

News



Note from NOAA

By Sean Hayes

Central Valley Salmon – Finding a Balance for Fish and Water

CALIFORNIA'S CENTRAL VALLEY IS A SOUTHERN stronghold for Chinook salmon, supporting vital fisheries with economic impacts estimated around \$280 million. While well-managed to prevent overharvest, these salmon populations face a complicated and unique set of challenges, related to the region's acute need for a secure water supply supporting a \$40 billion agricultural industry and 25 million people. Ocean conditions can play a role in salmon population declines, yet we know roughly 80 percent of the state's historical salmon habitat has been blocked or altered in some way to support land and water use for a \$2 trillion economy, with significant consequences to salmon.

Despite carrying one tenth the flow of the Columbia River, the Sacramento and San Joaquin rivers provide much of the state's critical water supply, through a network of storage reservoirs, conveyance and pumping systems. If this circulatory system has a heart, it is the Sacramento-San Joaquin Delta. Formerly a vast wetland providing important nursery habitat for salmon, the Delta is now the hub for water diversion consisting of 1,100 miles of levees directing almost 700 miles of river channels through 770 square miles of farmland that has subsided 10 to 25 feet below sea level. There is growing concern about seawater intrusion from failure of this aging and increasingly fragile infrastructure that might halt water transport as well as carry concerns for fish.

NOAA Fisheries is now using new tools to separate freshwater from marine survival challenges for salmon, including basin-scale acoustic tagging and survival studies, targeted studies evaluating regional mortality hotspots and ocean surveys to better understand the effect of fluctuating marine conditions on these stocks. The basin-wide studies are identifying unique behaviors and mortality zones for different stocks (e.g., winter versus spring run) as well as inter-annual effects of flow on overall survival. Additional investigations are revealing synergistic mortality effects of predators and altered habitats. These studies feed into full life-cycle models, which will inform decision making for both water and fish by assessing the expected impacts on salmon mortality at each life stage.

Today California is challenged with finding a way to provide safe and stable water transport for a state facing historical drought conditions, while balancing the needs of fish. As solutions are considered, NOAA Fisheries is working to provide the best science available to protect and restore California salmon. **FN**

Sean Hayes is the NMFS lead for the Salmon Ocean Ecology Team at the Southwest Fisheries Science Center.

40 YEARS AGO
Fishermen's News

1975



BY R. H. PHILIPS

SAN DIEGO, CA.— Seven U.S. seiners seized by Ecuador patrol craft while fishing off coast of that nation were released in mid-February after paying fines and penalties totaling \$2.7 million.

It is the largest penalty ever paid by a fishing fleet, and it's particularly galling to the vessel owners involved because their vessels were operating in a manner consistent with advice given to them by the U.S. State Department.

All of the seven vessels were fishing well beyond the 12-mile limit currently recognized as the extent of fisheries jurisdiction that any nation can claim, according to the State Department.

In a prepared statement, August Felando, general manager of the American Tunaboat Association which represents the U.S. high seas tuna fleet, said: "The U.S.A. flag vessels are only exercising the rights that they have been advised to have as U.S. citizens, namely, the right to navigate and fish beyond 12 miles free of any foreign laws. The Department of State has advised against the purchase of licenses to fish for tuna beyond 12 miles." **FN**



WheelWatch

AMSEA Marine Safety Instructor Training at AVTEC

The Alaska Marine Safety Education Association (AMSEA) is conducting a six-day Marine Safety Instructor Training at AVTEC in Seward, Alaska, from April 14 to April 19, 2015. This is an intensive train-the-trainer course that prepares individuals to effectively teach cold-water survival procedures, use of marine safety equipment, and vessel safety drills. Upon completion of the course, participants will be prepared to teach AMSEA's US Coast Guard approved Fishing Vessel Drill Conductor training, pending authorization from the Coast Guard.

Participants may co-teach a Fishing Vessel Drill Conductor workshop in Seward on April 20.

Topics covered during the course include:

- Preparation for emergencies
- Cold-water near drowning
- Hypothermia
- Cold-water survival
- Survival equipment, procedures & onboard drills
- Risk Assessment
- Ergonomics
- Methods of instructions

The cost for the course is \$875 for AMSEA members and \$995 for non-members. For more information or to register call AMSEA at (907) 747-3287 or visit the AMSEA website at www.amsea.org. **FN**