

Strawberry Creek Stocking Analysis – December 2012

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Strawberry Creek Analysis



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Primary Chinook Egg Take Facility in Wisconsin

- All Chinook eggs for Wisconsin come from Strawberry Creek
- Only Chinook salmon at this facility
- First stocked 1969
- First egg take 1972



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Why a facility devoted entirely to Chinook Salmon?

- Chinook salmon fishery importance
- Longest continuous egg take in Wisconsin (since 1972)
- Long-term Chinook biological data set
- Low rates of disease

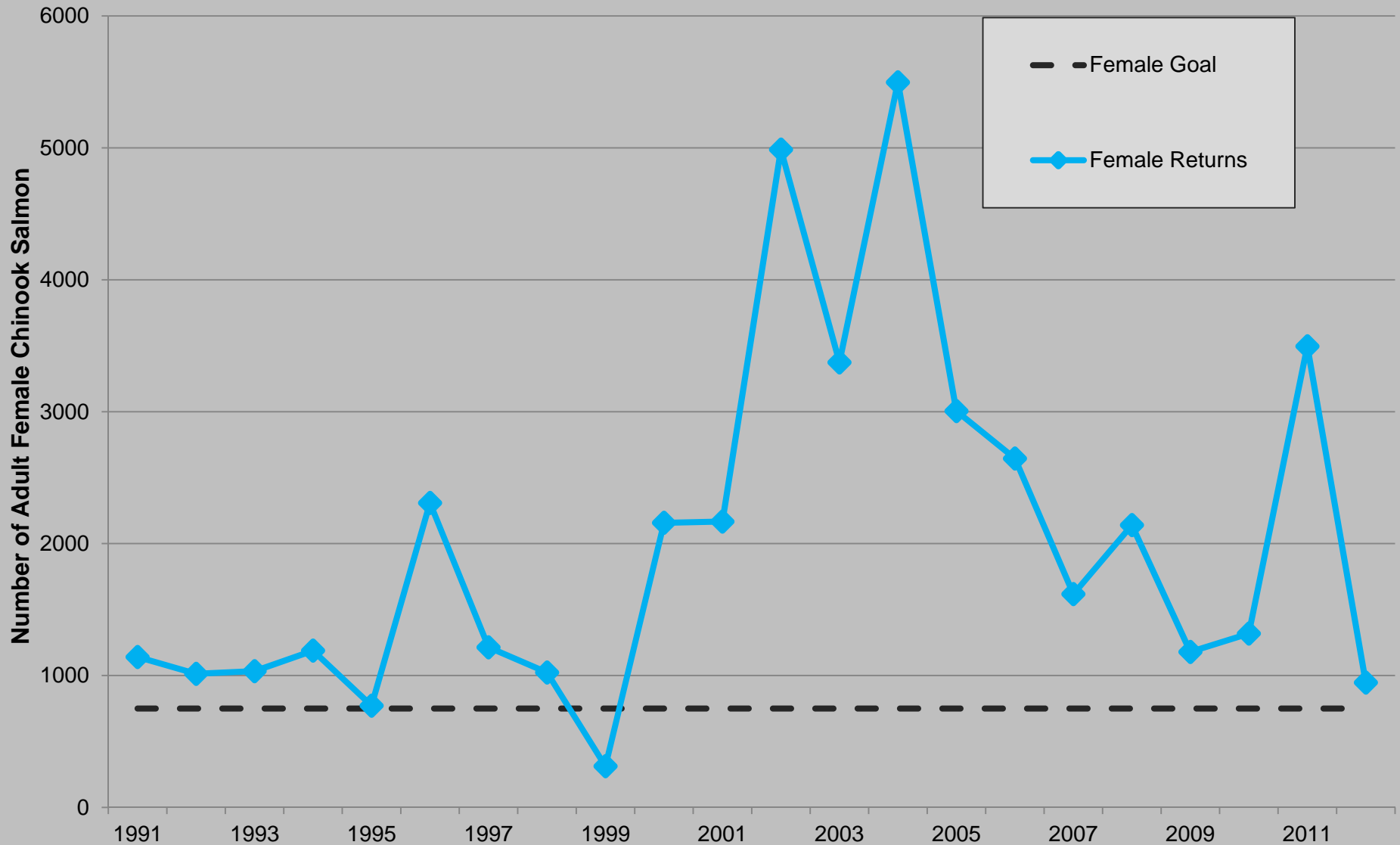


Current Egg Take Goal

- Spawners Needed = 750 females; 750 males
 - Egg collection goal = 1.5 Million (more than stocking goal due to mortality loss)
 - 1.5 million goal / 4,000 eggs per female = 375 females (Safety Factor -- multiply by 2 to account for green fish & disease = 750)

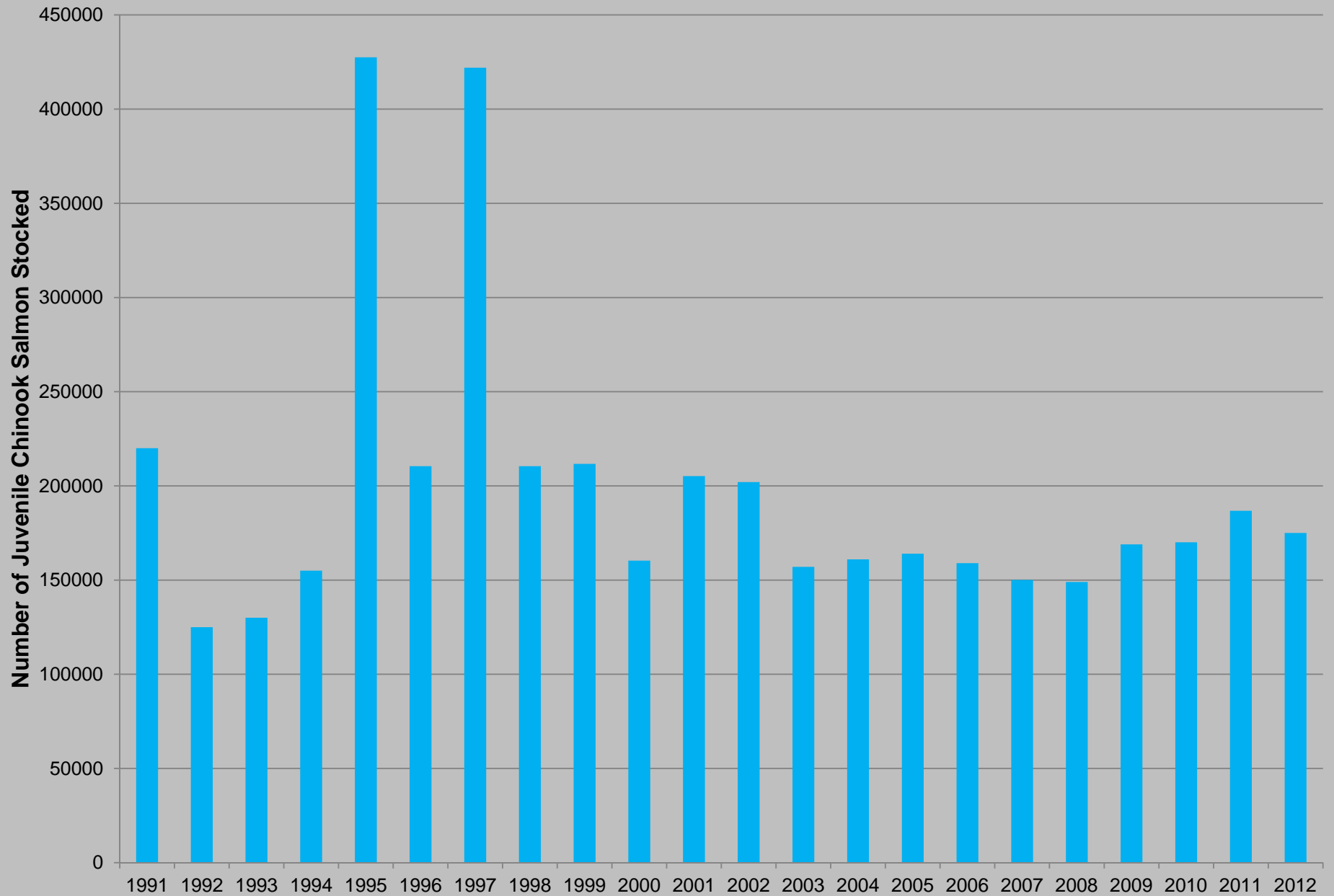


Female Chinook Salmon Returns to Strawberry Creek Weir: 1991 to 2011

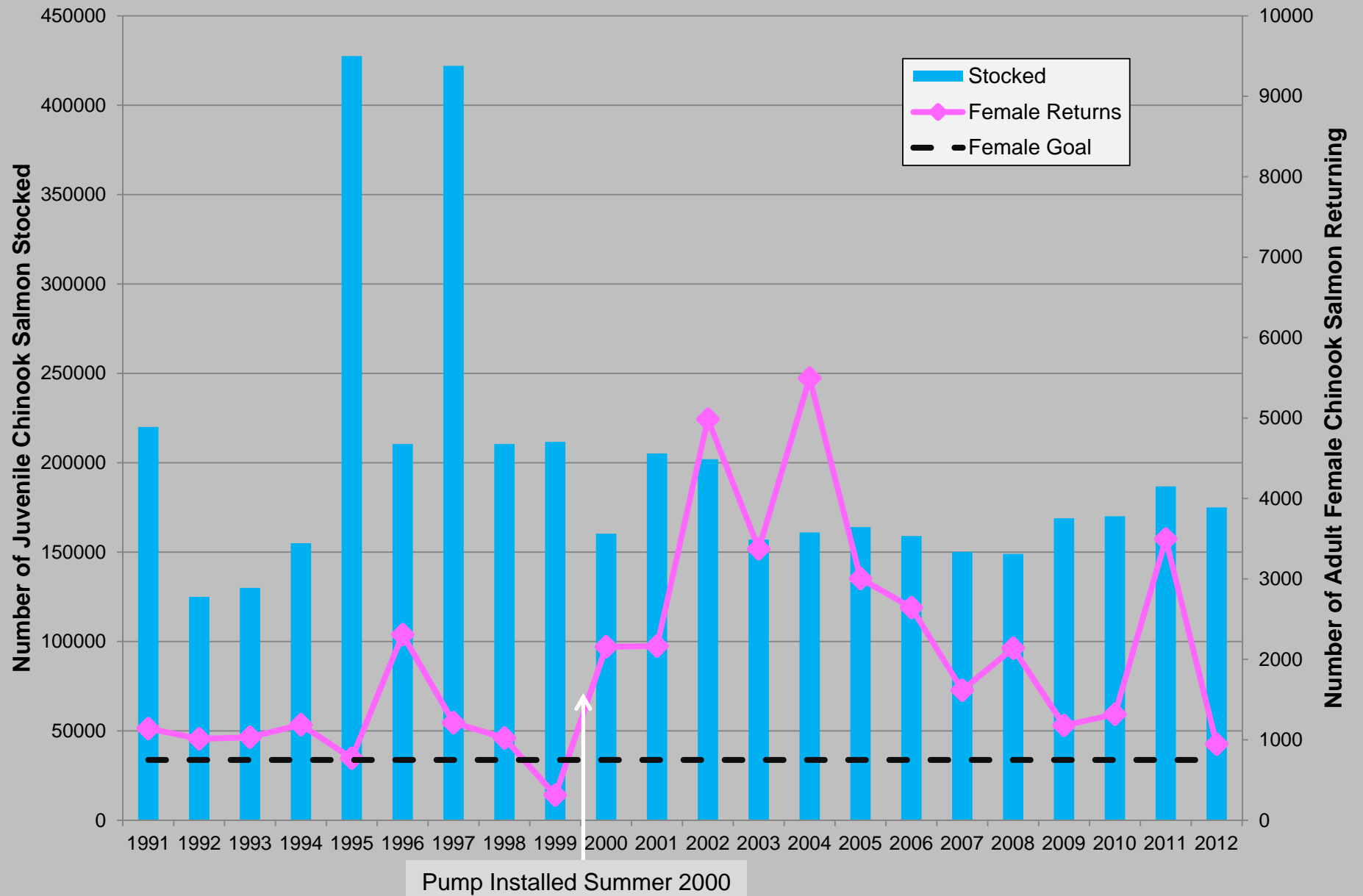


Note: Due to operation timing, pump operations, and other factors returns are not absolute and other factors besides abundance have influenced the numbers counted at the weir.

Number of Chinook Salmon Stocked at Strawberry Creek: 1991-2012



Chinook Salmon Stocked and Females Returned at Strawberry Creek: 1991-2012



Summary

- No precise mathematical or statistical way to calculate the exact number needed for stocking
 - Due to variability in system (e.g., survival, age at return, & environmental factors)
- Based on egg take goal & previous 10 years of stocking and return data, LM Fisheries Team recommends stocking 150,000 annually (reduction of 25,000)

