



Date: July 6, 2018

Memorandum

To: Gregg Erickson
Regional Manager
Bay Delta Region

From: Felipe La Luz
Environmental Scientist
Bay Delta Region

Subject: 2018 Summer Townet Survey Delta Smelt Abundance Index

The 2018 Summer Townet annual abundance index for Delta Smelt is 0.0. This is the third year in which the number of Delta Smelt collected during the first two Summer Townet surveys was low enough to result in an index equal to zero. The previous two zero indices occurred in 2015 and 2016 (Figure1).

Summer Townet conducts six Delta wide surveys in which 31 index and nine supplemental stations are sampled (Figure 2). The annual Delta Smelt abundance index is the average of the first two survey indices. Survey indices are calculated by multiplying Delta Smelt catch at each index station by a station-specific weighting factor. We sum these weighted catches for the 31 index stations and divide this sum by 1000. Catch from nine supplemental stations in the Napa River, Cache Slough, and Sacramento Deep Water Ship Channel (SDWSC) are not included in the index.

The first two surveys of 2018 were conducted during the weeks of June 10 and June 24. During the first survey, no Delta Smelt were collected at index stations. One Delta Smelt was collected at supplemental station 797 in the SDWSC. During the second survey, one Delta Smelt was collected near Chipps Island at station 508 (an index station), but that single fish was insufficient to produce an index value > 0.0 .

If you have any questions about this Delta Smelt Index and the information provided, please feel free to contact either Mr. Randy Baxter or myself directly.

Cc: Jim Starr
Randy Baxter
Kathy Hieb
Bob Fujimura

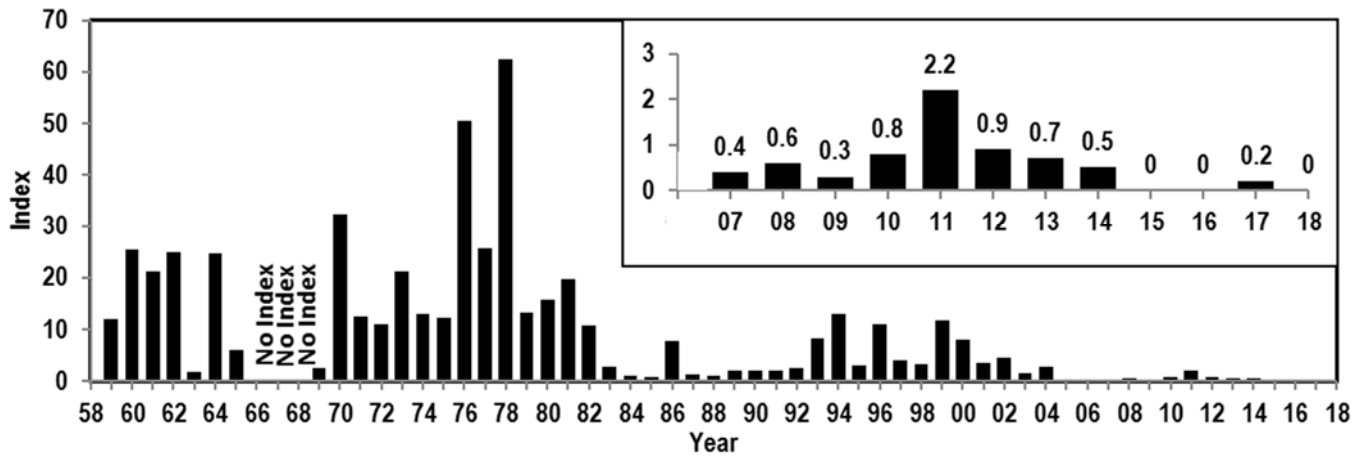


Figure 1. Summer Townet Survey Delta Smelt annual abundance indices 1959-2018 with inset showing indices from 2007 to 2018.

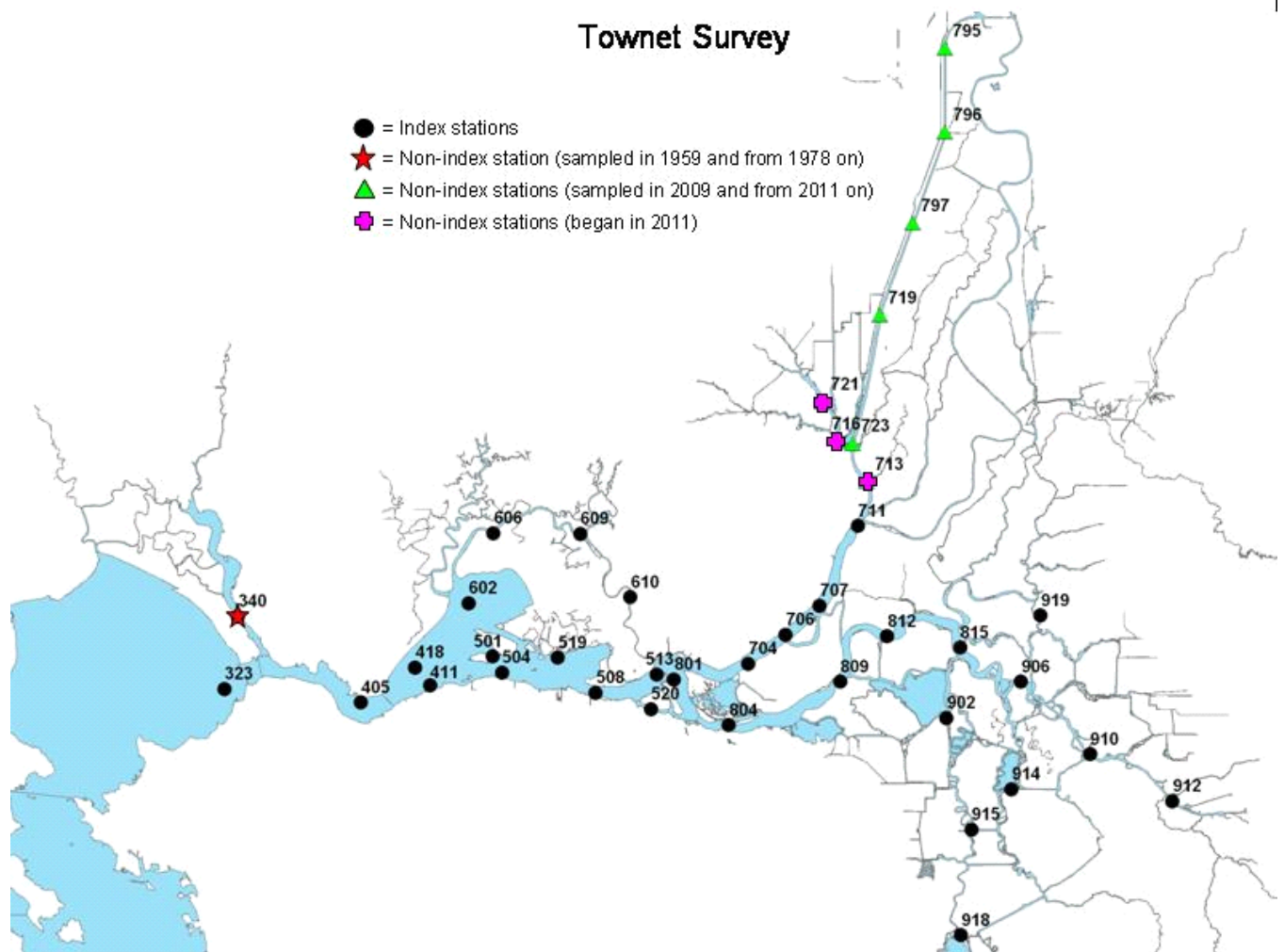


Figure 2. Map of Summer Townet Survey index and non-index station locations.