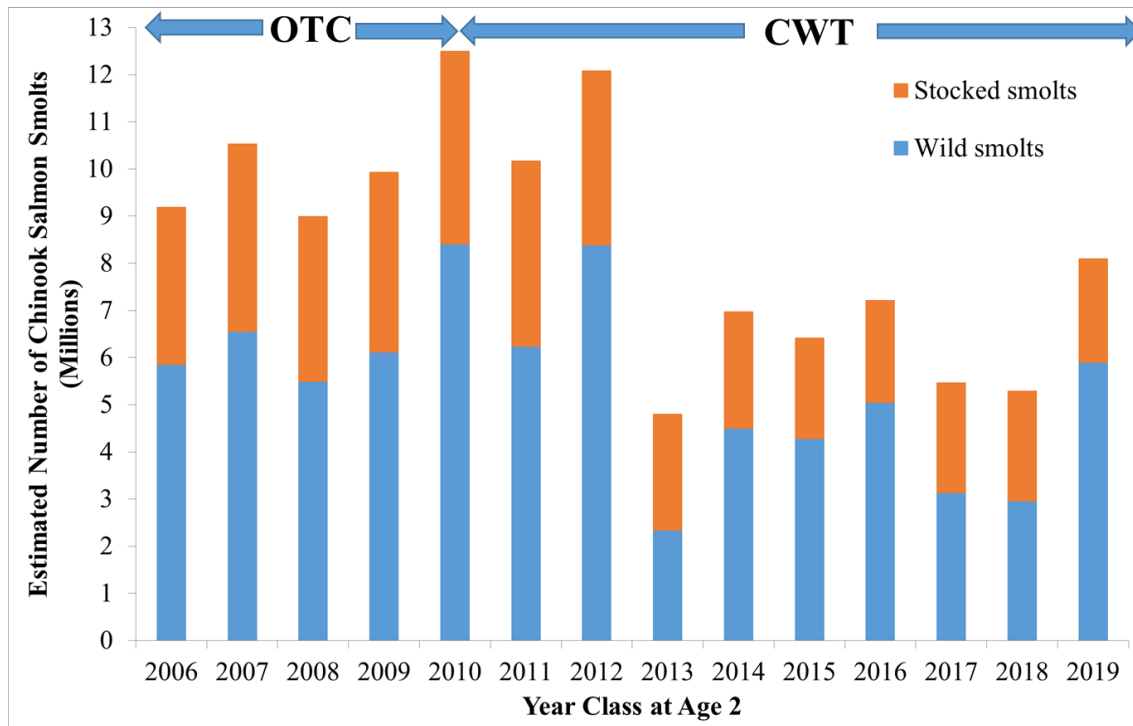




U.S. Fish & Wildlife Service

# Mass Marking Program Chinook salmon wild production

*The Great Lakes Mass Marking Program is a collaboration between federal, state and tribal fishery agencies, coordinated by the U.S. Fish and Wildlife Service, to answer questions critical for sustaining Great Lakes fisheries and native species restoration. The program is funded by the USEPA's Great Lakes Restoration Initiative.*



Estimated number of wild (blue) and stocked (orange) Chinook salmon in the 2006 – 2019 year classes in Lake Michigan, estimated from oxytetracycline marks (OTC) and coded-wire tags/adipose fin clips (CWT).

- Stocked smolt production is known from hatchery records, and has varied over the time series due to stocking reductions in 2005, 2013, and 2017 to help protect the forage base. A stocking increase occurred after the 2019 year class and thus is not yet shown.
- Wild smolt production is estimated as the number of wild smolts that must have been present to produce the observed proportion of wild fish at age 2 from each year class given the known number of hatchery fish that were stocked.
- Weak wild production from the 2013 year class is thought to be related to a drought during the spawning run, followed by a harsh winter and delayed spring.
- The most recent year class, 2019, had wild production comparable to the relatively high production year classes from 2006 – 2012.