

## Memorandum

**Date:** September 18, 2024

**To:** Erin Chappell  
Regional Manager  
Bay Delta Region

**From:** Margaret Johnson  
Environmental Scientist  
Bay Delta Region

**Subject:** 2024 Summer Townet Survey Delta Smelt Abundance Index

The annual California Department of Fish and Wildlife (CDFW) Summer Townet Survey abundance index for Delta Smelt (*Hypomesus transpacificus*) in 2024 is 0.0. This is the ninth year in which the abundance index was equal to zero. The first zero index was reported in 2015 and has reported a 0.0 index every year since 2018 (Figure 1).

The Summer Townet Survey sampling period consists of six biweekly surveys, beginning in mid-June and ending in late August. During each survey, young pelagic fishes are sampled from 40 fixed stations which consist of 31 index stations and 9 supplemental non-index stations (Figure 2). These sampling stations are located in the upper San Francisco Estuary from eastern San Pablo Bay and Napa River and upstream through to the Sacramento Deep Water Ship Channel (SDWSC) and lower San Joaquin River.

The Delta Smelt annual index is generated from an average of the first two survey indices. Survey indices for Delta Smelt are calculated by multiplying the catch at each index station by a station-specific weighting factor, summing the weighted catches of all index stations, and dividing the total by 1000. More information on index calculation can be found at on the department website for the [Summer Townet Survey \(ca.gov\)](https://www.cdffw.ca.gov/Summer-Townet-Survey).

The first and second Summer Townet surveys of 2024 were conducted during June 3-6 and June 17-21. During these surveys, no Delta Smelt were collected at index or non-index stations. This pattern is somewhat consistent with the low catches reported in the CDFW 20-mm Survey in the summer of 2024. The 20-mm Survey caught one Delta Smelt on June 13<sup>th</sup>. Although sample processing is ongoing for both surveys, these low confirmed catches indicate that Delta Smelt continue to occur at very low levels and detection is limited.

**Cc:** Stephanie Fong

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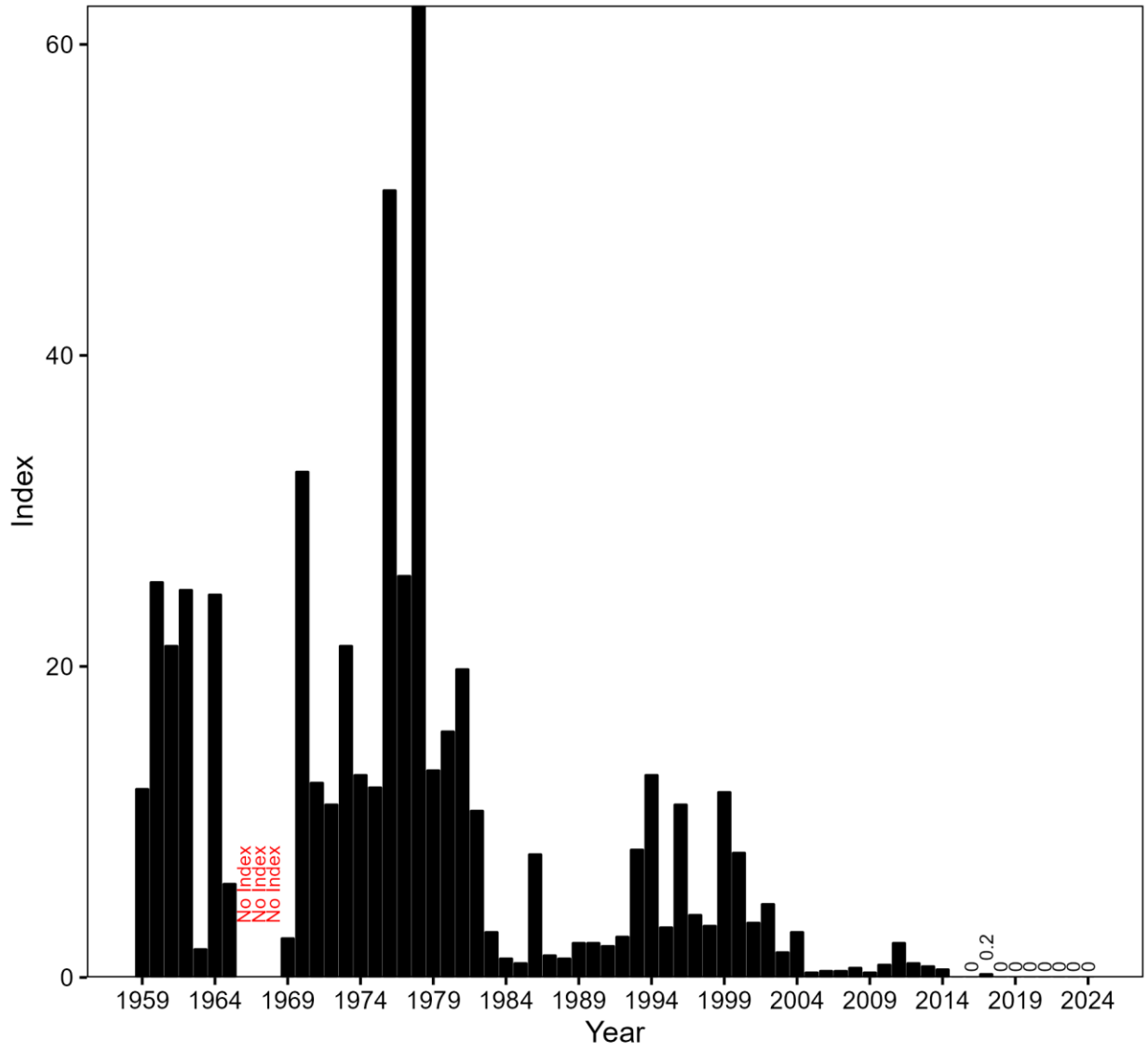


Figure 1. Summer Townet Survey Delta Smelt annual abundance indices 1959-2024.

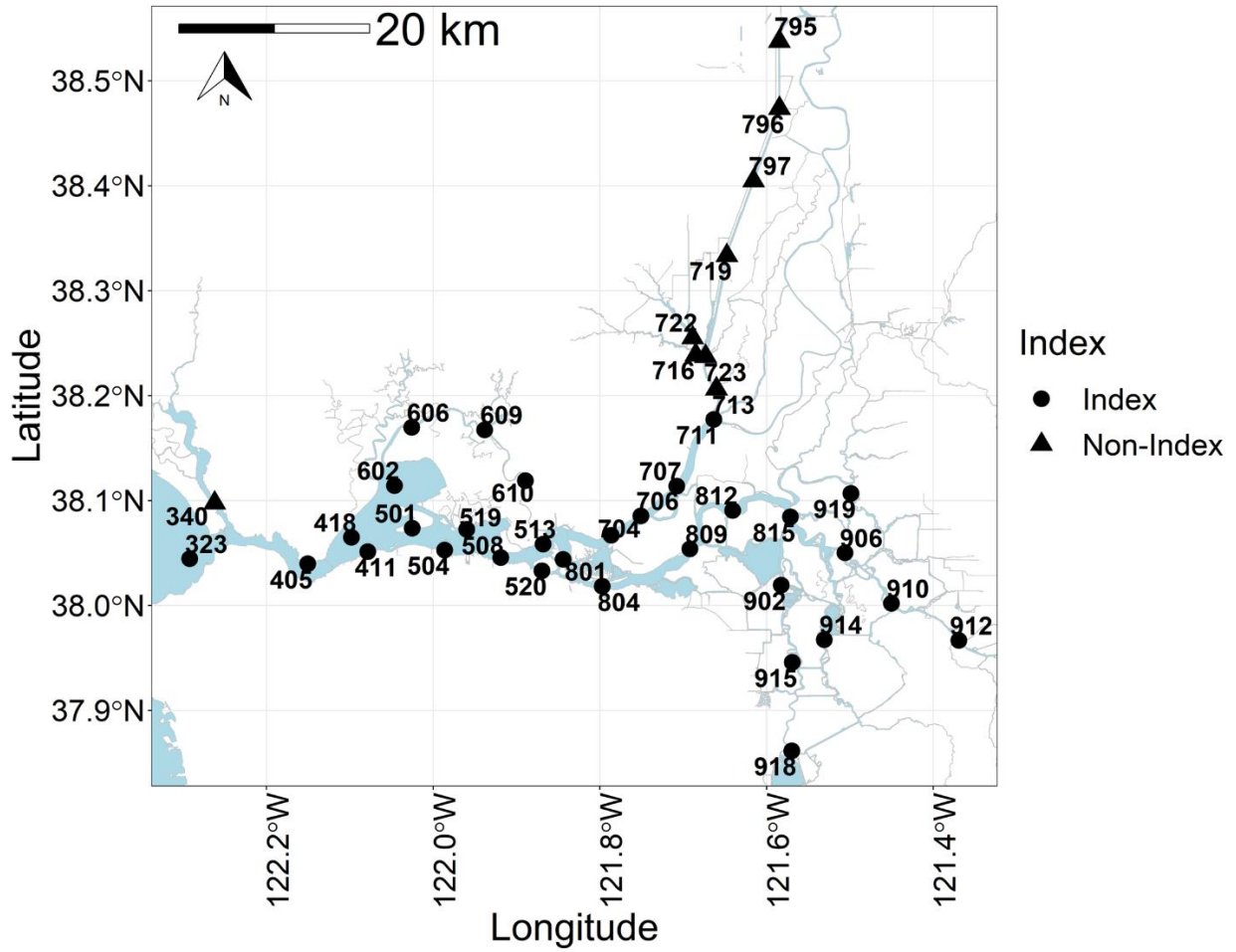


Figure 2. Distribution of Summer Townet Survey index and non-index stations in the upper San Francisco Estuary.