

RECLAMATION

Managing Water in the West

Cle Elum Dam Interim Fish Passage

Pat Monk

U.S. Fish and Wildlife Service

Yakima River Basin Water Enhancement Project (yarb-wep)



U.S. Department of the Interior
Bureau of Reclamation



Interim Fish Passage Facility

- Built in 2005, first operated in 2006
- Annual O&M Budget has been about \$80,000 from YRBWEP funds
- Improvements since construction include a gantry to lift stop logs, replacing the need for a boom truck to travel to site
- The dam tender can now manipulate weir boards in concert with the river operator



RECLAMATION

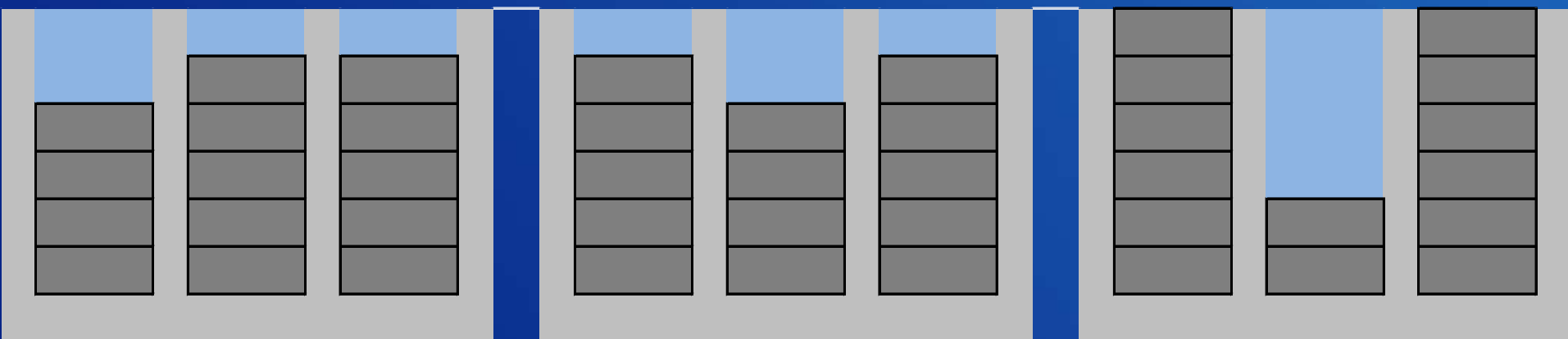


RECLAMATION

Each weir board is 11 feet wide by one foot deep.

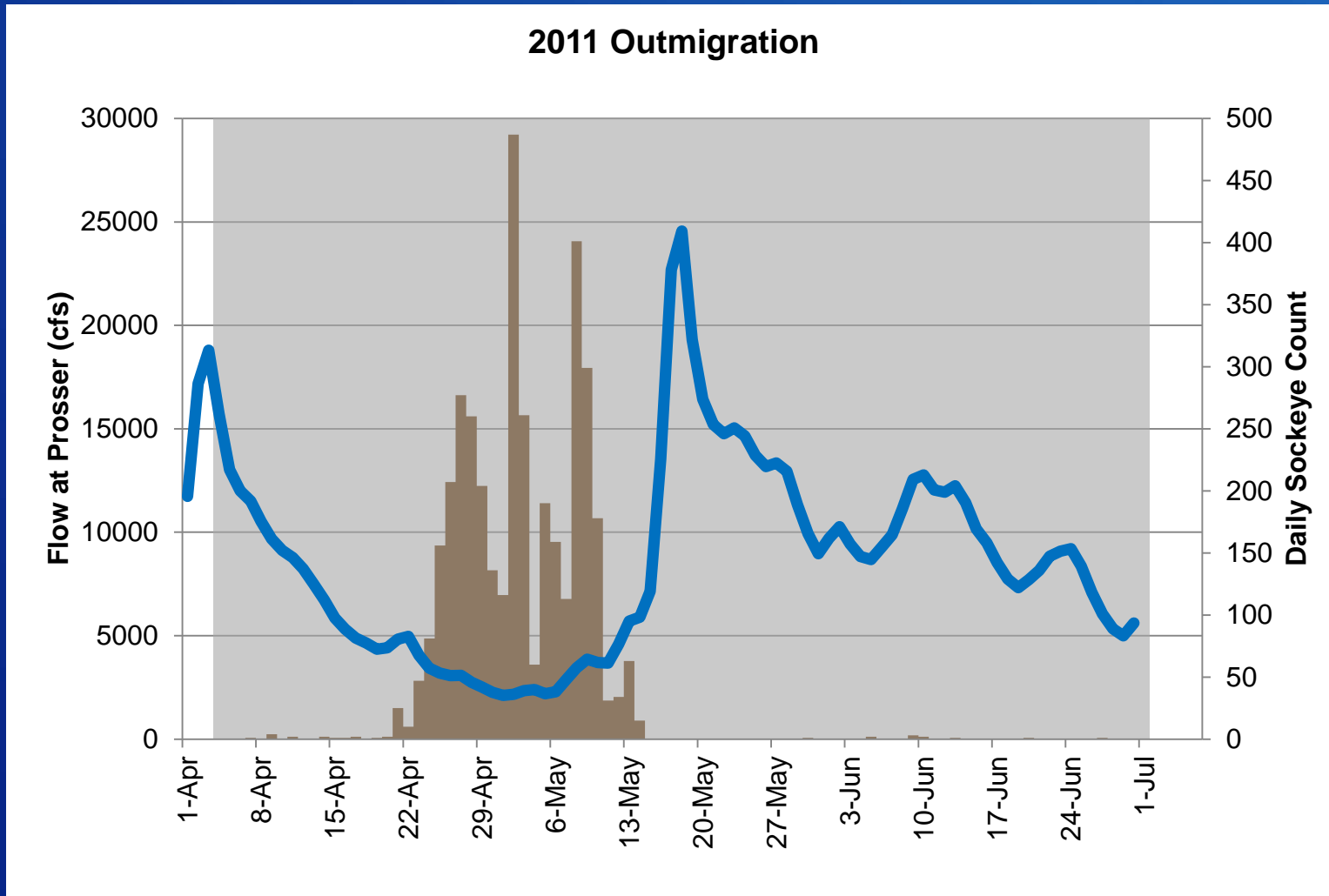
One foot of water depth over each board is appx.
80 cfs of water flow.

Flow ranges from 200-400 cfs.

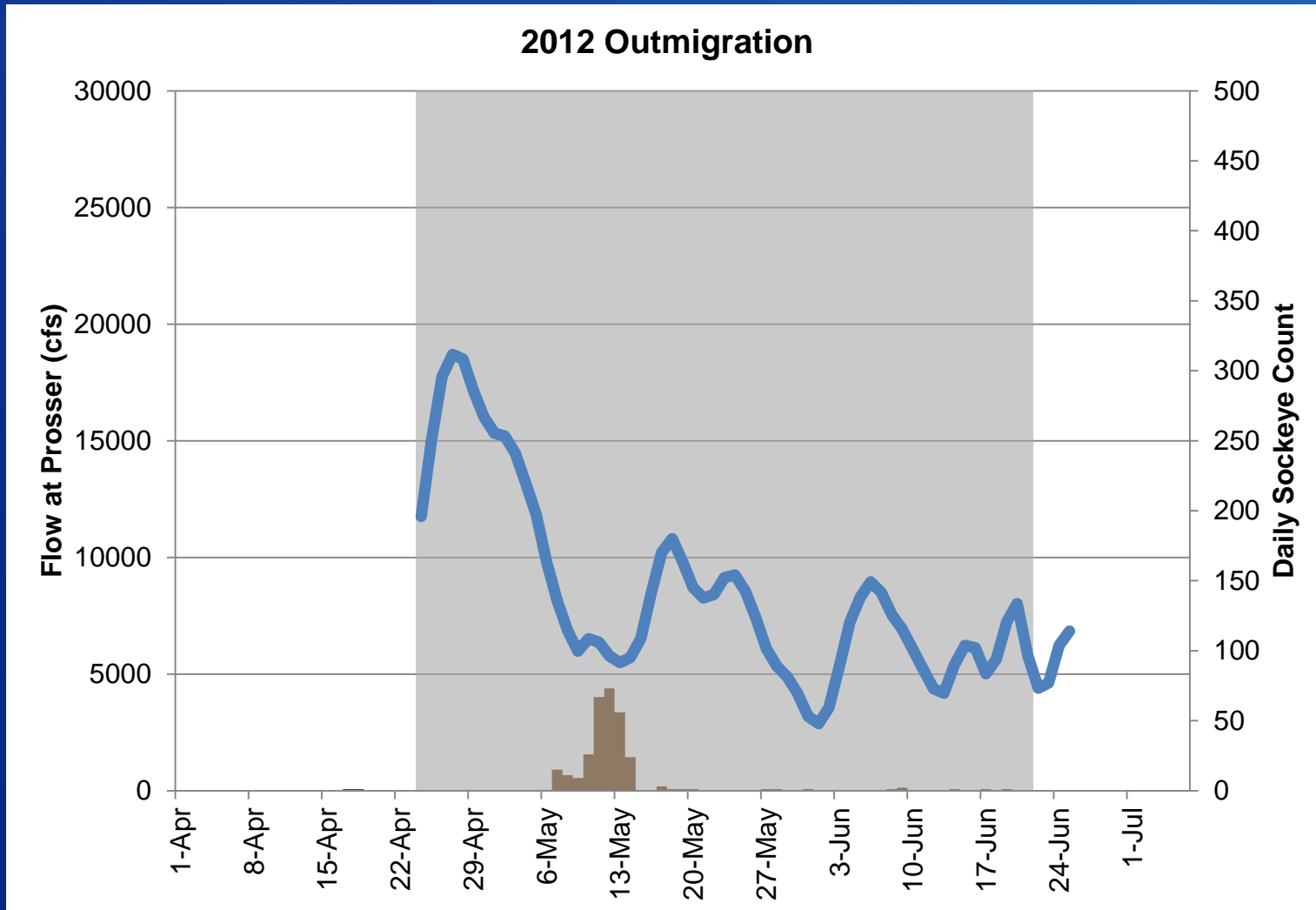


RECLAMATION

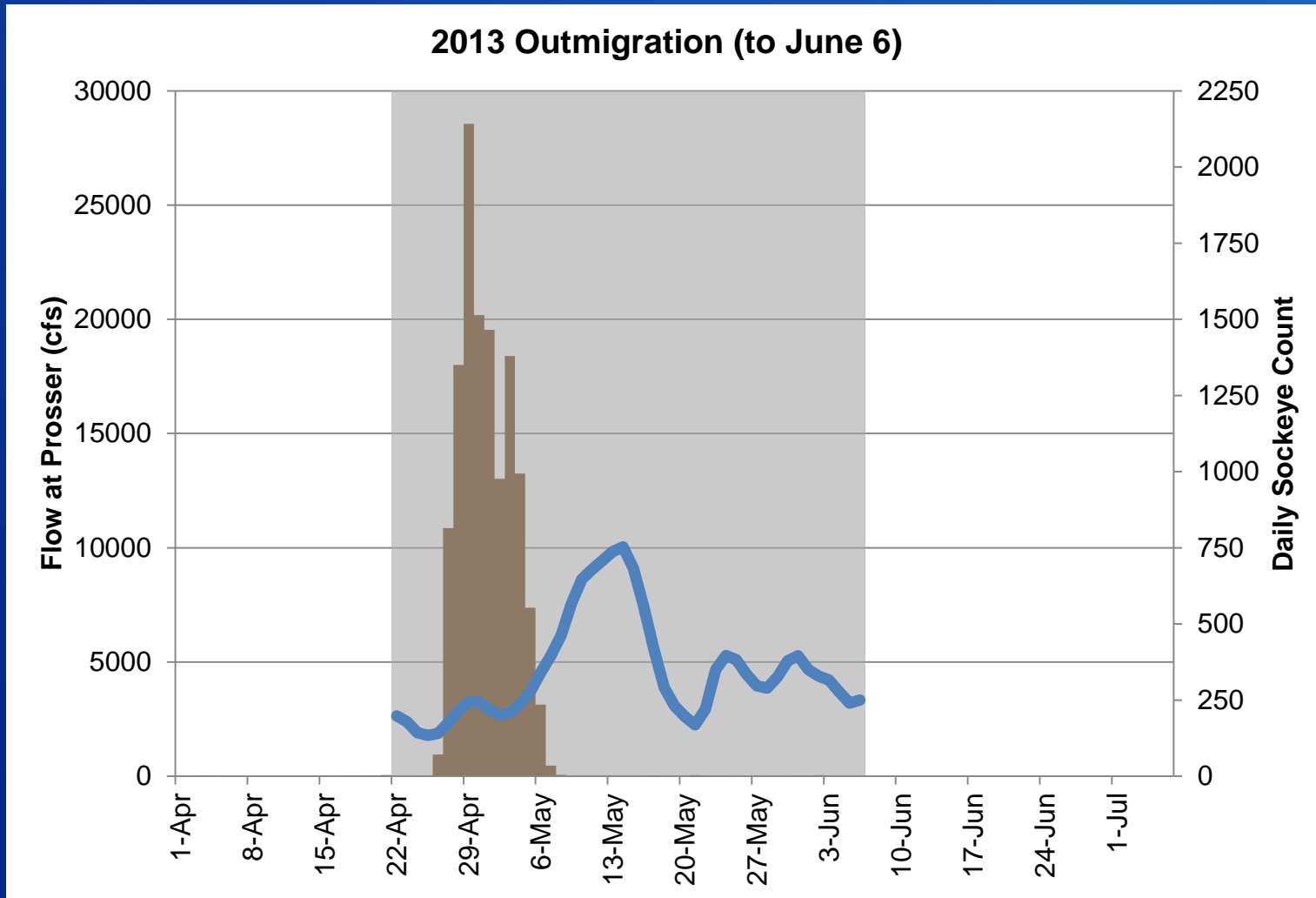
Bars are counts of sockeye smolts at the Prosser Juvenile Facility (sum 3837), line is Q, and the shaded area is Cle Elum operating season, April 4 to July 1, 2011.



Operating season April 24-June 21, 2012 (sum 298).



Operating season April 22 until now (sum 11580).





RECLAMATION

Mechanisms of injury: shallow depth, rough surface



RECLAMATION

Future Activities

- **Delaying operations until a higher elevation is reached is possible in some years, but in other years reservoir elevation rises slowly and delays could be significant.**
- **Investigate resurfacing flume floor, extending flume walls, continued annual inspections and maintenance.**
- **Hydroacoustic monitoring of weir operations to evaluate operations, smolt timing, and abundance.**

Acknowledgements

- **Yakima Field Office: Quentin Krueter and Duane Dobbs, Fish Operations Crew**
- **Reclamation-YRBWEP**
- **Yakama Nation Fisheries**