Interagency Ecological Program 2023 Work Plan Element
Adult Sturgeon Population Study

Project Manager and Affiliation

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Principal Investigator and Affiliation

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Annual Costs (thousands) and Funding Sources

$683 USBR

Figure 1: *Juvenile white sturgeon captured during trammel net survey.*

Description

CDFW first conducted a mark-recapture study of White Sturgeon in 1954 to monitor and manage the population dynamics of White and Green Sturgeon under the then new recreational fishery. Semi-regular sampling as the Adult Sturgeon Population Study then began in 1984, with annual sampling in the years since 2005 (except 2018). The study now operates as a part of the Interagency Ecological Program (IEP), a multi-agency monitoring enterprise tasked with studying the effects of water exports and impoundments on the ecology of the SFE.

The study captures adult White and Green Sturgeon with the use of custom-made Trammel nets ranging from 100 to 200 fathoms in length. Captured sturgeon are tagged with PIT and/or reward disk tags to measure movement, growth, and to estimate population size using mark-recapture methods. Sampling generally occurs four days per week between August and October, and is conducted primarily in San Pablo, Suisun, and Grizzly Bays.

Need

The CVPIA has doubling goals for White Sturgeon and Green Sturgeon, and only this element supplies the data necessary for monitoring progress toward achieving those goals. This element does the only work in California to assess and characterize the White Sturgeon population and fishery. White Sturgeon is an important sport fish with a history of mismanagement and Green Sturgeon is a listed species. On-going in one form or another since 1954, this element is necessary to rationally manage White Sturgeon in California and bycatch of Green Sturgeon in California fisheries. Information on White Sturgeon produced by this element has been used as a 'surrogate' when addressing lack of pertinent Green Sturgeon data.

The Adult Sturgeon Population Study is also mandated to address compliance with water rights decisions D-1485 and D-1641, as it helps inform abundance trends and recruitment success of the White and Green Sturgeon populations relative to freshwater outflow and exports.

Objectives

- To track the absolute abundance of White Sturgeon using mark-recapture methods.
- To track the relative abundance of White and Green Sturgeon as a metric of catch per unit effort.
- To track the condition of adult White and Green Sturgeon.

Schedule of Milestones

March 2023 – Publish 2022 field summary report to CDFW document library

August 2023 – Start annual trammel net survey

October 2023 – End annual trammel net survey

December 2023 – Complete data entry and QA/QC

Continuous – estimates of adult abundance and vital rates are conducted periodically as angler reward tags are returned through-out the year; however, most tags are returned within 3-years of initial tagging.