The Salmon of Marsh Creek

Millions of salmon historically migrated through the California Delta to thousands of miles of spawning grounds in the Sacramento and San Joaquin River watersheds.

The great water projects of the mid-20th Century transformed the Delta watershed into a global agricultural leader. Dams, diversions, and flood control projects that enabled this transformation depleted 90% of historic salmon spawning and rearing (juvenile) habitat. As a result, salmon populations crashed.

Despite these changes, every autumn we witness the perseverance of salmon. From distant waters of the Pacific Ocean adult salmon return to spawn in Marsh Creek.



To reduce flooding, Marsh Creek was straightened in the 1950s. Well-established streamside, or riparian, vegetation was removed, severely degrading salmon habitat.







Concrete drop-structure on Marsh Creek

This concrete wall, or drop-structure, tames erosive flows and flood waters, but also blocks access to salmon habitat upstream.

A fish ladder, built along side the drop-structure, opens that habitat while maintaining the function





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Fry migrate downstream one to three months after hatching.

of the drop structure. The ladder is a staircase for salmon to migrate past this barrier to broaden their habitat, regaining some of California's rich natural heritage.

Proposed fish ladder

Spawning adults deposit eggs and sperm in streambed.

Adults migrate up stream to area of birth.

The majority of Chinook Salmon mature in the ocean for up to four years.

Smolts migrate to an estuary to adapt to saltwater.



East Bay Regional Park District