



Memorandum

Date: November 2, 2017

To: Marty Gingras
Environmental Program Manager
Bay Delta Region

From: Trishelle Tempel
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Bay Delta Region

Subject: Age-0 White Sturgeon Catch in the 2017 20-mm Survey

The 20-mm Survey collected notably-high numbers of larval White Sturgeon in 2017, and this memorandum briefly summarizes our observations about those collections¹.

The 20-mm Survey was initiated in 1995 and uses a 10-minute oblique tow to sample the water column at 47 stations throughout the upper San Francisco Estuary (Figure 1). The Survey samples March-July and uses a 1600 μ m mesh net that was designed to retain post-larval and juvenile Delta Smelt. More information on the 20-mm Survey methods, protocols, and data can be found on our webpage:

<https://www.wildlife.ca.gov/Conservation/Delta/20mm-Survey>

The 20-mm Survey collected 73 larval White Sturgeon ranging in size from 10-19 mm in 2017. The fish were collected from mid-March (the start of the sampling season) through May, they were broadly distributed throughout the estuary, and catches were highest in the Lower Sacramento River. Two fish were collected in the Lower San Joaquin River, and they were the first caught there by 20-mm Survey since 2008.

The 20-mm Survey typically observes age-0 sturgeon during water years classified as "above normal" or "wet", and high catches this year were likely influenced by high outflow this spring. The 20-mm Survey also collected record high numbers in 2016, and this is the first time in 20-mm Survey history that notably-high catches were made two years in a row (Figure 2).

¹ For more information on age-0 Sturgeon catch in the 20-mm Survey, see *Memorandum: Age-0 Sturgeon Catch in the 20-mm Survey* here: <http://www.dfg.ca.gov/delta/data/20mm/bibliography.asp>

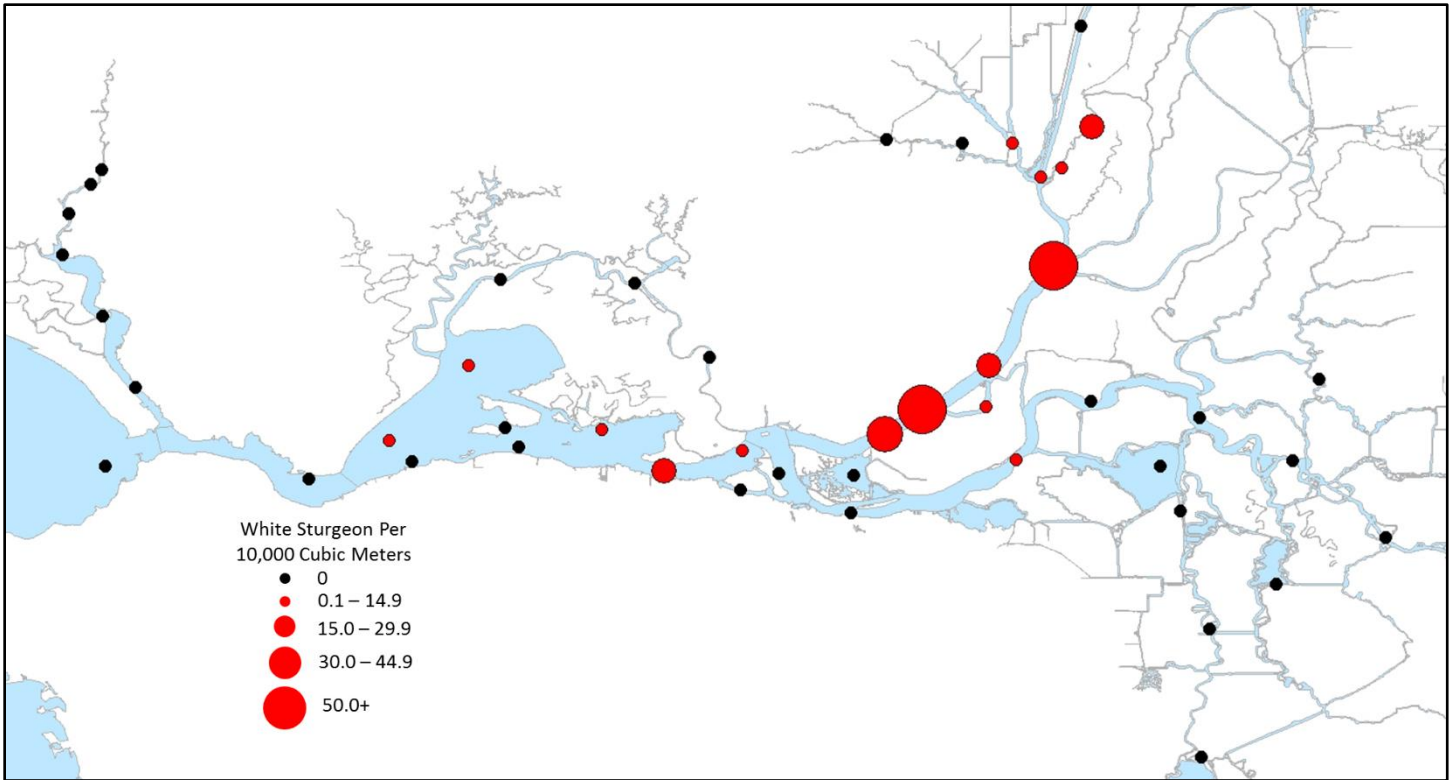


Figure 1. Map of the upper San Francisco Estuary showing the 20-mm Survey stations and associated 2017 cumulative age-0 White Sturgeon catch per unit effort

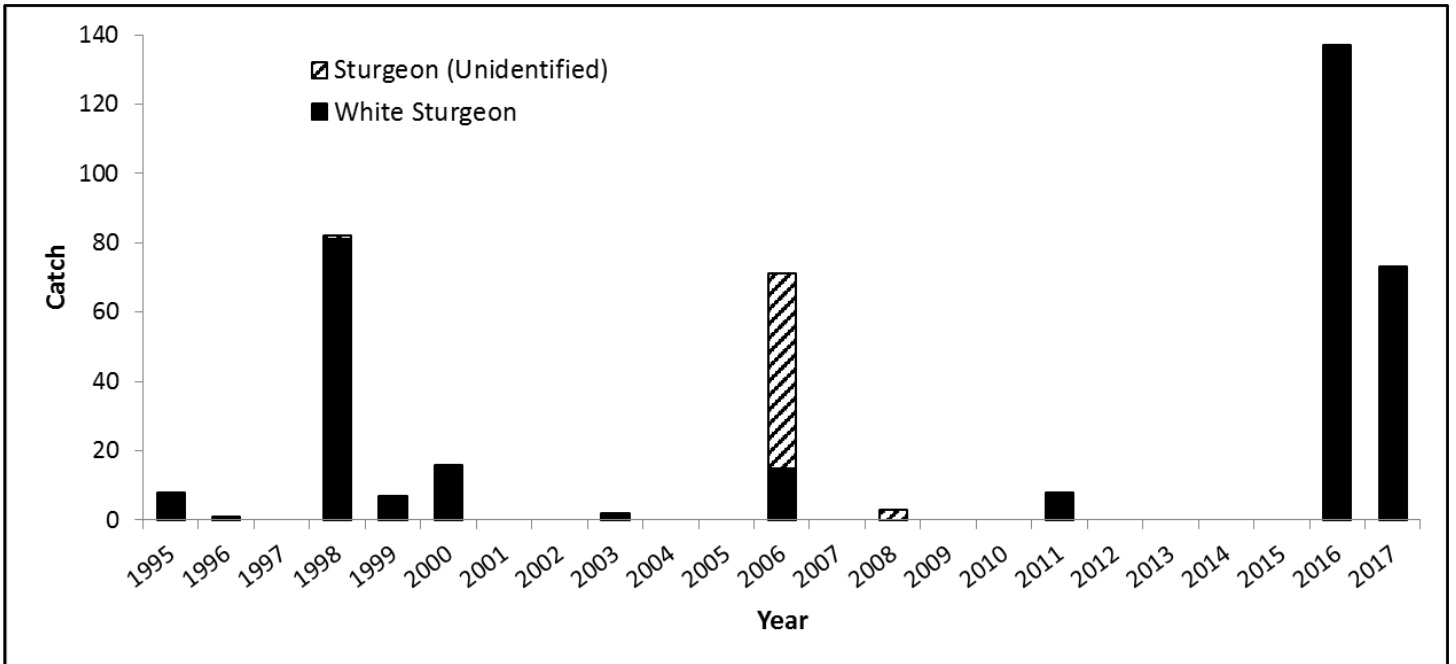


Figure 2. Annual catch of age-0 White Sturgeon and unidentified sturgeon during the 20-mm Survey