

Telemetry Study Summary Framework

July 19, 2019

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| Point of Contact: | |
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| Study objective(s): Estimate survival of acoustically tagged Livingston stone winter-run Chinook salmon juveniles to the USFWS trawl sampling stations at Sacramento and Chipps Island. These estimates will be used in the CWT-Acoustic Tag paired release hybrid design to determine trawl capture efficiency and abundance estimates for other runs of salmon. Tag life tests on a 5% sample of tags and tag retention trials in 50 fish will be done each year. | |
| State hypothesis (if applicable): | |
| Study Type: <input checked="" type="checkbox"/> Reach-specific survival estimate <input type="checkbox"/> Route selection <input type="checkbox"/> Habitat use/preference <input type="checkbox"/> Entrainment/fish passage evaluation <input type="checkbox"/> Technology testing <input checked="" type="checkbox"/> Other: Methodology development | Study Timing: Study Duration (years): 3 Years Release Dates (range; if applicable): February or March of 2018, 2019, and 2020 Study site(s): (If applicable) Collection site(s): LSNFH Release location(s): Caldwell Park on Sacramento R. |
| Fish/Species of Interest | |
| Species-race: Winter-run Chinook salmon Length (range): 87-110mm FL Life stage: Juvenile, pre-smolts | Source/quantity: LSNFH 600 fish Status of fish request (if applicable): approved |
| Tagging Information (if applicable) | |
| Transmitter Information Type/model: ATS SS300 (2018, 2019) and SS400 (2020) Weight (gm): 0.30/0.42 and 0.22 PRI/life of tag: 10 Second PRI. JSATS 60-80 day life. | Implant procedure <input checked="" type="checkbox"/> Surgical <input type="checkbox"/> Gastric <input type="checkbox"/> Injected Has staff completed a standard tagging training? (Y/N). If yes, when? Yes. 2013, 2015. |
| Telemetry Receivers: <ul style="list-style-type: none"> • Non-Core Receivers Deployed/Duration: November to July each year • Identify mission critical Core receiver locations (general description): SacTrawl – dual array, 2 lines of 3 receivers, Chipps Island – dual array, 2 lines of 5 receivers • Desired frequency of download (If Real-time data is required, indicate management directive): every 3 months | |
| Environmental/operating conditions (if applicable) | |
| <ul style="list-style-type: none"> • Relevant discharge indices: varying flow • Temperature: 8-20 deg C | <ul style="list-style-type: none"> • TDG: • Treatment(s): year and CWT group |
| Unique study characteristics: Use of acoustic telemetry survival estimates to improve abundance estimates derived from another sampling methods. | |