

Date of Hearing: June 20, 2023

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE

Rebecca Bauer-Kahan, Chair

SB 579 (Umberg) – As Amended March 20, 2023

SENATE VOTE: 39-0

SUBJECT: Fish: Annual Provisional Stocking Document

SUMMARY: Requires the California Department of Fish and Wildlife (CDFW) to make an updated Annual Provisional Stocking Document (Stocking Document) available on its website before January 1 of each year. Specifically, **this bill:**

- 1) Requires that CDFW update and make the Stocking Document available by January 1 each year.
- 2) Requires that the Stocking Document include a disclaimer that unforeseen conditions may prevent compliance and that the Fish Planting Schedule currently available on CDFW's website provides the most accurate information.

EXISTING LAW:

- 1) Establishes CDFW in the California Natural Resources Agency [Fish and Game Code (FGC) § 700], including:
 - a) CDFW's mission is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment of the public (FGC § 712.1); and
 - b) CDFW's core programs include biodiversity conservation, and hunting, fishing, and public use, among other things (FGC § 712.1).
- 2) Makes it unlawful to place, plant, or cause to be placed or planted, in any of the waters of the state, any live fish without securing the written permission of CDFW (FGC § 6400).
- 3) Requires the Fish and Game Commission to establish, maintain, and operate fish hatcheries for stocking the waters of the State (FGC § 1120).
- 4) Sets the state hatchery production goal of 2.75 pounds of released trout per sport fishing license sold in a previous calendar year, as provided. Requires the predominant number of released fish be catchable size or larger, and requires CDFW to achieve this goal in compliance with certain policies, including the Strategic Plan for Trout Management, as provided (FGC § 13007).
- 5) Declares that it is the policy of the state that to the extent possible the state should establish and maintain native wild trout stocks and discourage the planting of hatchery-raised hybrid and nonnative fish species in wild trout waters or in other areas that would adversely affect native aquatic and nonaquatic species (FGC § 1726).

- 6) Requires that CDFW release an update every five years to the Strategic Plan for Trout Management, which among other things, is guided by ecologically and environmentally sustainable hatchery and stocking practices for native trout as listed (FGC § 1728).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

- 1) **Purpose of this bill.** According to the author, “Until recently, CDFW would post their annual provisional stocking plans at or near the beginning of each calendar year so that anglers and the public could view the [CDFW’s] estimation of where and when they planned to stock fish for the calendar year. This ‘Annual Provisional Stocking Document’ was a helpful resource because it gave a modicum of predictability to anglers in California by allowing them to see which bodies of water were planned to be stocked for the year and an approximation of when they were planned to be stocked. This information was useful, not just to anglers, but also policy makers, because it allows California residents and policy makers to see where the state is planning to prioritize fish stocking for the year. For example, residents may notice from the provisional plan that there is less stocking planned near disadvantaged communities than the previous year. Seeing this provisional plan allows these people and communities to educate themselves on why their local bodies of waters are not being stocked and then work with governmental entities, nonprofits, and others to try to increase the stocking in their communities. Therefore, [this bill] is necessary to increase transparency for recreational anglers by requiring CDFW, to once again, make their Annual Provisional Stocking Document publicly available on their website.”
- 2) **Background.** Trout fish stocking in the U.S. dates back to the 1800’s. Non-native trout have been stocked throughout California to enhance recreational opportunities, even before the creation of CDFW. In fact, many fish introduced to California are so commonplace that many believed them to be native.¹ For example, in 1871, Seth Green, known to many as the “Father of Fish Culture in America,” boarded a train from New York to California with 12,000 newly hatched American shad in milk cans. One week later, he arrived in Sacramento, traveled up to Tehama, and launched the first formal introduction of non-native fish to California.

Today, fish plants (i.e., releasing fish into bodies of water) are still largely done to support recreational fishing, although there is a stronger focus on restoring native fish, mitigating for habitat loss caused by developments such as dams, and reducing negative environmental impacts of introducing recreational fish.

California supports a rich heritage of native trout, wild trout fisheries, and a hatchery system that produces and stocks trout, which are highly desirable for anglers (for purposes of this analysis, ‘trout’ includes the twelve recognized native trout, non-native species of trout and char, the Mountain Whitefish, and landlocked salmon). CDFW is responsible for managing

¹ [Dill and Cordone, Fish Bulletin 178. History And Status of Introduced Fishes In California, 1871–1996.](#)

the state's trout resources to provide the public with diverse angling opportunities and to ensure the persistence of trout populations.

The right fish, right location, right numbers, right time, right purpose. Judgement on which waters of the state will be stocked considers the best available data, hatchery production capacity, several governing policies, stocking environmental impact reports, and the biological needs of the released fish. It is important to note that fish are living animals, and cannot be planted in habitat that will not support them—warmer, lower elevation areas are not suitable for trout. Additionally, not all of the released fish are of “catchable” size, so a released fingerling (baby) trout may need years before achieving “catchable” size.

According to the 2003 Strategic Plan for Trout Management (Strategic Plan), CDFW has stocked hatchery catchable trout “to satisfy angler desires and create recreational opportunities” since 1945. Recreational angling is one of the main themes of the Strategic Plan, and includes the goals of providing diverse opportunities for angling statewide, and increasing the public's awareness of trout-related recreational opportunities through improved communication and educational sources. The Strategic Plan recognizes that these efforts are part of “the broader sphere of fisheries and resource management, which includes protecting and maintaining native and wild species and their habitats.” The 2021 draft update of the Strategic Plan delineates priorities intended to sustain and restore wild trout fisheries, better utilize hatchery trout, and improve angler satisfaction.

Forecasting for fish planting. CDFW previously published a Stocking Document online, but discontinued the practice the last few years due to circumstances that resulted in a very different stocking schedule than anticipated (continued below). CDFW intends to again produce a Stocking Document in Fiscal Year 2023 if hatchery operations remain close to normal. In view of recent challenges, CDFW's ability to forecast planting schedules has been significantly hampered the last few years. However, CDFW maintains two other fish planting logs currently available to the public – the Fish Planting Schedule and an online interactive map.

As of June 12, 2023, the “Fish Planting Schedule” available on CDFW's website, provides information on nearly 1,000 fish plants of various species and size into various water bodies across the state from the week of December 18 – 24, 2022 to the week of June 25 – July 1, 2023.² This information is readily-available to recreational anglers. According to a disclaimer at the top of the webpage:

This dynamic Fish Planting Schedule is updated in real time, directly by CDFW Hatchery staff. Although it contains current information, all fish plants are subject to change depending on road, water, weather and operational conditions. Conditions permitting, the waters listed here will be restocked with catchable-size fish from CDFW hatcheries, according to this schedule. More specific dates are not given to avoid focusing excess fishing activity immediately after a plant.

The Fish Planting Schedule includes a two-week-ahead forecast of planned stocking and about twenty-six weeks of previous stocking history is currently available on CDFW's website. As such, only fish of catchable size are listed on the Planting Schedule to protect the

² [Fish Planting Schedule, CDFW.](#)

smaller fish, and after twenty-six weeks this information would largely be considered outdated by anglers. Data currently available from the Fish Planting Schedule show planting performed in 44 of the state's 58 counties, including both urban and rural areas, with many water bodies being repeatedly planted throughout the six months of data available. Eleven lakes in Fresno County were planted a total of 49 times, most repeatedly.

Additionally, CDFW has a geographical information system (GIS) map available that represents the general locations that have been stocked with fish by CDFW during the current year and the two preceding years.³ It was created to provide a spatial representation of release waters described in CDFW's statewide hatchery database. This spatial representation makes fish stocking information more accessible both to CDFW staff and to other interested parties and could be utilized as a tool by hatcheries to enhance fish stocking planning and efficiency.

The annual forecast in the Stocking Document could be subject to considerable change. In addition, CDFW already limits advance knowledge specific to planting sites to limit fishing pressure. An annual fish stocking forecast may support some level of planning for anglers (a one to seven month range is given as a potential release time), although the fish plants are not guaranteed. The current Fish Planting Schedule represents the most accurate information. The available CDFW GIS map provides some information for fish plants from the previous two years. The 2019 version of the Stocking Document also contained dates for the last time that body of water was stocked with that size and species of fish. Most of these previous release dates had been from the previous years (2018–2019), although some dated back as far 2003 and, for some, the 2019 release was the first fish plant of that size and species. This level of detail is not available on the GIS map or planting schedule that CDFW currently maintains.

Recent challenges to fish planting. Fish stocking can vary based on a wide range of factors such as water temperature, flow, depth, weather, site accessibility and popularity, algae presence, high turbidity, high alkalinity, general poor water quality, funding, and other reasons.

Over the last few years, CDFW has faced multiple challenges to its planting plans.

- *Disease outbreaks.* In 2020, new-to-California pathogens – *Lactococcus garvieae* and *Lactococcus petauri* (*Lactococcus spp.*) – were detected at the Fish Springs, Black Rock, and Mojave River Fish Hatcheries. This bacterial outbreak resulted in the euthanasia of about 3.2 million trout. In 2020, the nearby Hot Creek Hatchery was quarantined as a safety measure, and, in 2021, it also experienced an outbreak of *Lactococcus spp.* In 2022, Black Rock and Fish Springs Hatcheries experienced another outbreak of *Lactococcus spp.* These bacteria had not been previously observed in hatcheries or the wild in California. The working hypothesis is that the pathogens were transported to the hatcheries by birds present in the Pacific Flyway. These outbreaks limited the availability of fish for planting in the Eastern Sierras and Southern California. CDFW re-allocated fish from other locations and purchased some from private hatcheries in order to plant more locations in those areas.

³ [Map Viewer, CDFW.](#)

- *Drought, fire, and flood.* In 2021, all trout at the American River Hatchery were relocated as there was insufficient cold water being released from the Folsom Dam Complex. In 2019 – 2022, fire and drought limited operations at the Silverado Fish Base which resulted in reduced stocking in the San Francisco Bay Area. Drought conditions in 2020 – 2022 also forced the release of fish from hatcheries earlier than usual. Severe flooding at the Moccasin Creek Fish Hatchery in 2017 caused significant damage that was not repaired until 2022. In addition, ongoing work that impacts the water tunnels that provide water for Moccasin Creek will require limiting the fish inventory each fall until 2030.
- *Additional infrastructure issues.* The Kern River Hatchery has remained closed since 2019 due to an inoperable water intake.

Recent hatchery budget augmentation. The state’s hatcheries used for trout stocking are funded, in part, through sport fishing license sales. Recently, additional funds were made available to these hatcheries to help address infrastructure and equipment needs necessary to improve climate resiliency. These include \$16 million in fiscal year 2021, approximately \$35 million in fiscal year 2022, and \$5 million annually from fiscal year 2023 – 2027.

- 3) **Related legislation.** SB 1148 (Pavley), Chapter 565, Statutes of 2012, requires CDFW to give priority to stocking native hatchery-produced species in California waters where stocking is determined to be appropriate by CDFW.

AB 7 (Cogdill), Chapter 689, Statues 2005, established hatchery production goals tied to fishing license sales and increased priority for stocking native trout strains where appropriate.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file

Opposition

None on file

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