VOLUNTARY DROUGHT INITIATIVE

Drought has severely impacted native fisheries due to critically low streamflow in our local watersheds. While the region has recovered significantly following the recent atmospheric river events and rainfall, there is a high probability that drought will return to California in the future. To prepare, the California Department of Fish and Wildlife and NOAA Fisheries continue to seek flow enhancement projects to support survival of juvenile Coho salmon and Steelhead in tributaries to the Russian River watershed.

The California Voluntary Drought Initiative is a collaborative effort designed to engage landowners, water users, and communities in watershed conservation and management actions that can help reduce the effects of the drought on salmon and steelhead. Voluntary actions include:

- streamflow augmentation using water released from ponds or wells
- water stored in the winter for use during the summer
- floodplain inundation for groundwater recharge
- property access for fish rescue and relocation
- monitoring and evaluating the success of the above measures

Financial and technical assistance may be available to implement flow-enchancing projects.

Targeted flow augmentation is the most sought-after project type because of the immediate survival benefits for salmon and steelhead. Therefore, landowners who have groundwater wells or off-stream ponds with sufficient storage to release small volumes of water to provide subsistence flows during the critical dry period (July through October) are strongly encouraged to contact CDFW or NOAA Fisheries.



Flow augmentation project by Camp Meeker Recreation and Park District on Dutch Bill Creek. Water is released in the summer continuously through November or until flows are restored from rainfall.

Funding is available to cover costs for flow augmentation projects in priority Russian River tributaries, including but not limited to, Dutch Bill Creek, Green Valley Creek, Mark West Creek, and Mill Creek.

Juvenile salmon and steelhead spend approximately one year rearing in small tributary streams before out-migrating to the ocean. The exceptionally dry conditions in drought years cause stream-drying to accelerate in these tributaries and subsequently traps oversummering juveniles in isolated pools as streamflow disconnects. Lack of flowing water between pool habitat causes water quality conditions to become unsuitable for survival and results in largescale die-offs.



Juvenile Coho salmon and steelhead mortalities in a drying pool during the summer in a drought year. August 2020, Wood Creek tributary to the Russian River.

If you are interested in participating and for additional information, please contact us:

BDRDrought@wildlife.ca.gov calcoastalvdi.wcr@noaa.gov



wildlife.ca.gov/Drought/Voluntary-Drought-Initiative