

## Memorandum

Date: July 18, 2013

**To:** Scott Wilson  
Acting Regional Manager  
Region 3, Bay-Delta

**From:** Katherine Osborn  
Fisheries Biologist  
Region 3, Bay-Delta

**Subject:** 2013 Summer Townet Survey Age-0 Delta Smelt Index

The Summer Townet Survey (STN) delta smelt abundance index for 2013 is 0.7. This index is less than last year's index and is similar to the low indices from 2005-2010 (Figure 1). The STN delta smelt abundance index is calculated as the mean of the first 2 survey indices. This year the first 2 surveys occurred during the weeks of June 10 and June 24. The STN project samples 31 stations that contribute data to the index during each biweekly survey. In 2011, STN added 8 new, non-index stations to each survey to improve distribution coverage and increase detection of delta smelt in Cache Slough (CS) (3 stations) and the Sacramento River Deep Water Ship Channel (SRDWSC) (5 stations) (Figure 2). To reduce take, tows performed at CS station 721 only are 5 minutes in duration instead of the standard 10 minutes. The catch values reported below are actual catch and do not compensate for shorter tows conducted at station 721.

In 2013, index station catch decreased from 35 during survey 1 to 18 for survey 2. During survey 1, delta smelt were caught in Montezuma Slough (n=19), the lower Sacramento River (n=10), the lower San Joaquin River (n=5), and Suisun Bay (n=1). During survey 2, delta smelt continued to be most numerous in Montezuma Slough catch (n=13). They were also caught in Suisun Bay (n=2) and the lower San Joaquin River (n=3). Probable delta smelt catch in the CS-SRDWSC region was 42 fish during survey 1, with a majority from the SRDWSC (n=32). Identification has been confirmed for 8 of these fish, but remains to be confirmed for the other 34 delta smelts caught in the region. During survey 2, CS-SRDWSC region catch dropped (n=7), with only 1 delta smelt caught in CS. Identification of all survey 2 catch has been confirmed. The CS-SRDWSC region is outside the area used to calculate the abundance index.

Attachments: 1

Cc: Carl Wilcox  
Marty Gingras  
Bob Fujimura  
Kathy Hieb  
Randy Baxter

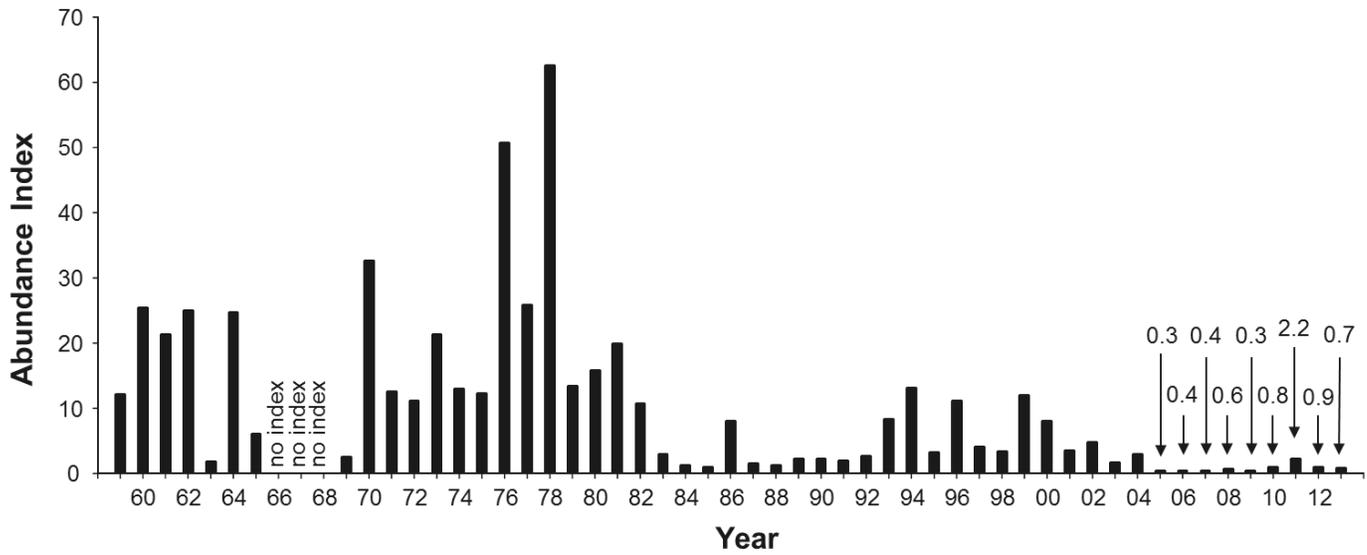


Figure 1. Summer Townet Survey age-0 delta smelt abundance indices, 1959-2013.

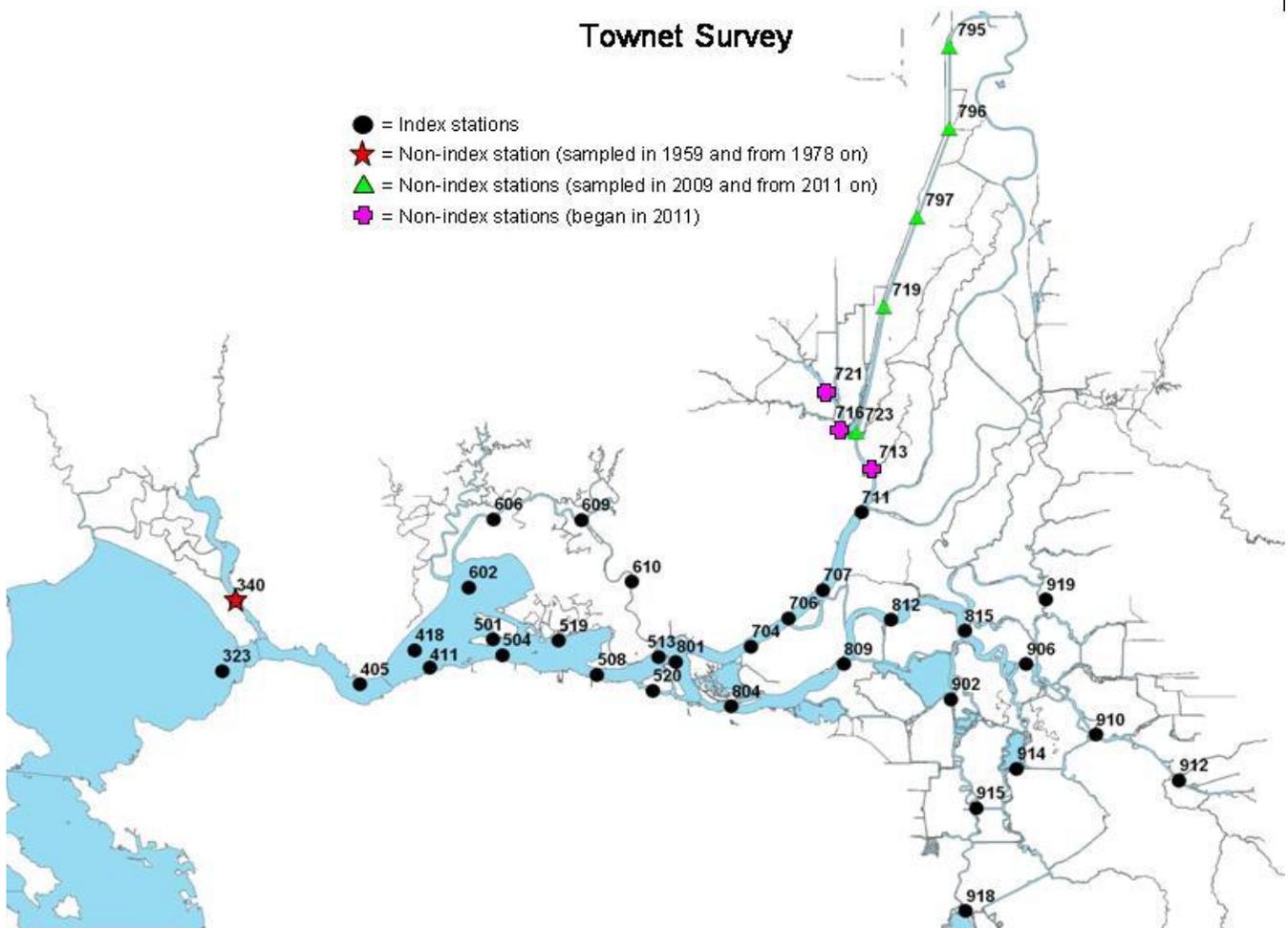


Figure 2. Map of Summer Townet Survey index and non-index station locations.