State of California
Department of Fish and Game

Memorandum

Date: July 18, 2012

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

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

Subject: 2012 Summer Townet Survey Age-0 Delta Smelt Index

The Summer Townet Survey (STN) delta smelt abundance index for 2012 is 0.9. This index is less than half of last year's index, but is similar to the low indices since 2005 (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 11 (survey 1) and June 25 (survey 2). The STN project samples 31 stations that contribute 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 2012, index station catch increased from 19 during survey 1 to 29 for survey 2. During survey 1, delta smelt were caught in Montezuma Slough (n=8), Suisun Bay (n=5) and the lower Sacramento River (n=6). During survey 2, delta smelt continued to be caught in Montezuma Slough (n=3), Suisun Bay (n=19) and the lower Sacramento River (n=2), as well as in the lower San Joaquin River (n=5). Delta smelt catch occurred in the CS-SRDWSC region in surveys 1 (n=50) and 2 (n=39), with the majority from SRDWSC (n=34 and n=31, respectively). 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

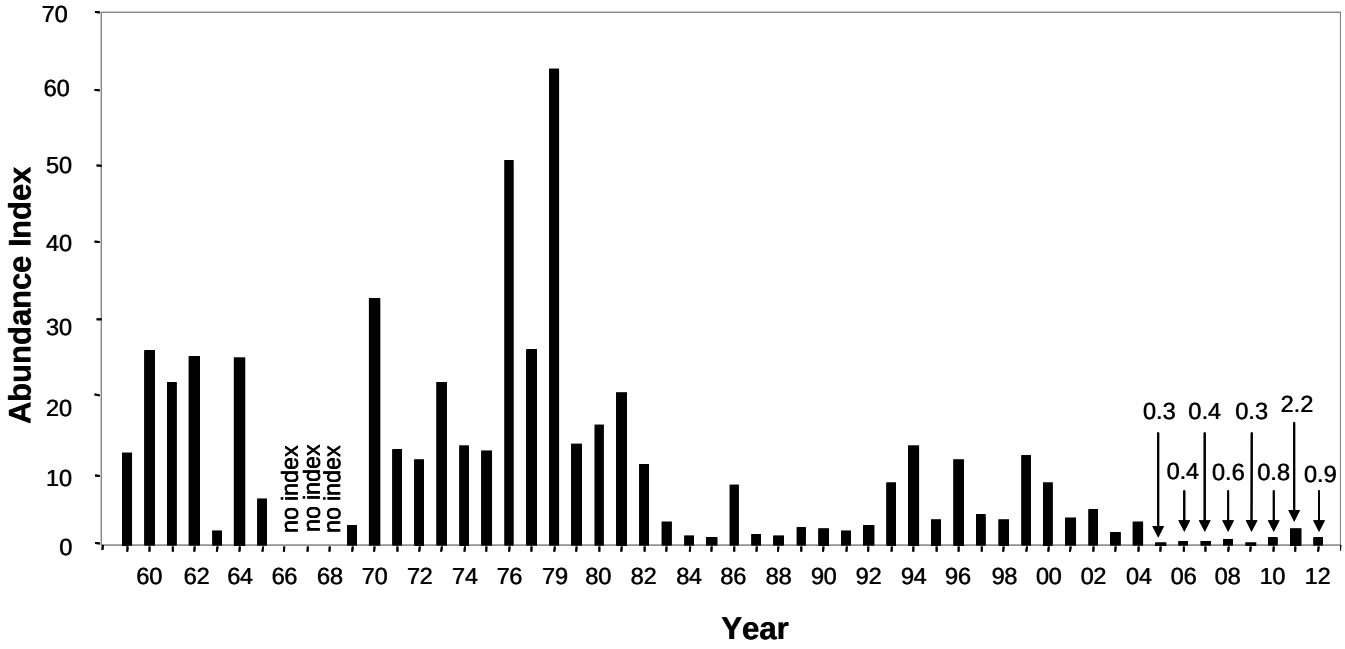

Figure 1. Summer Townet Survey age-0 delta smelt abundance indices, 1959-2012.

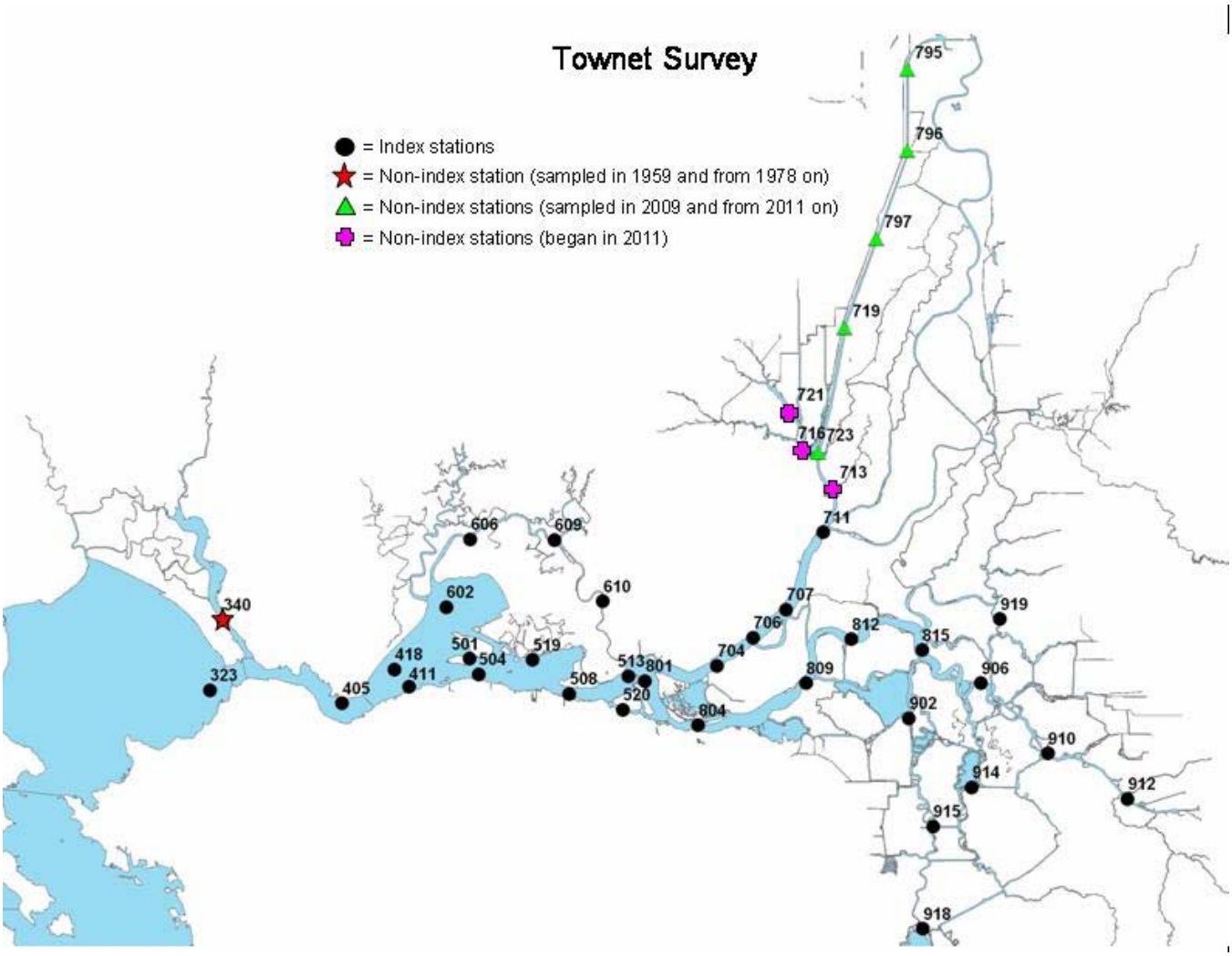

Figure 2. Map of Summer Townet Survey index and non-index station locations.