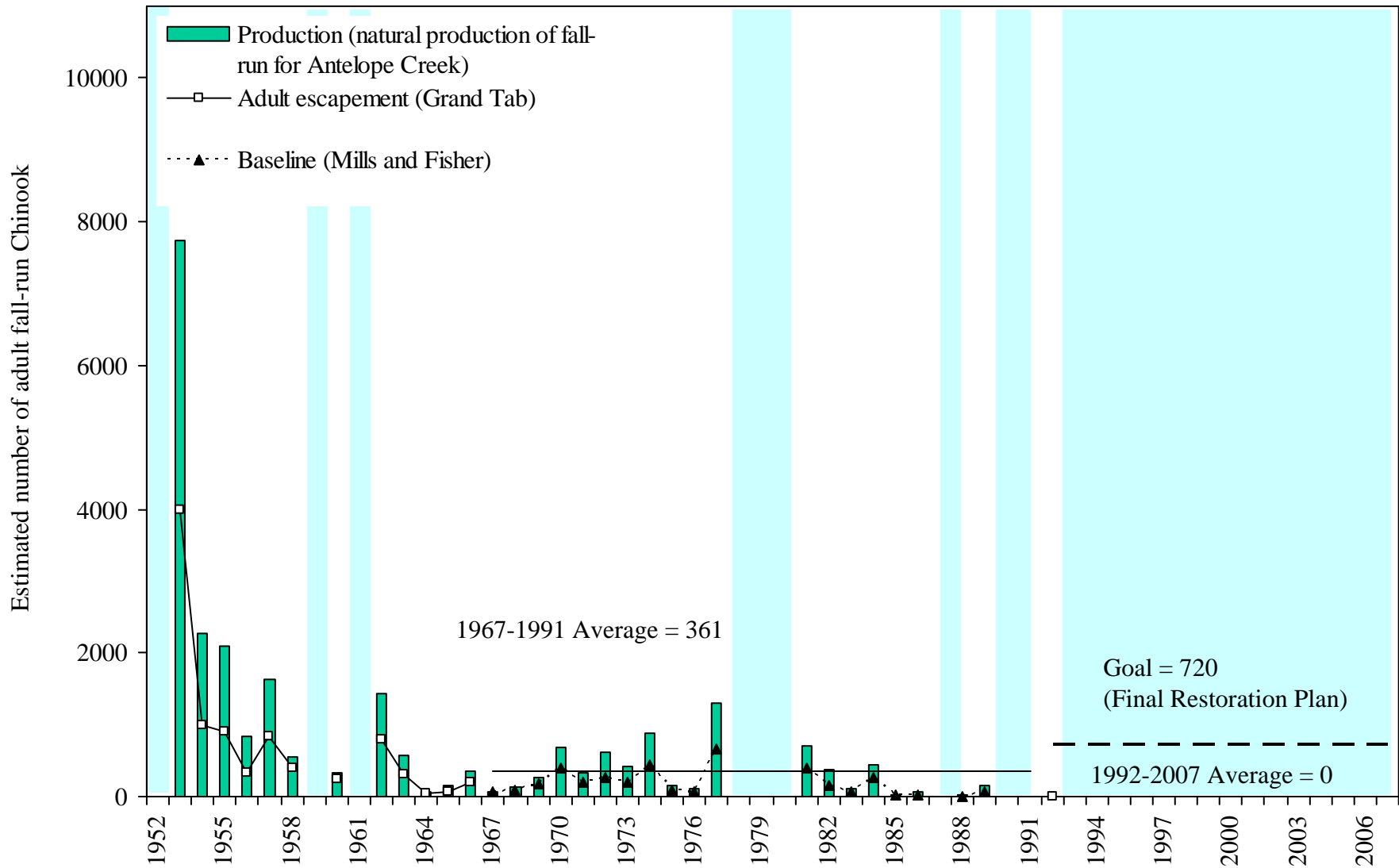


Figure 16. Estimated yearly natural production, and in river escapements of Antelope Creek adult fall-run Chinook salmon.
 □ = data was not available for 1952, 1959, 1961, 1978 - 1980, 1987, 1990, 1991, and 1993 - 2007. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

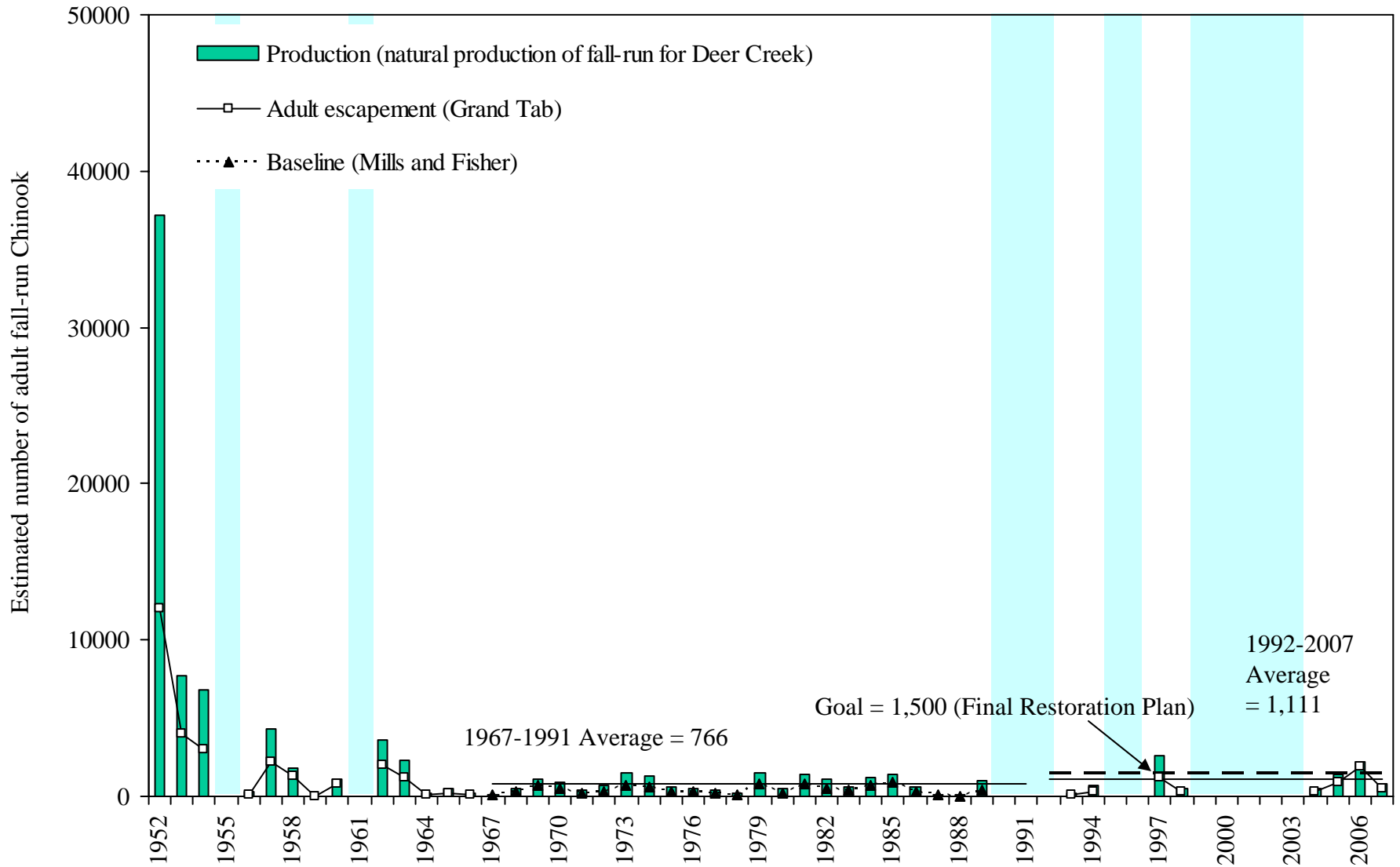


Figure 17. Estimated yearly natural production, and in river escapements of Deer Creek adult fall-run Chinook salmon.
 = data was not available for 1955, 1961, 1990 - 1992, 1995, 1996, and 1999 - 2003. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

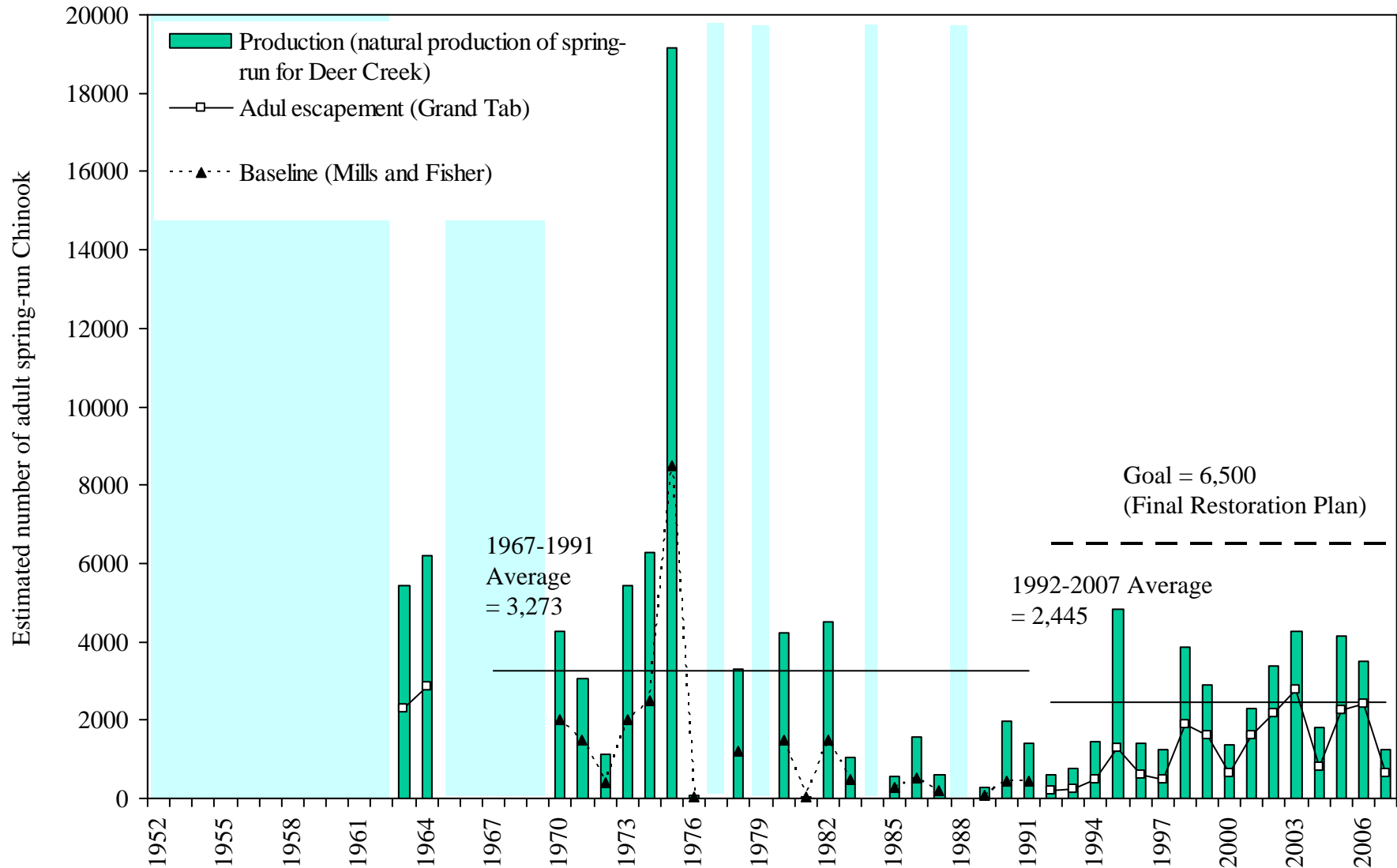


Figure 18. Estimated yearly natural production, and in river escapements of Deer Creek adult spring-run Chinook salmon.
 □ = data was not available for 1952 - 1962, 1965 - 1969, 1977, 1979, 1984, and 1988. 1952 - 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

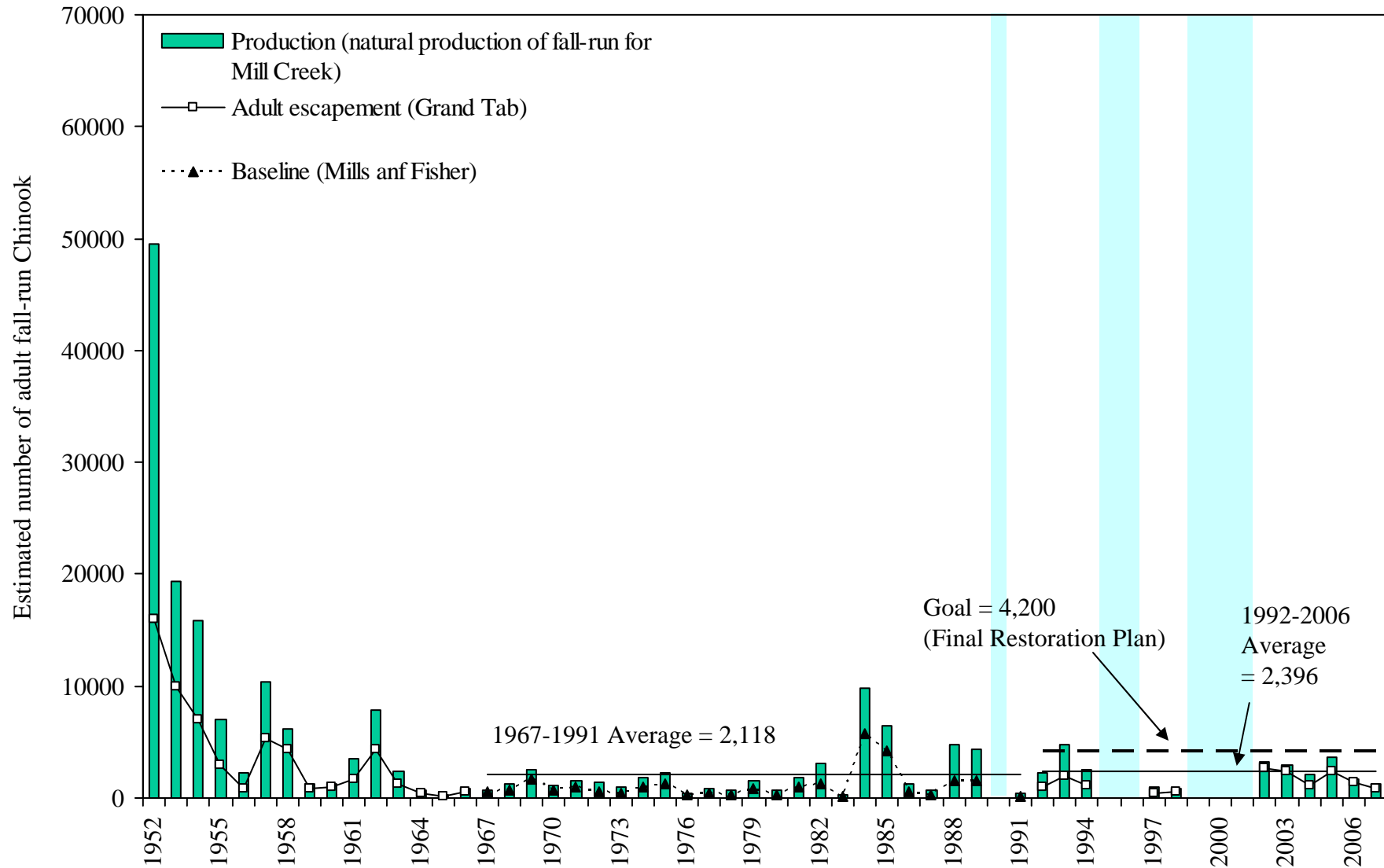


Figure 19. Estimated yearly natural production, and in river escapements of Mill Creek adult fall-run Chinook salmon.

□ = data was not available for 1990, 1995 - 1996, and 1999 - 2001. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

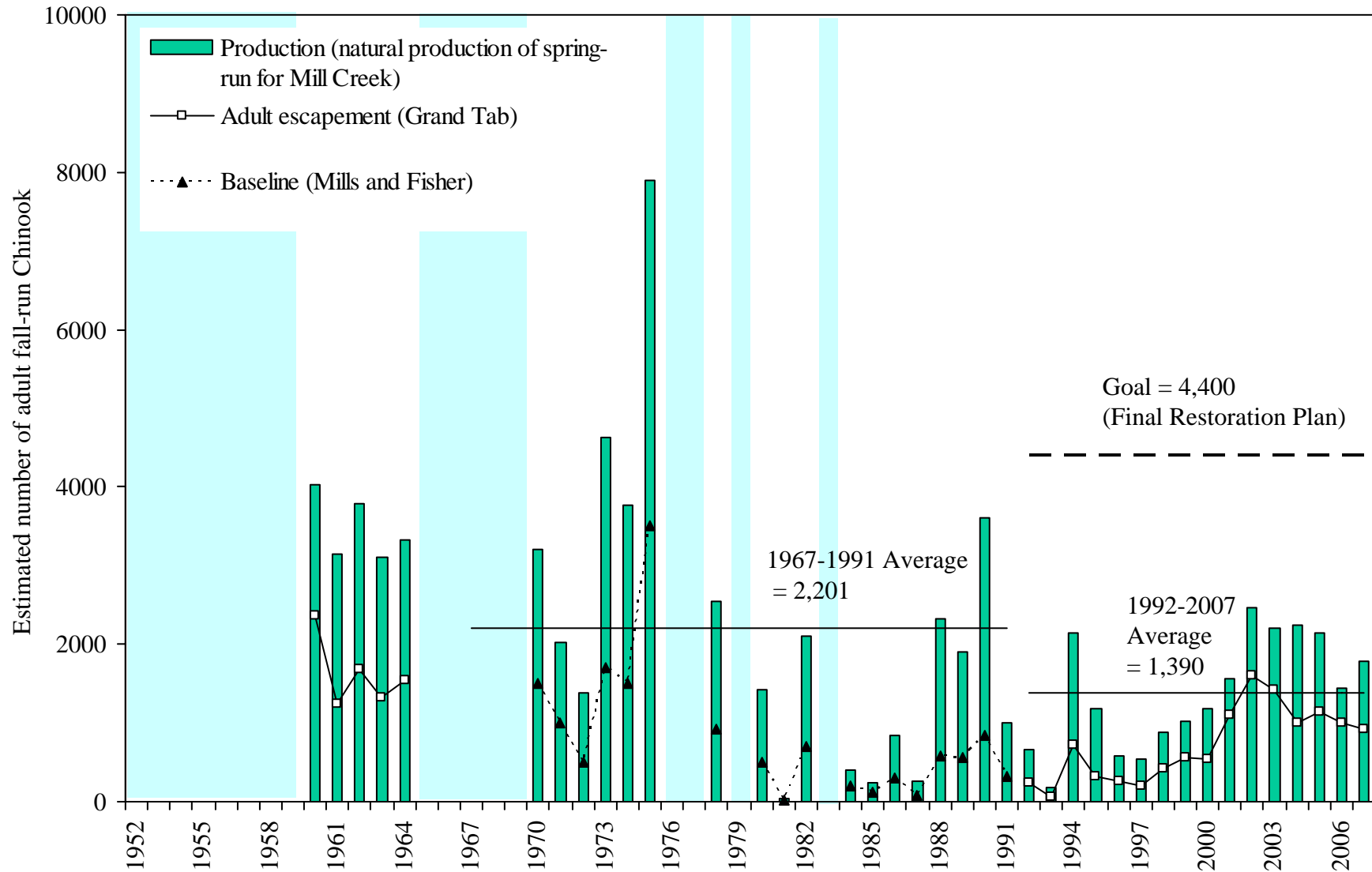


Figure 20. Estimated yearly natural production, and in river escapements of Mill Creek adult spring-run Chinook salmon.
 [Light blue box] = data was not available for 1952 - 1959, 1965 - 1969, 1976, 1977, 1979, and 1983. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

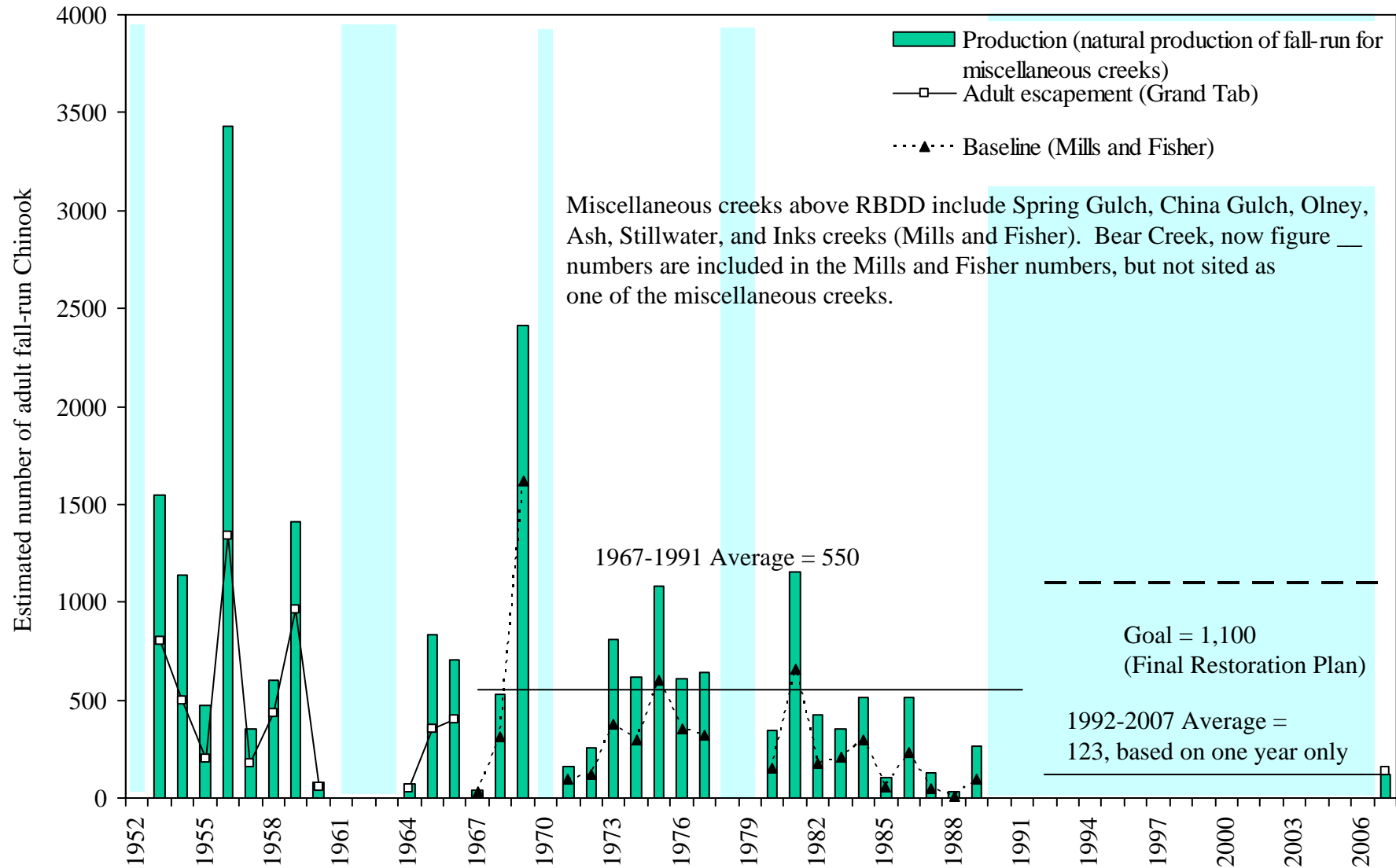


Figure 21. Estimated yearly natural production of miscellaneous creeks adult fall-run Chinook salmon above RBDD.

□ = data was not available for 1952 -1955, 1963 – 1968 and 1970 – 2006. 1952 – 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

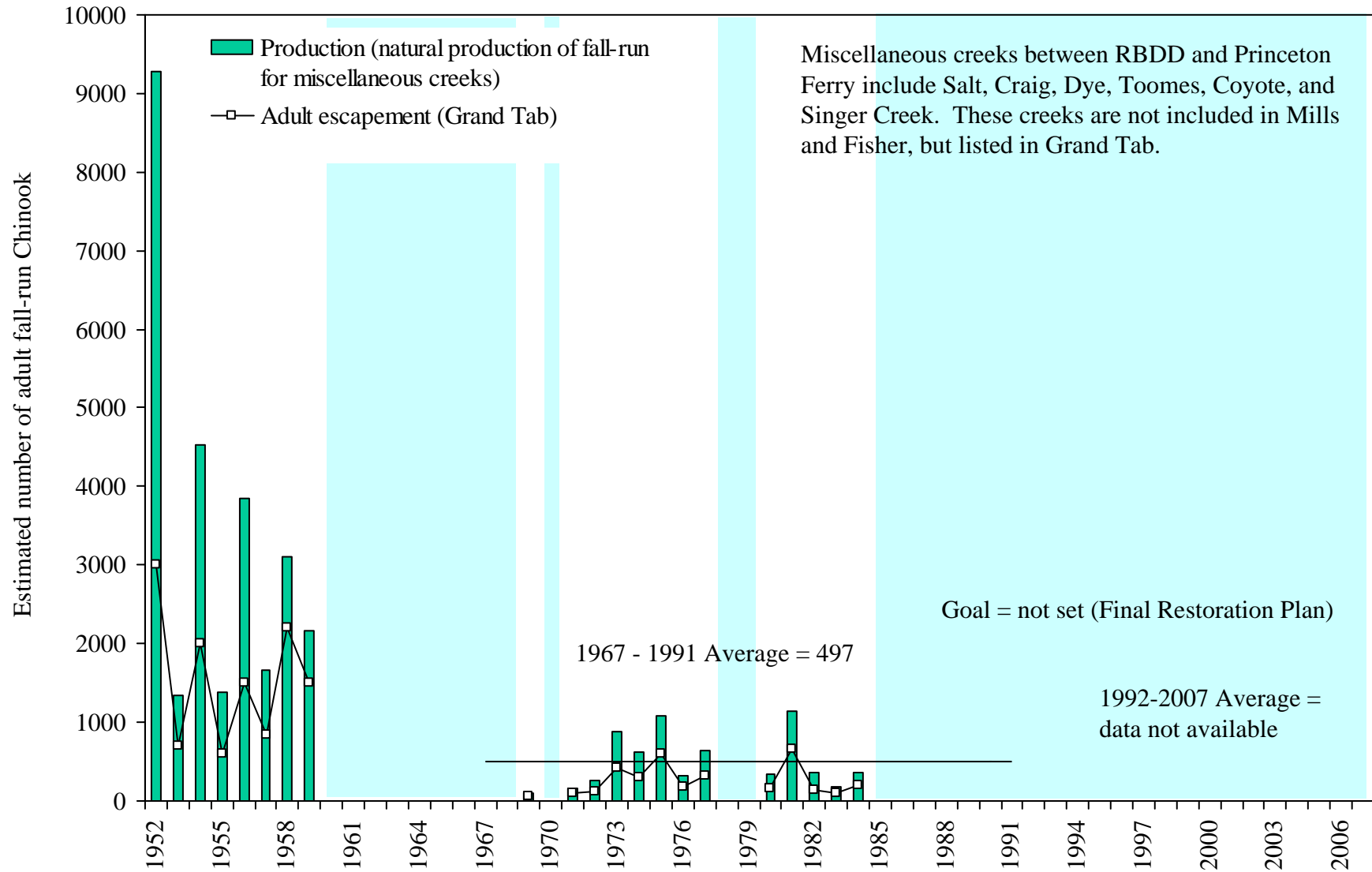


Figure 22. Estimated yearly natural production of miscellaneous creeks adult fall-run Chinook salmon below RBDD.

□ = data was not available for 1952-1955, 1958 - 1968, 1970, 1978 - 1980, and 1985 - 2007. Baseline numbers are from CDFG Grand Tab (March 1, 2008).

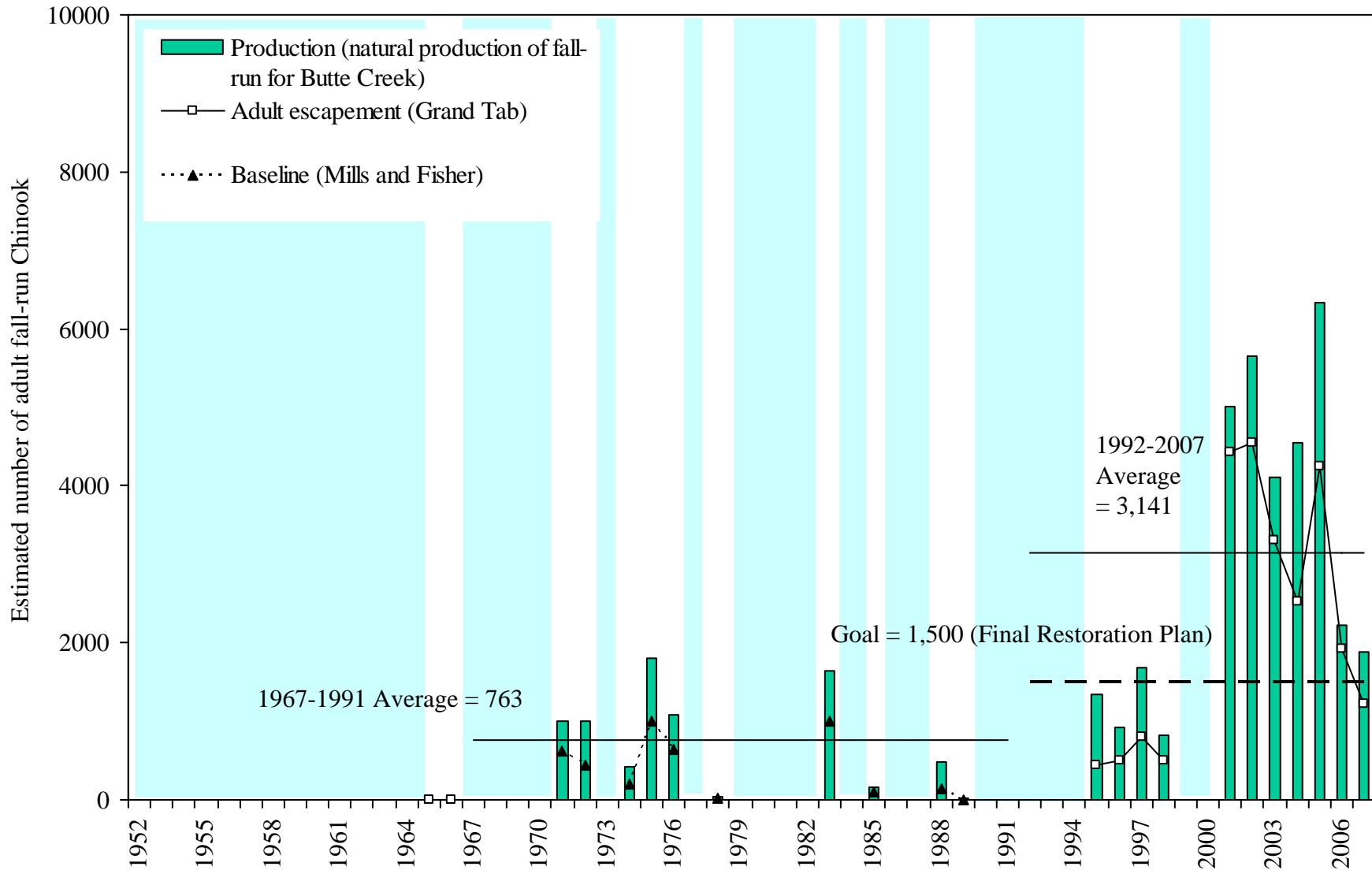


Figure 23. Estimated yearly natural production, and in river escapements of Butte Creek adult fall-run Chinook salmon.

□ = data was not available for 1952 - 1964, 1967 - 1970, 1973, 1977, 1979 - 1982, 1984, 1986, 1987, 1990 - 1994, and 1999 - 2001. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

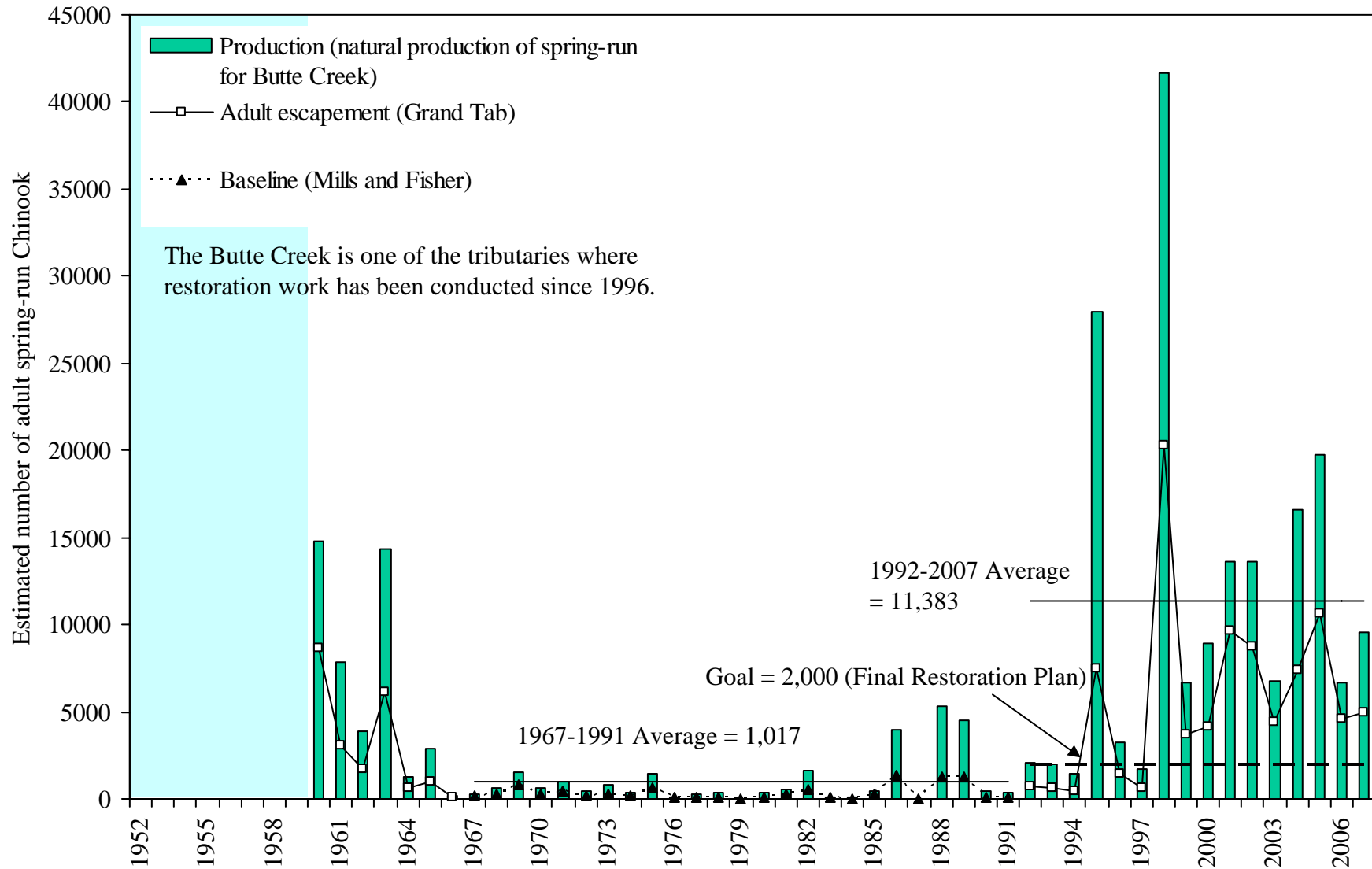


Figure 24. Estimated yearly natural production, and in river escapements of Butte Creek adult spring-run Chinook salmon. 1952- 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). = data was not available for 1952 - 1959. Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

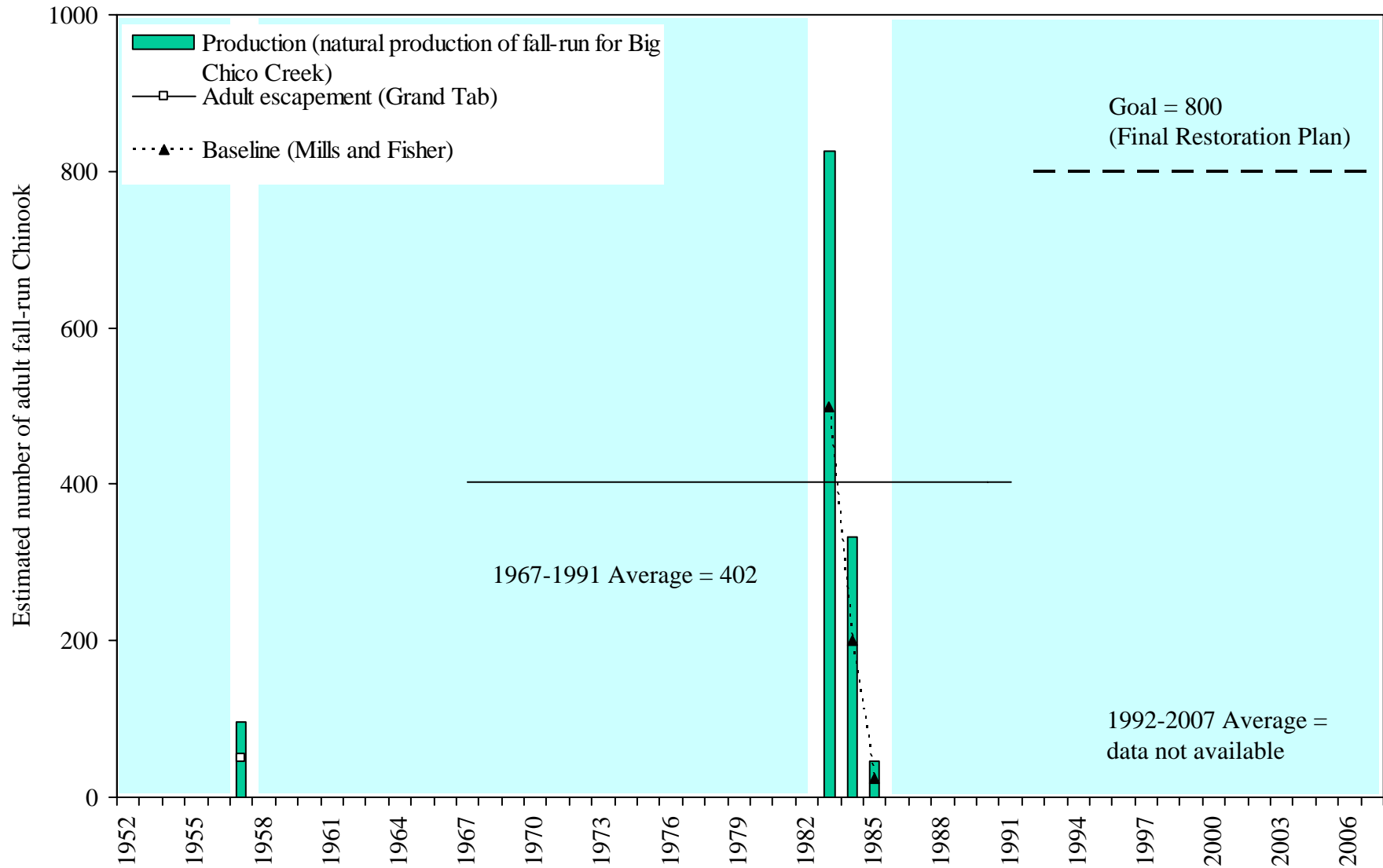


Figure 25. Estimated yearly natural production, and in river escapements of Big Chico Creek adult fall-run Chinook salmon.
 [Light blue shaded area] = data was not available for 1952 - 1956, 1958 - 1982, and 1986 - 2005. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

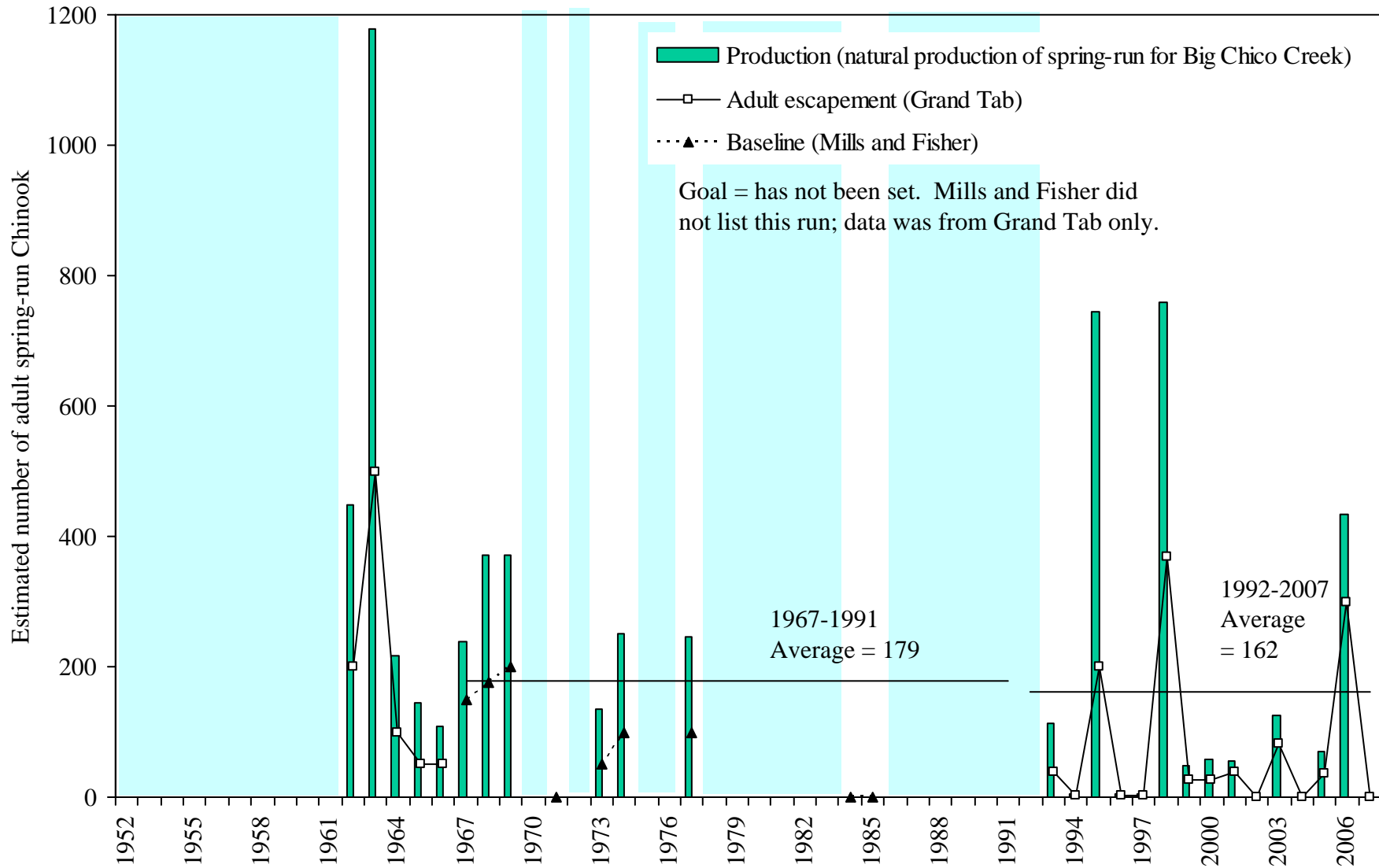


Figure 26. Estimated yearly natural production, and in river escapements of Big Chico Creek adult spring-run Chinook salmon. [Legend] = data was not available for 1952 - 1961, 1970, 1972, 1975 - 1976, 1978 - 1983, and 1986 - 1992. 1952 - 2007 numbers are from CDFG Grand Tab (March 1, 2008).

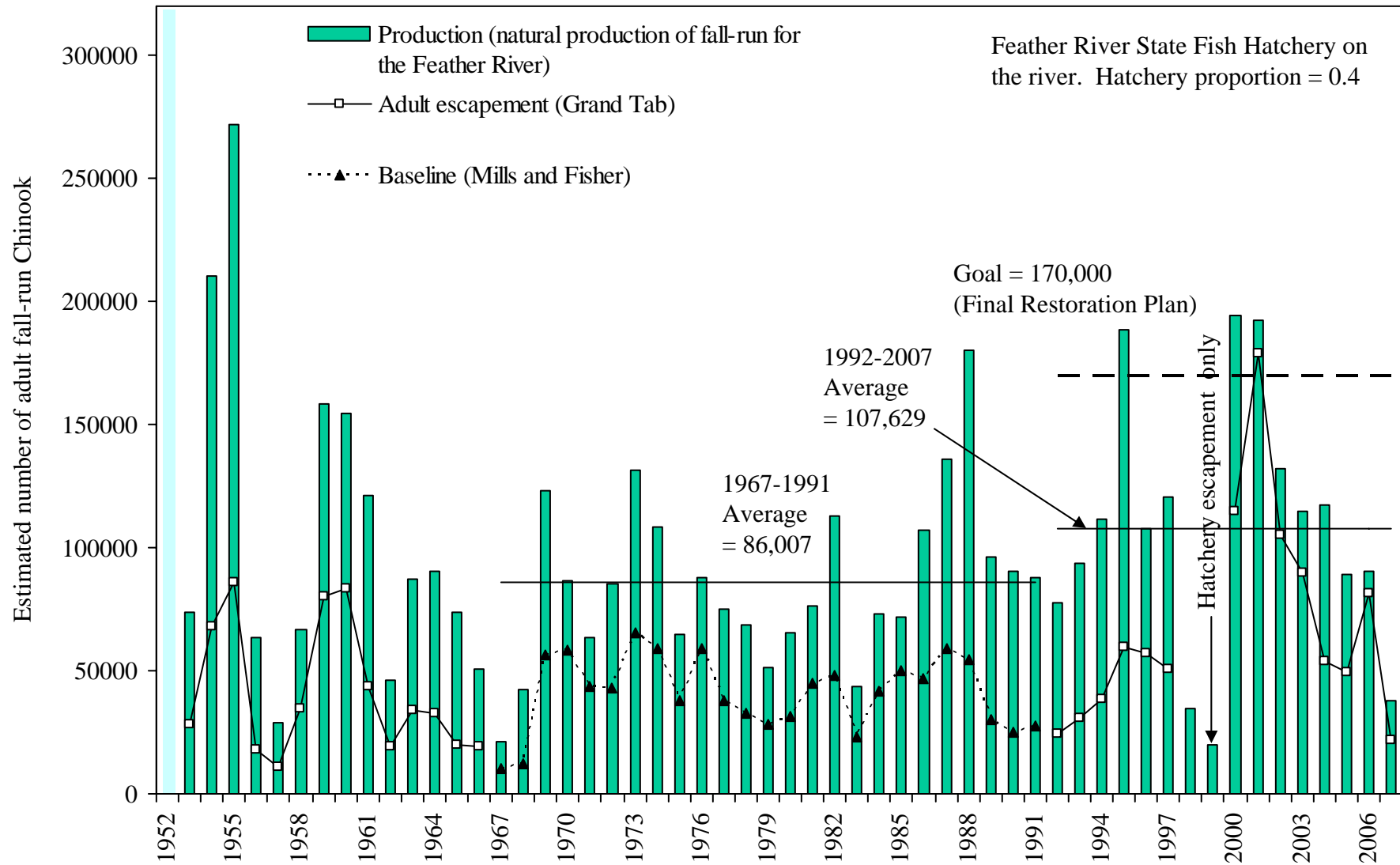


Figure 27. Estimated yearly natural production, and in river escapements of Feather River adult fall-run Chinook salmon. In-river escapements were not available for 1998 and 1999. 1952 - 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

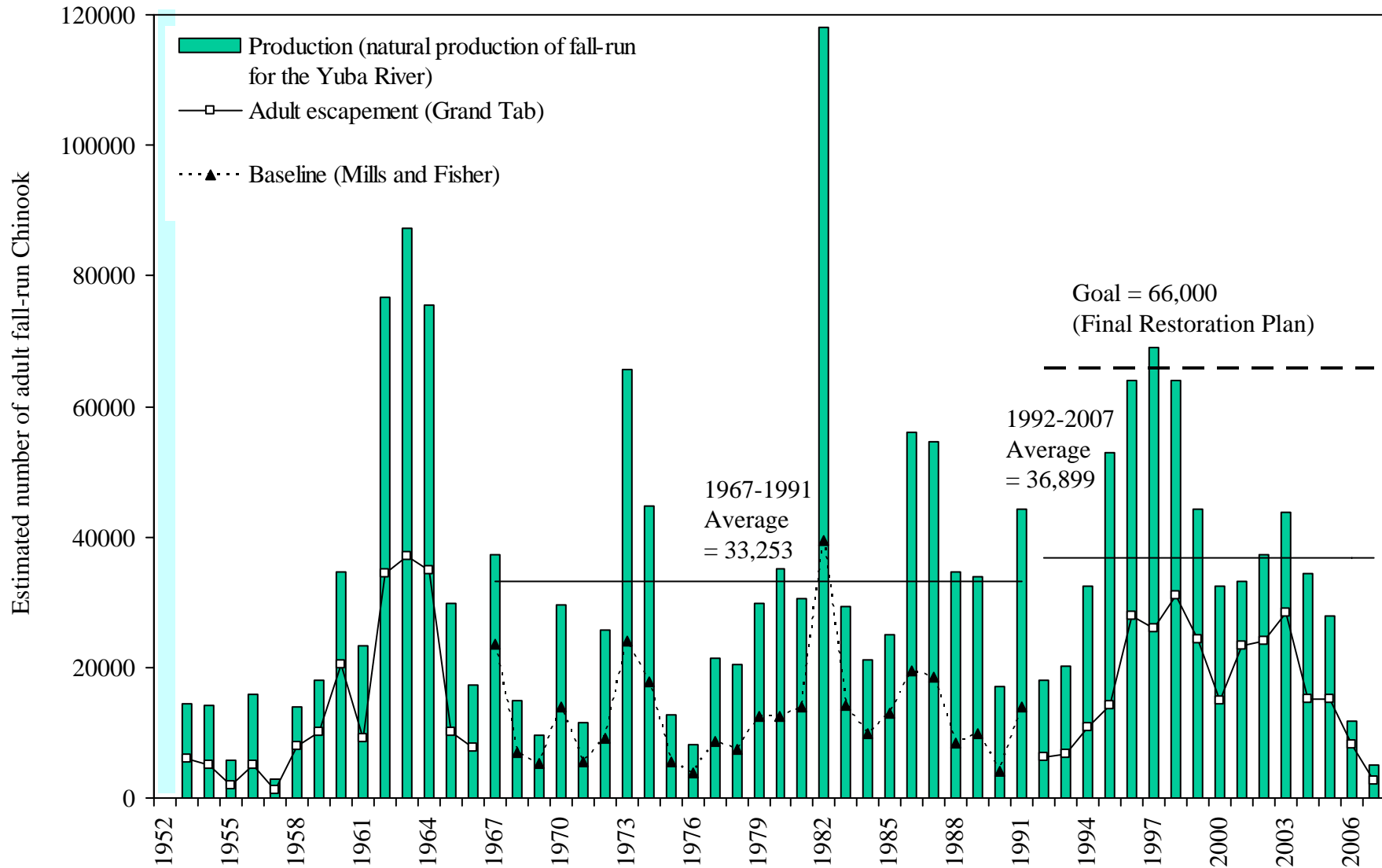


Figure 28. Estimated yearly natural production, and in river escapements of Yuba River adult fall-run Chinook salmon. 1967-1991 baseline numbers are from Mills and Fisher (CDFG, 1994). 1952 - 1966 and 1992-2007 numbers are from CDFG Grand Tab (March 1, 2008). data was not available for 1952.

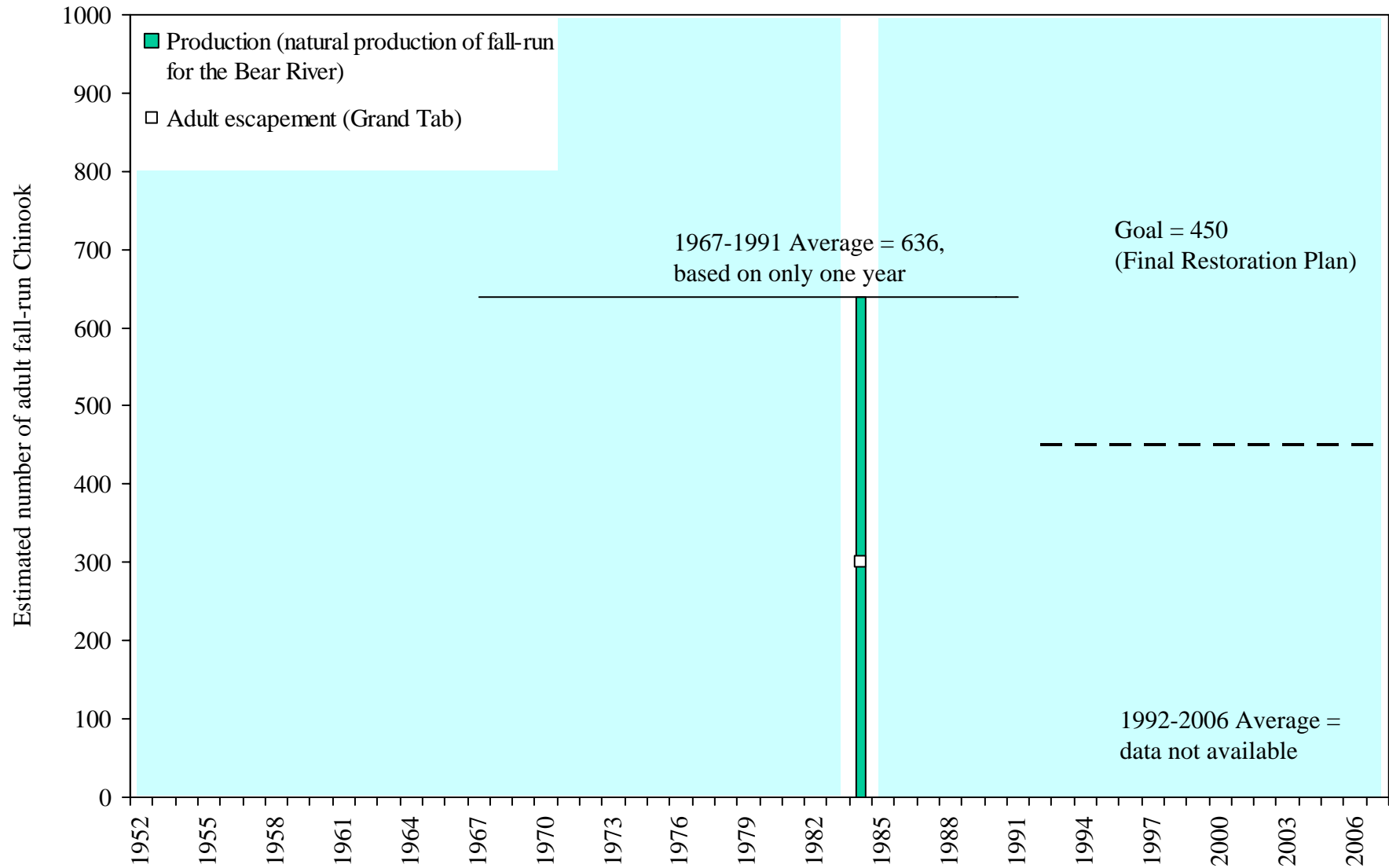


Figure 29. Estimated yearly natural production, and in river escapements of Bear River adult fall-run Chinook salmon.

□ = data was not available for 1952 - 1983, and 1985 - 2007. Numbers are from CDFG Grand Tab (March 1, 2008).

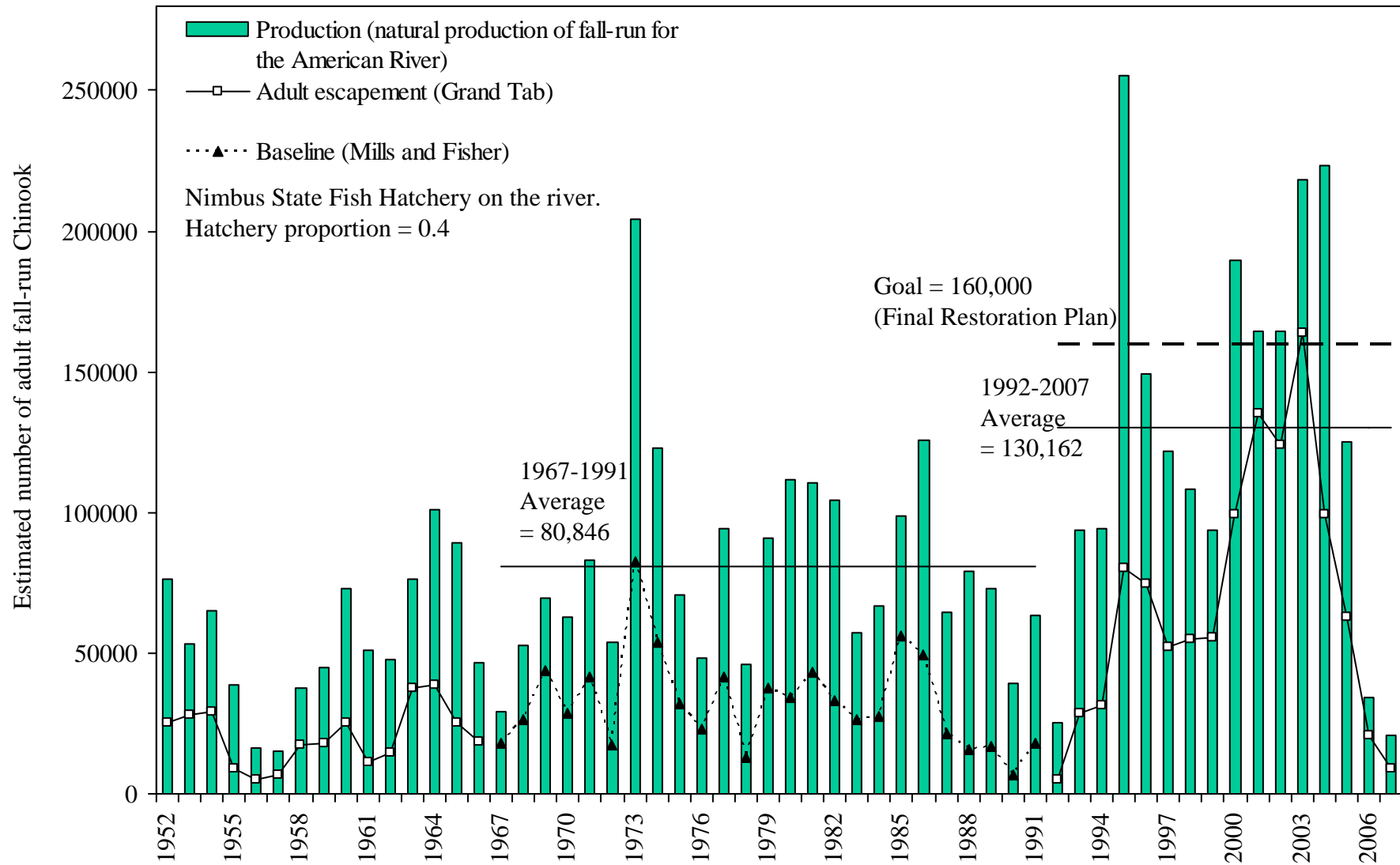


Figure 30. Estimated yearly natural production, and in river escapements of American River adult fall-run Chinook salmon. 1952 - 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

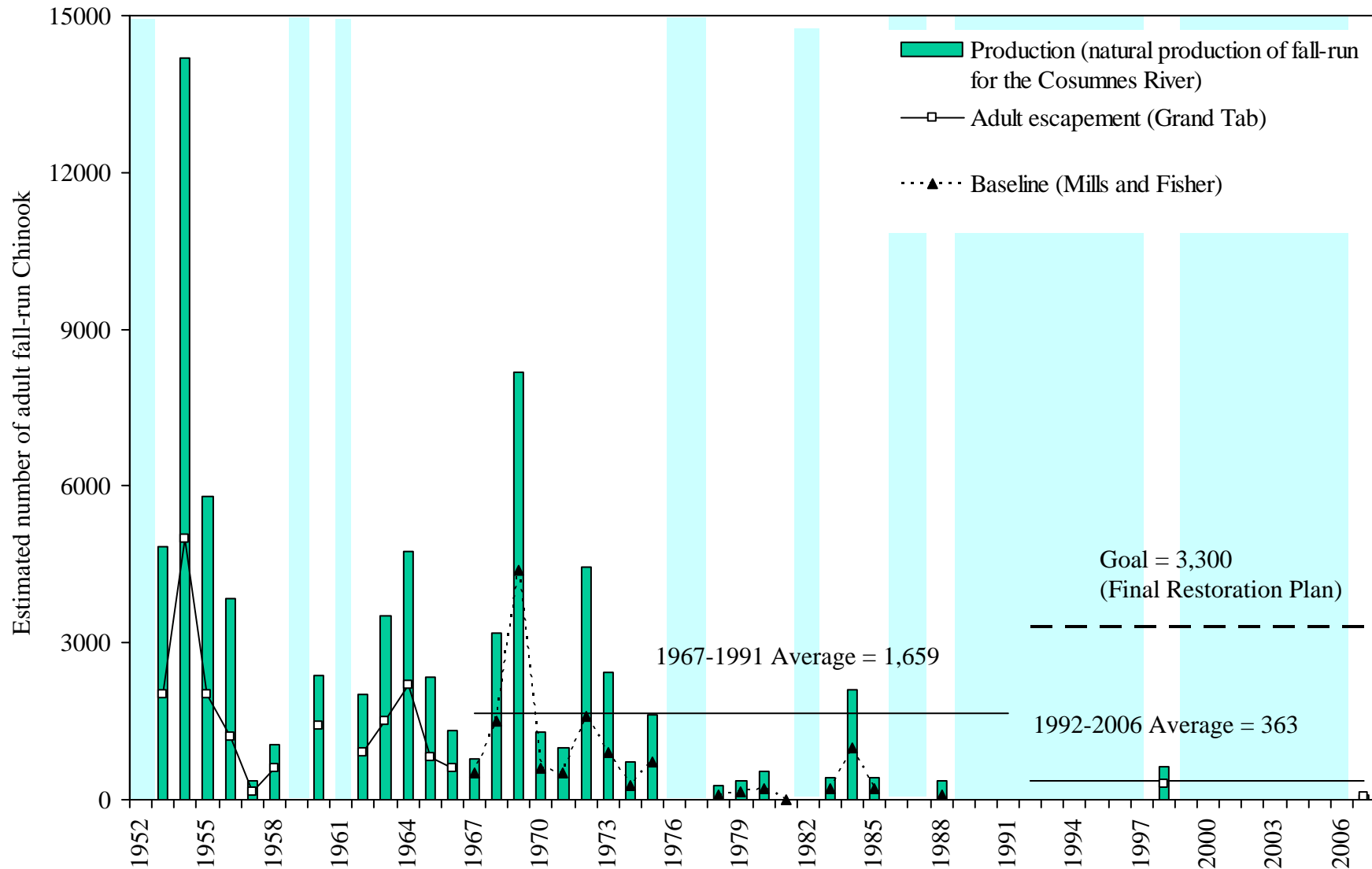


Figure 31. Estimated yearly natural production, and in river escapements of Cosumnes River adult fall-run Chinook salmon.
 [Light blue shaded area] = data was not available for 1952, 1959, 1961, 1976-1977, 1982, 1986, 1987, 1989 - 1997, and 1999 - 2006.
 1952-1966 and 1992-2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

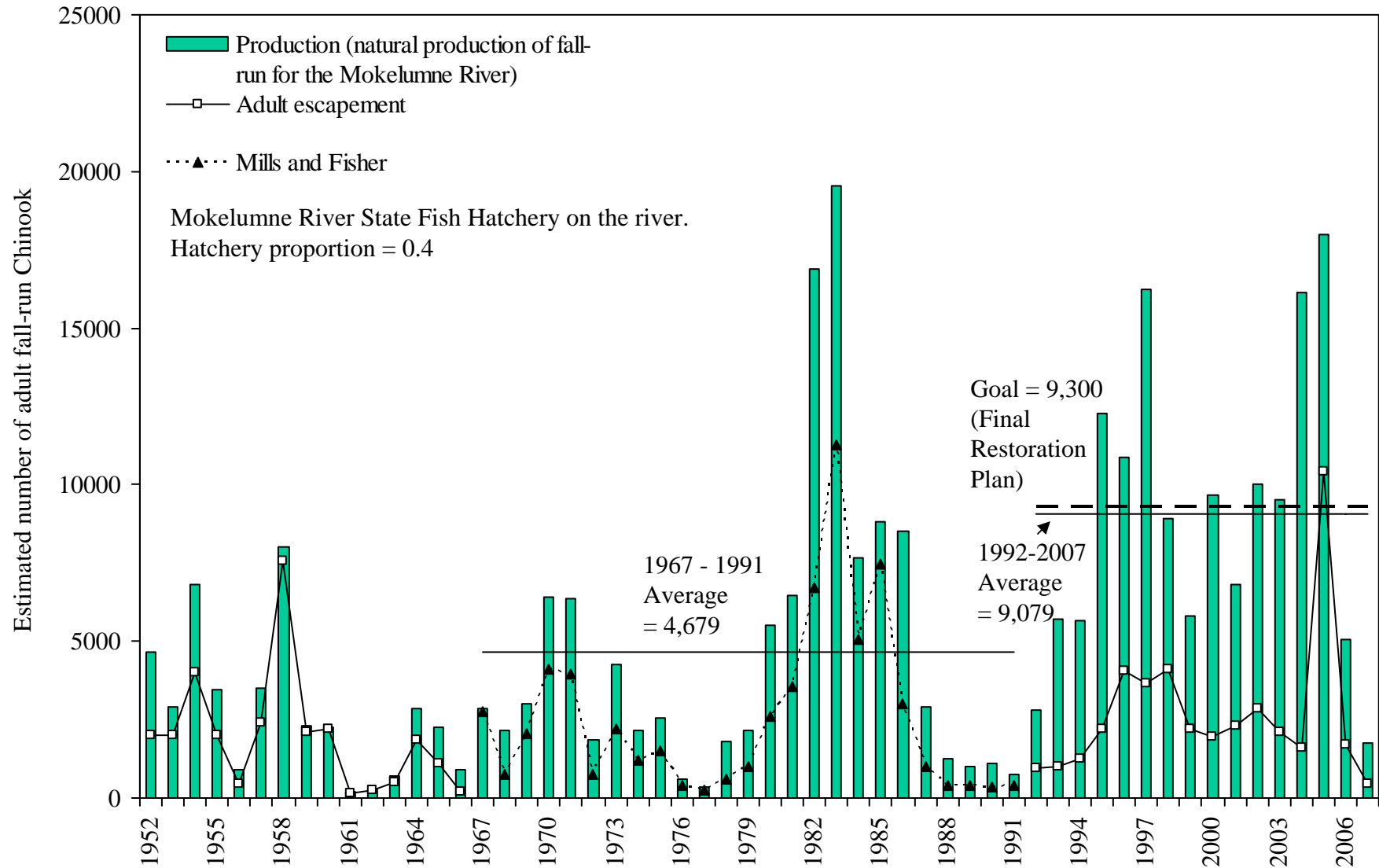


Figure 32. Estimated yearly natural production, and in river escapements of Mokelumne River adult fall-run Chinook salmon. In river escapement numbers were not available for 2001. 1952 – 1966 and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

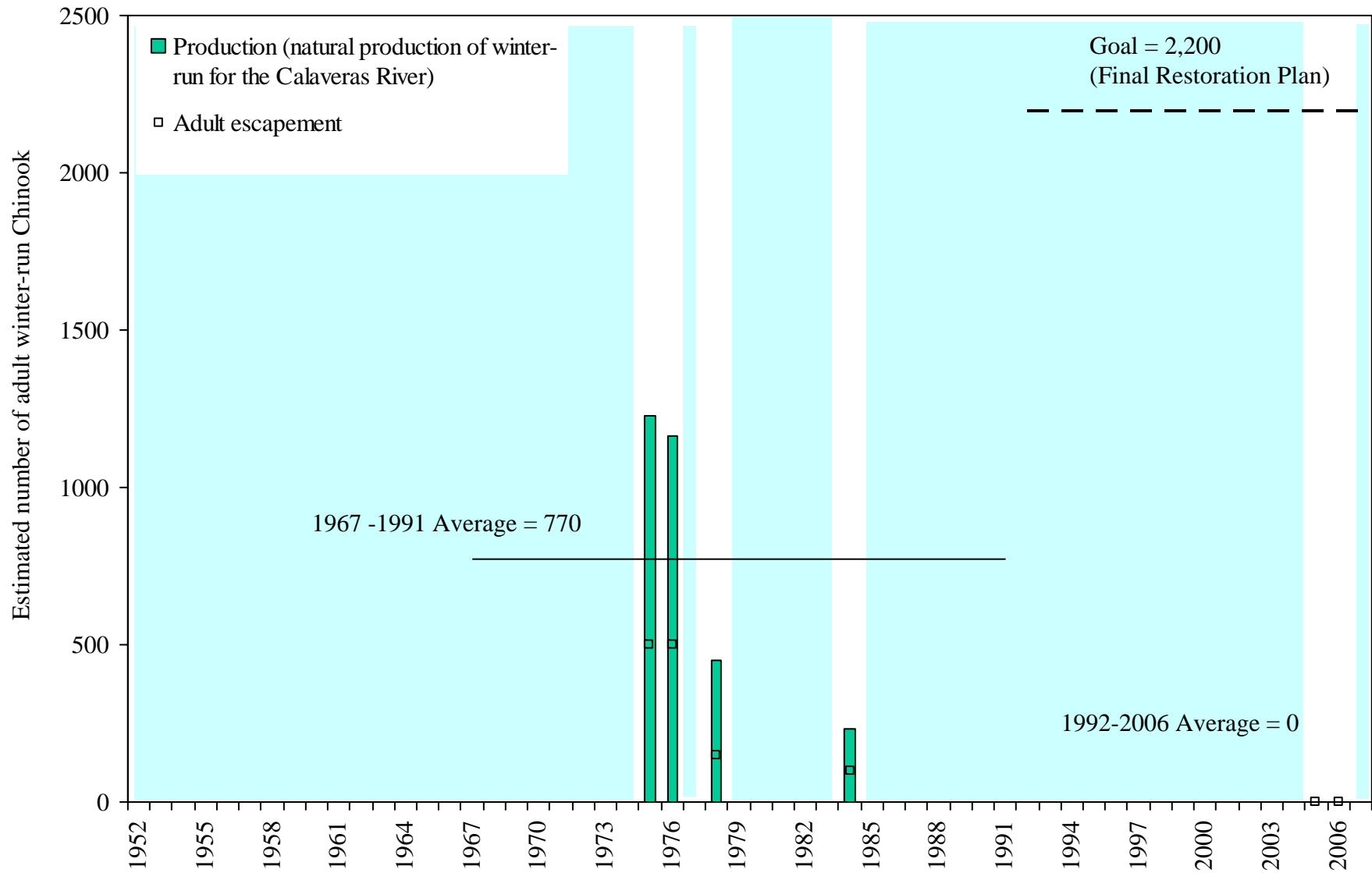


Figure 33. Estimated yearly natural production of Calaveras River adult winter-run Chinook salmon. □ = data was not available for 1952 - 1974, 1977, 1979 – 1983, and 1985 - 2005. 1952 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers from Mills and Fisher (CDFG, 1994) were not available.

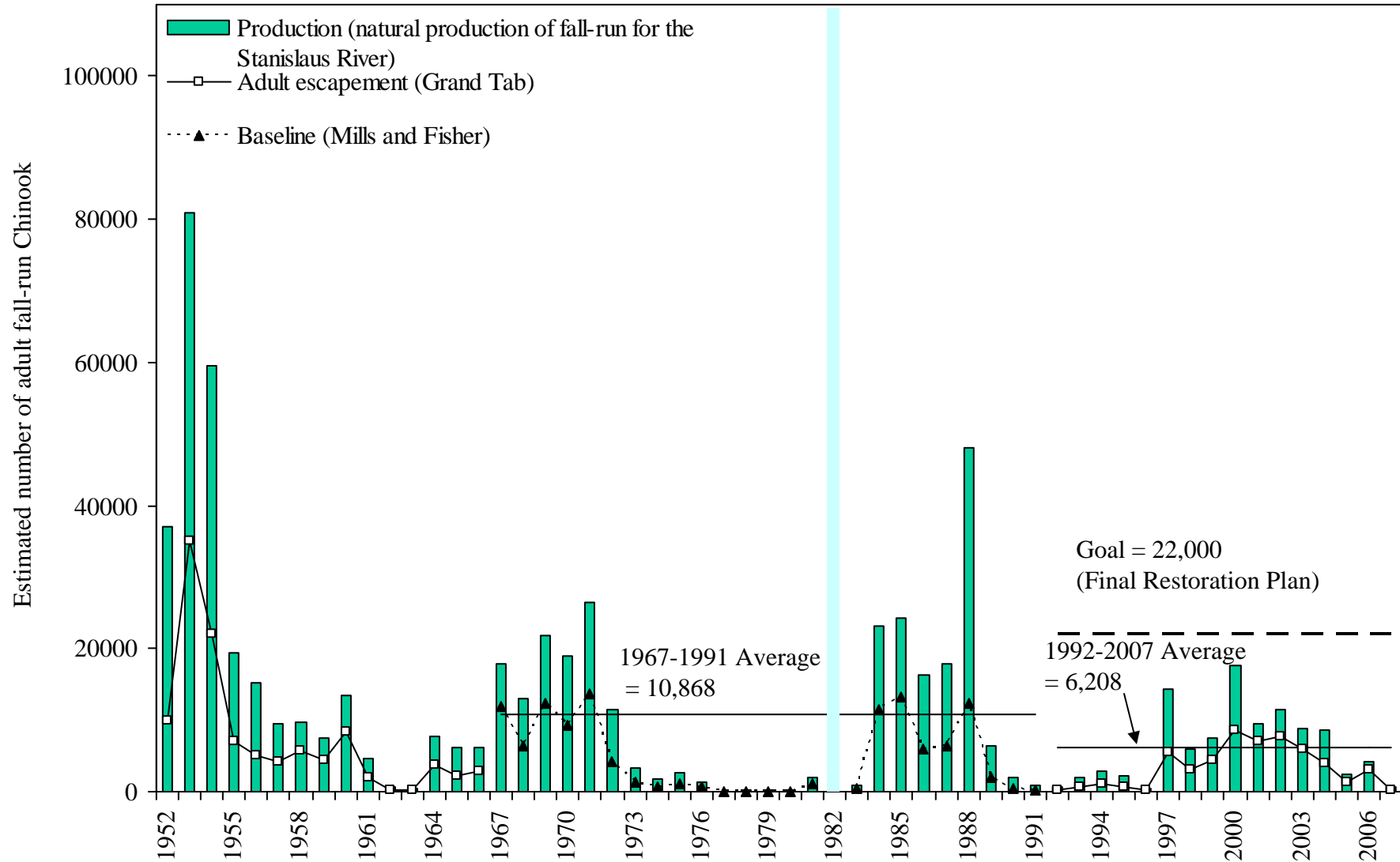


Figure 34. Estimated yearly natural production, and in river escapements of Stanislaus River adult fall-run Chinook salmon. 1952 – 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994). □ data was not available for 1982.

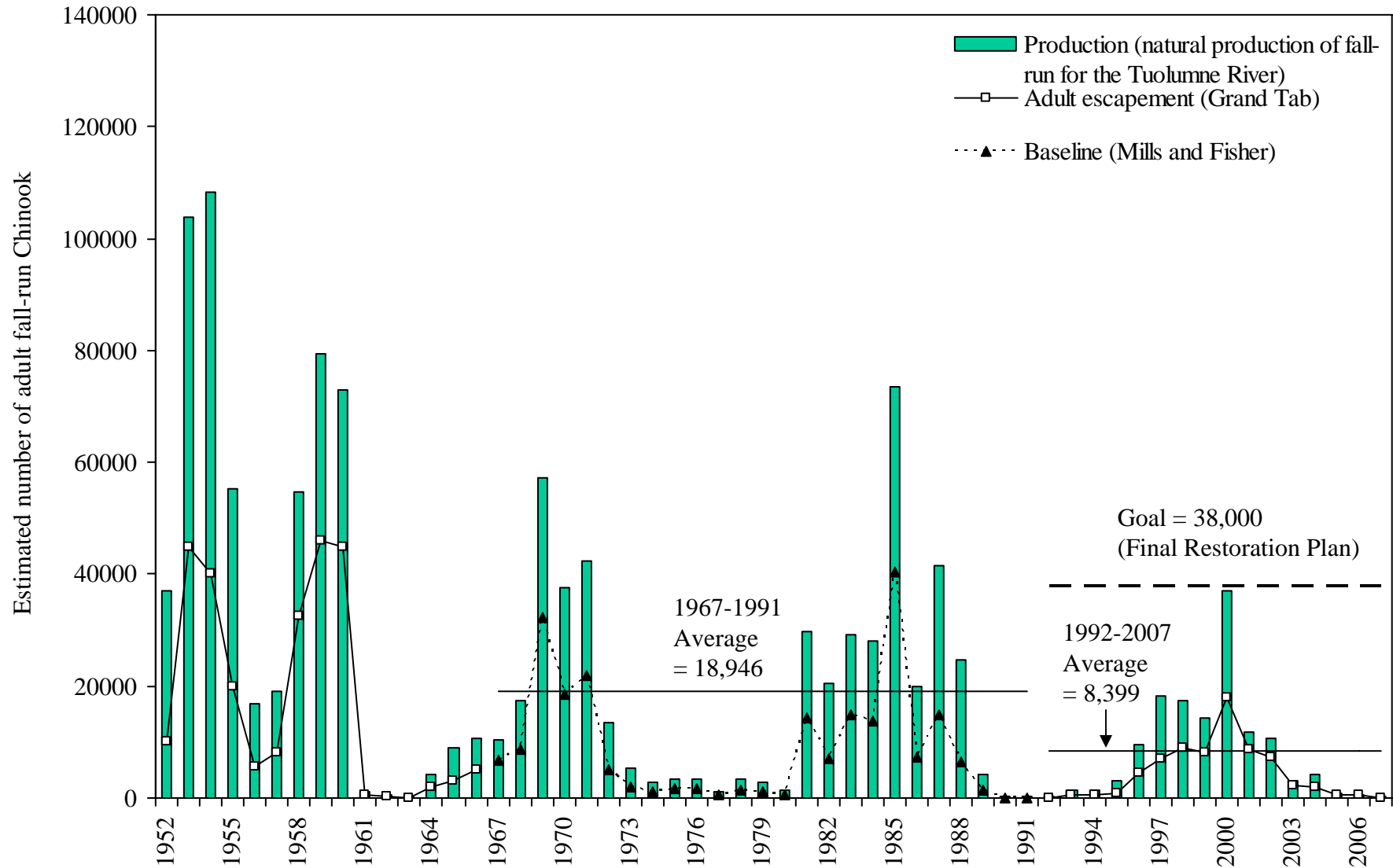


Figure 35. Estimated yearly natural production, and in river escapements of Tuolumne River adult fall-run Chinook salmon. 1952 - 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

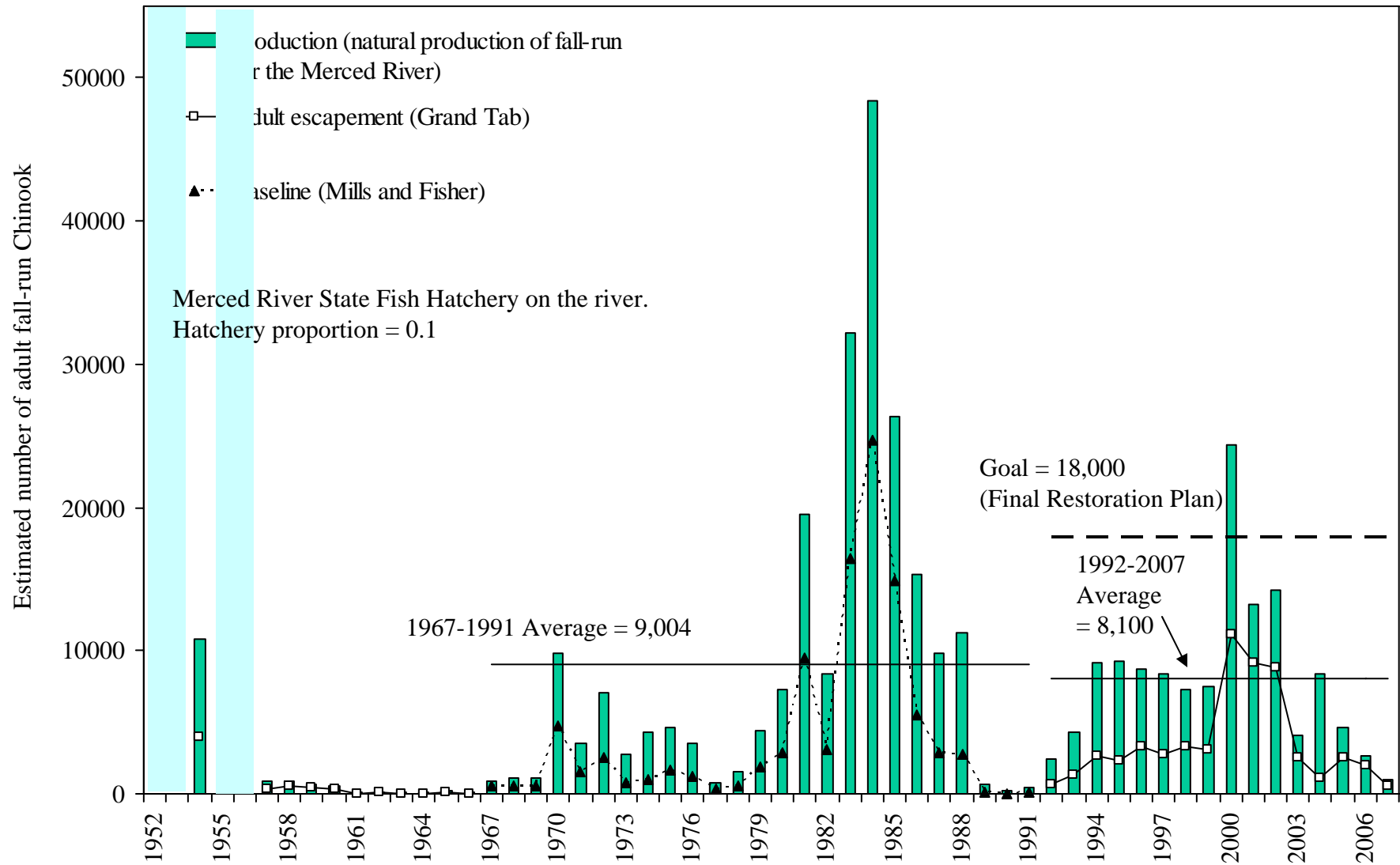


Figure 36. Estimated yearly natural production, and in river escapements of Merced River adult fall-run Chinook salmon. 1952 - 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). [Light blue shaded area] = data was not available for 1952 - 1953, and 1955 - 1956. Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

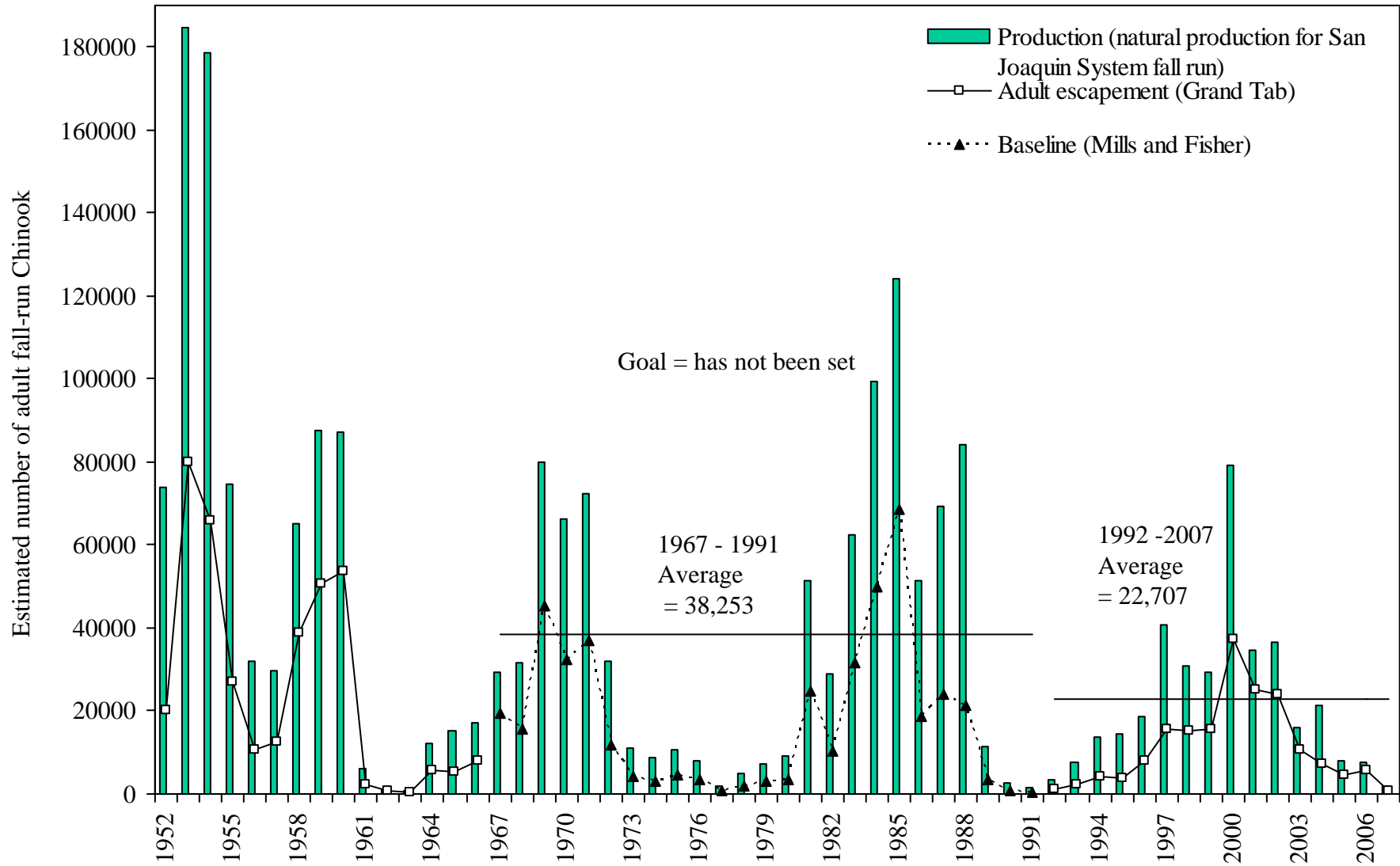


Figure 37. Estimated yearly natural production, and in river escapements of San Joaquin System adult fall-run Chinook salmon. The San Joaquin System is the sum of the Stanislaus, Tuolumne, and Merced Rivers. 1952 - 1966, and 1992 - 2006 numbers are from CDFG Grand Tab (August 20, 2007). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

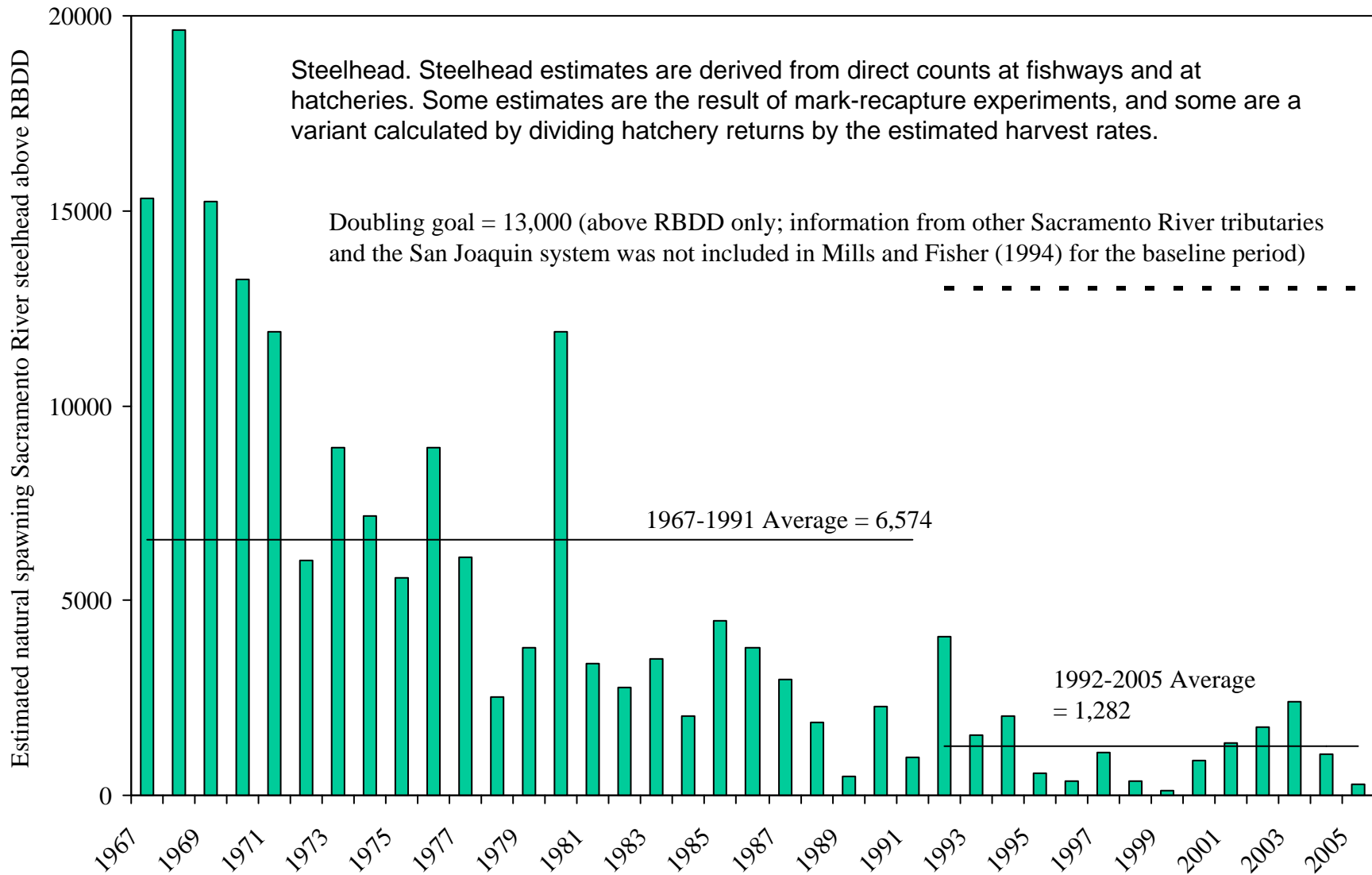


Figure 38. Estimated yearly number of natural spawning of steelhead on the Sacramento River, upstream of the RBDD (Mills and Fisher, 1994). Data for 1992-2005 is from CDFG, Red Bluff.

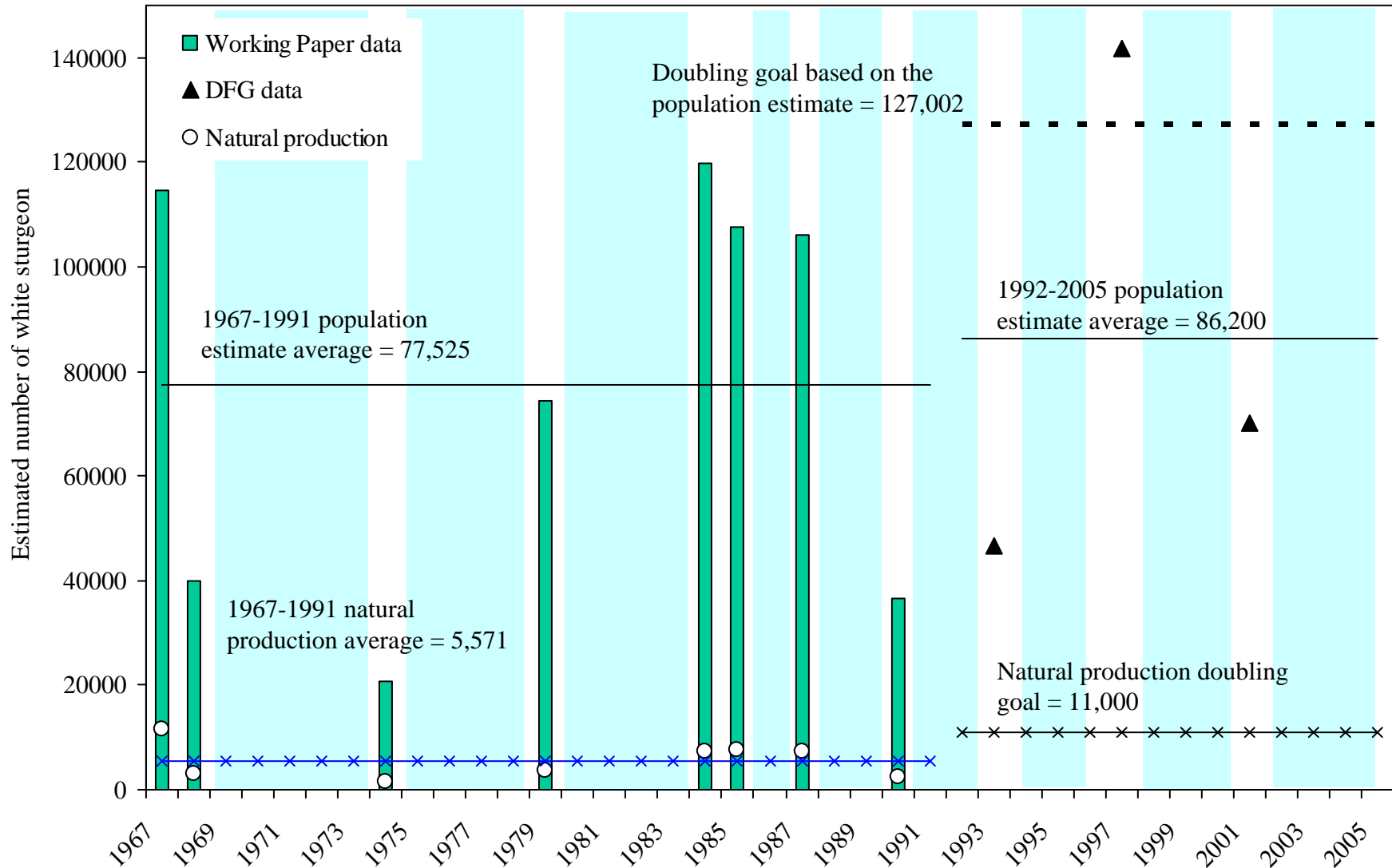


Figure 39. Yearly estimated abundance and natural production estimates of white sturgeon in the Central Valley. Estimates are for ≥ 40 inch fish. 1967-1991 baseline numbers are from the Working Papers on Restoration Needs, Vol. 3 (1995), and 1992-2001 numbers are from CDFG, Bay Delta. data was not available for 1991-1992, 1994-1996, 1998-2000, and 2002-2005.

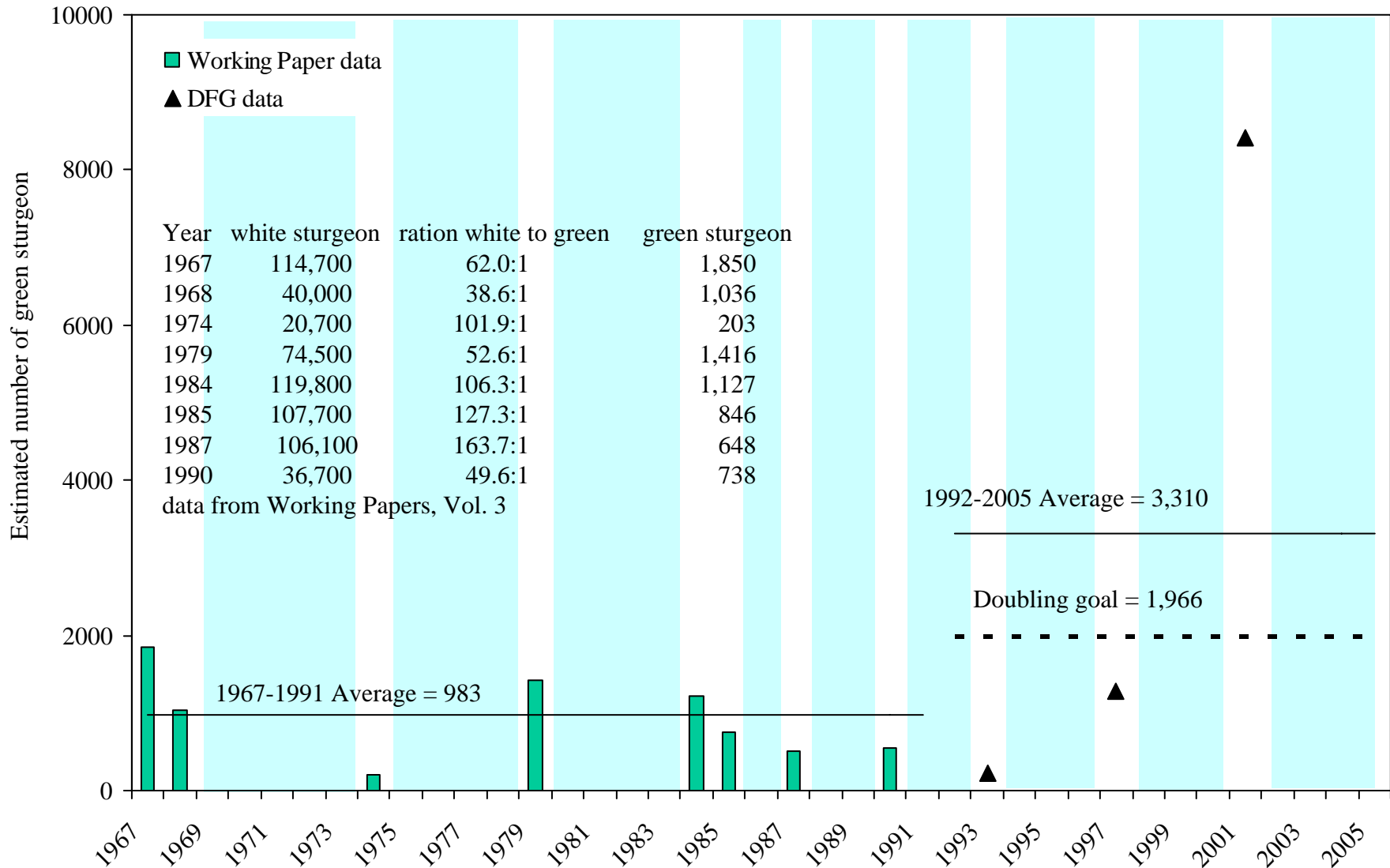


Figure 40. Yearly estimated abundance of green sturgeon in the Central Valley. 1967-1991 baseline numbers are from the Working Paper on Restoration Needs, Vol. 3 (1995), and 1992-2001 numbers are from CDFG, Bay Delta. = data was not available for 1991-1992, 1994-1996, 1998-2000, and 2002-2005. Green sturgeon estimates were based on a ratio of white to green sturgeon captured during those years when DFG was sampling for these fish.

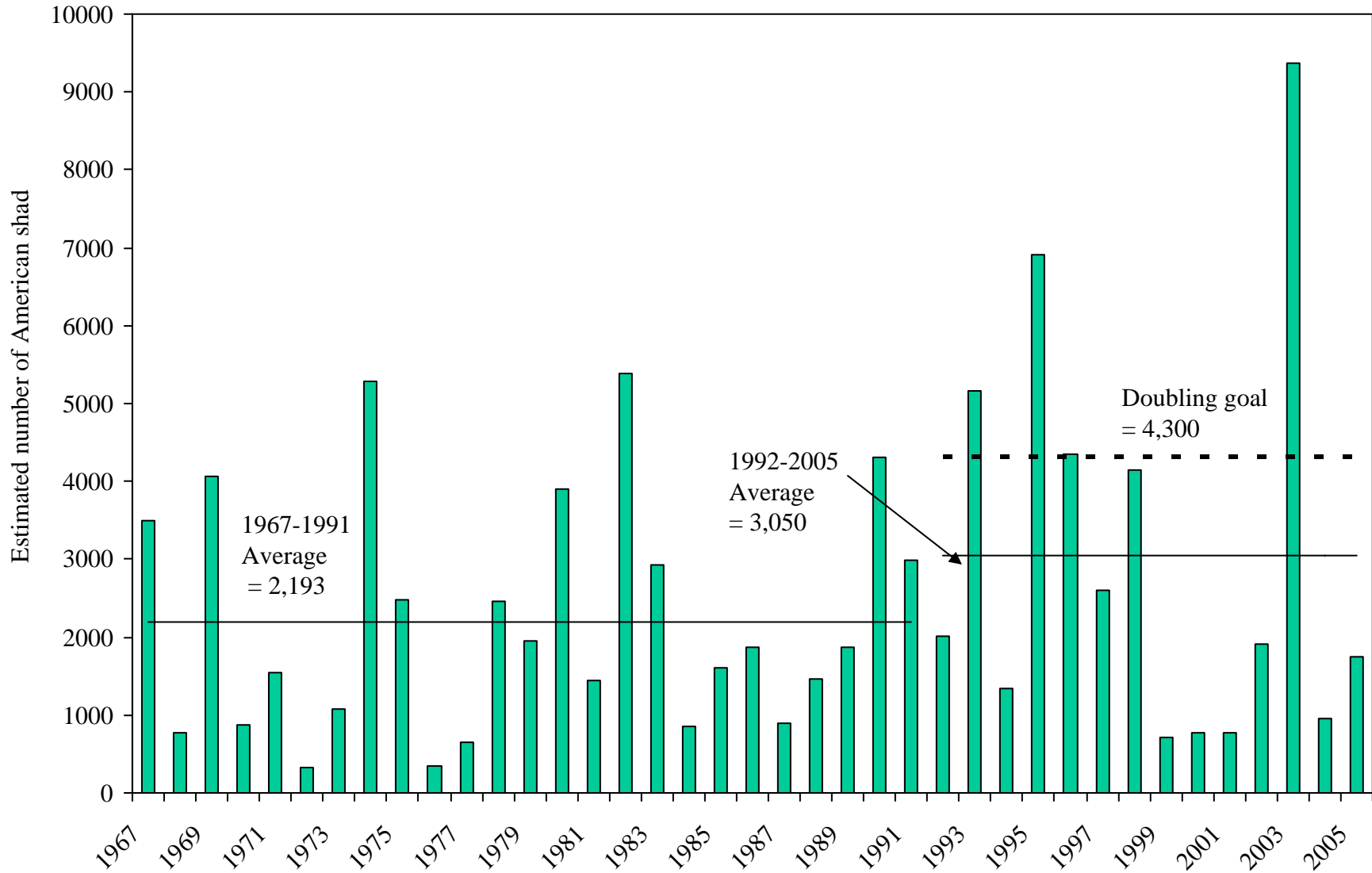


Figure 41. Yearly estimated abundance of American shad in the Central Valley, 1967 through 2005. Data, based on juvenile abundance from CDFG, Central Valley Bay Delta Branch (CVBDB) fall midwater trawl, was used as an index of production. 1967 – 1988 data is from the Working Papers, Vol.3, and 1989 – 2005 data is from CDFG, CVBDB midwater trawl website. The Working Papers site a young-of year index while CVBDB uses an index based on all ages, however the numbers are nearly identical.

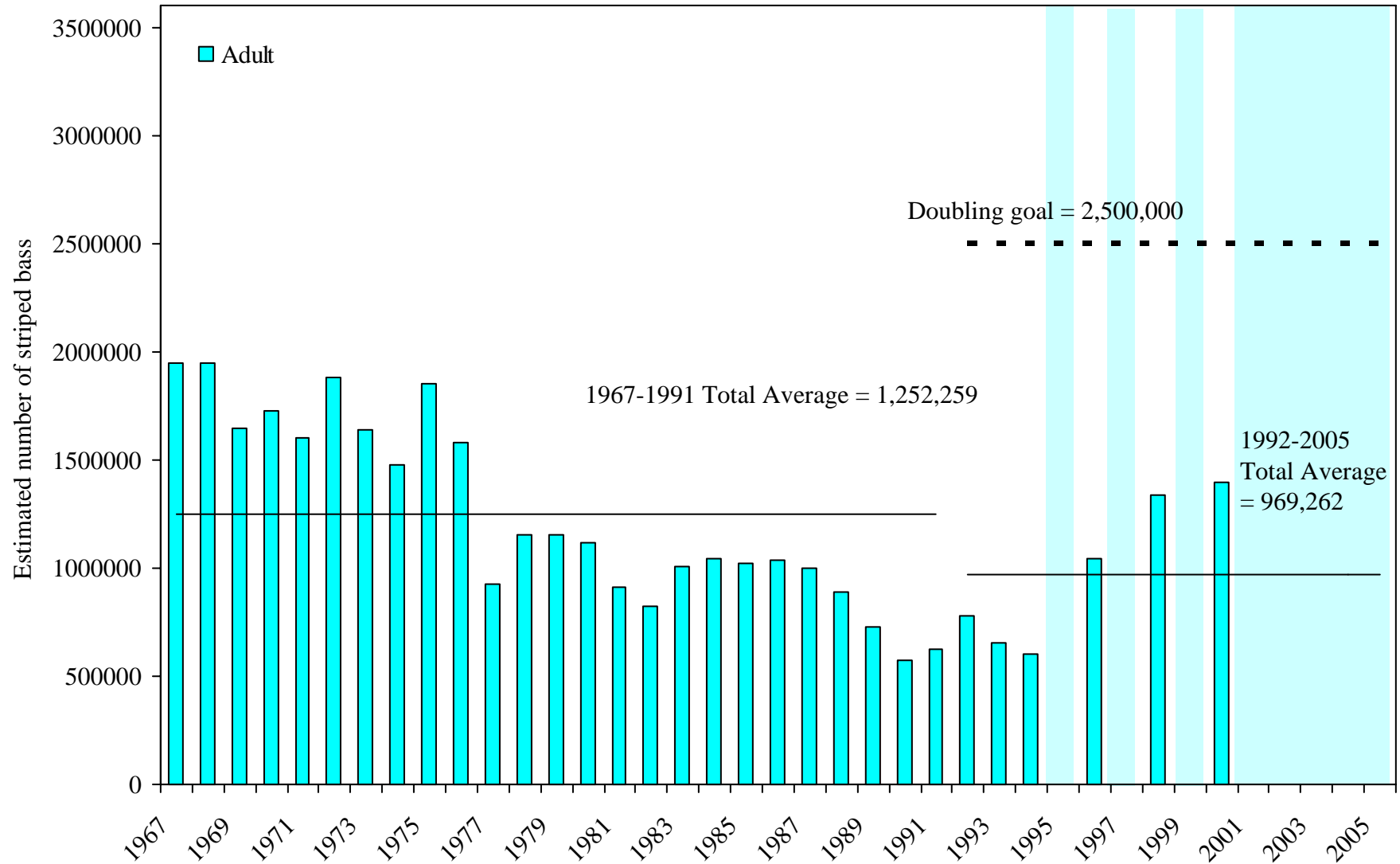


Figure 42. Yearly estimated abundance of adult sized (> 15 inches before 1982, and > 16.5 inches thereafter) striped bass in the Central Valley. Data is from the Mills and Fisher (1967-1991), and CDFG, Bay Delta (1992-2005). = data was not available for 1995, 1997, 2000, and 2002-2005.