

State of California  
Fish and Game Commission

Initial Statement of Reasons for Regulatory Action  
Certificate of Compliance

Amend Sections 5.79, 5.80, 27.90, and 29.72,  
Title 14, California Code of Regulations  
Re: White Sturgeon Fishing

I. Date of Initial Statement of Reasons:

II. Dates and Locations of Scheduled Hearings

(a) Notice Hearing:

Date: April 18, 2024

Location: San Jose

(b) Discussion Hearing:

Date: June 20, 2024

Location: Mammoth Lakes

(c) Adoption Hearing:

Date: August 15, 2024

Location: Fortuna

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR). Commission refers to the California Fish and Game Commission unless otherwise specified. Department and CDFW both refer to the California Department of Fish and Wildlife unless otherwise specified.

The proposed changes to the White Sturgeon (*Acipenser transmontanus*) sport fishing regulations aim to continue the one fish annual bag limit, reduced size limit, per-day vessel limit, and fishing closures established by emergency regulatory action on October 13, 2023 (Office of Administrative Law file #2023-1106-01E). The existing emergency regulations are set to expire in November 2024, following planned readoptions of the emergency regulations in April and August. It is anticipated that a standard rulemaking with long-term changes to the White Sturgeon fishery will be received by the Commission in summer 2024. The proposed amendments in this current rulemaking are necessary to protect the White Sturgeon population until the long-term regulation can be implemented.

**Background**

**White Sturgeon Sport Fishing**

White Sturgeon are an anadromous species of fish that reside primarily in the San Francisco Bay Delta (SF Bay) and migrate as adults into the major rivers of the Central Valley to spawn. Most spawning occurs in the Sacramento River approximately between

Verona and Colusa (Schaffter 1997), with a lesser amount of spawning on the lower San Joaquin River (Jackson et al. 2015). Some additional spawning may occur in tributaries such as the Feather, Bear, and Yuba rivers. White Sturgeon are long lived, potentially in excess of 100 years, with most reaching maturity by approximately 19 years, spawning every two to five years once mature (Chapman et al. 1996; Hildebrand et al. 2016). Successful recruitment to the adult population is uncommon, occurring approximately every six to seven years, highly correlated with above normal water years as measured by high mean daily Delta outflow (CDFW 2023; Fish 2010). The abundance of legal-sized White Sturgeon has declined considerably since the 1980s, when abundance was estimated to be approximately 175,000 fish (CDFW 2023; Danos et al. 2019). In 2015, the Department estimated abundance at about 48,000 fish (Danos et al. 2019), and the most recent estimate was about 33,000 fish (CDFW 2023).

Until the start of the emergency action on November 16, 2023, recreational anglers were permitted to keep one White Sturgeon per day, and a combined total of three per year, between 40 and 60 in. fork length (FL), meaning the measurement of the fish from the front of its head to the fork in its tail. The season was open year-round, with some limited regional and/or seasonal closures. As of November 16, 2023, the emergency action a) reduced the annual bag limit for White Sturgeon from three to one fish, b) reduced the legal-sized slot limit from 40-60" FL to 42-48" FL, c) placed a limit of two fish per day per boat, and d) closed White Sturgeon fishing in the migrating and spawning reaches of the Sacramento and San Joaquin rivers from January 1 through May 31.

Fishing pressure for White Sturgeon has remained stable at roughly 40,000 to 45,000 anglers per year since 2013 when fees were first charged for the Sturgeon Fishing Report Card (Card). Based on Card returns, the number of fish harvested by anglers has remained relatively stable. However, the number of fish caught and released has declined precipitously, indicating that fewer fish overall are being caught. According to Card data, in 2021, anglers kept 46% of landed fish (Hause et al. 2021). The majority of anglers that harvest fish keep only one per year (75%), with only about 5% of anglers that harvest (1% of Card-holders) keeping the full three-fish limit. Exploitation rate of White Sturgeon is estimated to be very high, ranging from 8 to 29.6% between 2007 and 2015 (Blackburn et al. 2019) and averaging 8.1% in the years since then (CDFW 2023). It is suggested that the highest exploitation rate that a sturgeon population can sustain is approximately 5 to 10% (Beamesderfer and Farr 1997) and that does not account for other anthropogenic sources of mortality such as habitat loss, altered hydrology, or contaminants. For comparison, Washington and Oregon use 3.8% as a target for management in areas that permit harvest.

During July and August 2022, the San Francisco Bay region experienced a major Harmful Algal Bloom (HAB) of *Heterosigma akashiwo* that resulted in significant mortality of fishes, including sturgeon. The Department recorded over 850 sturgeon carcasses, the majority legal-sized or larger and within the age range of the core spawning population (CDFW 2023). The number of carcasses observed during the HAB was 62% of the number harvested by anglers in 2022. Based on carcass studies and fish kills of other species of sturgeon, it is thought that only a small percentage of the fish killed floated long enough to be detected (Fox et al. 2020). While the absolute magnitude of the HAB's impact on the

White Sturgeon population is unknown, it is thought to be quite significant. In addition, in July and August of 2023, a HAB of the same species was detected in San Francisco Bay and at least 15 white sturgeon carcasses were reported, though the total impacts are unknown.

The fish kill resulting from the HAB exacerbated what the Department believed to be an already unsustainable level of fishery exploitation of White Sturgeon into a crisis situation. In order to protect the surviving population of White Sturgeon and maintain a recreational fishery into the future, immediate steps were necessary to reduce angler associated harvest of adult White Sturgeon and to minimize harassment and handling on the spawning grounds so that these adults can spawn successfully and new individuals can recruit to the population. The Department recommended that all harvest of White Sturgeon within the recreational fishery be paused starting January 2024, until new regulations could be developed to limit exploitation to sustainable rates based on monitoring, which was opposed by the recreational sturgeon fishing industry. At its October 11, 2023 meeting, the Commission voted in support of an emergency action that limited harvest via reductions in the bag and legal slot limits, and institution of per-day vessel limits and seasonal and geographic closures of migrating and spawning habitat. This was intended to protect the existing population in the short term while allowing time for the Department to develop new long-term management measures for the future population.

### ***Proposed Regulations***

This proposed regulatory action seeks to continue amendments to sections 5.79, 5.80, 27.90, and 27.92, Title 14, CCR, which describe report card and tagging requirements, and seasons and bag limits for White Sturgeon sport fishing in inland and ocean waters. The proposed changes aim to continue the existing one fish annual bag limit, reduced size limit, per-day vessel limit, and fishing closures established by emergency regulatory action on October 13, 2023.

### **Subsection 5.79, White Sturgeon Report Card and Tagging Requirements for Inland Waters**

The proposed regulations amend White Sturgeon report card and tagging requirements for inland waters in the following subsections:

- All subsections: White Sturgeon has been capitalized for consistency throughout the regulation.
- Subsection (b): Edit text to reflect that report cards will come with only one tag rather than three. Add subsections (7) and (8) to clarify when anglers can continue to fish catch and release after harvesting a fish. Anglers will not be permitted to fish catch and release the same day they harvest a fish in order to prevent 1) take over the daily possession limit and 2) “high grading” (holding a fish in captivity while continuing to fish in the hopes of catching a larger individual).
- Subsection (c)(1): Add a requirement for anglers to report length of fish caught and released. This is necessary to provide more data availability on the nature of size to inform future management options related to age.

- Subsection (c)(2): Remove the current language that tells anglers if all lines on the card are filled, any additional sturgeon caught and released do not need to be recorded, and replace with language specifying that anglers may report additional sturgeon caught and released on the back of the card. This is necessary in order to track fishing pressure and success. It is valuable to track all fish caught by anglers and this should not be restricted simply by the size of the printed card. This type of data allows the Department to form a better understanding of the fishery as it plans long-term regulations for the fishery.

## **Section 5.80, White Sturgeon**

The proposed regulations amend the White Sturgeon open season and daily and annual bag limit in the following subsections:

- All subsections: White Sturgeon has been capitalized for consistency throughout the regulation.
- Subsection (a): From the west Carquinez Bridge east to the Highway 50 bridge on the Sacramento River and the Interstate 5 bridge on the San Joaquin River, the fishing season will remain open all year. Above the Highway 50 bridge on the Sacramento River and the Interstate 5 bridge on the San Joaquin River, including all tributaries of both rivers, fishing will be allowed from June 1 through December 31 and all fishing for sturgeon will be unlawful from January 1 to May 31. This is necessary to maintain recreational fishing, which has economic and cultural benefits, while preventing additional mortality of the impacted White Sturgeon population and minimizing harassment and handling of migrating and spawning individuals. White Sturgeon are known to handle catch and release fishing with minimal adverse impacts except during migration and spawning season when additional stress of catch can cause fish to abort spawning activities.
- Subsection (b), now (b) and (c): Divide this subsection so there are individual subsections for daily and annual limits. Proposed subsection (b) specifies the daily limit and provides unambiguous clarification of when catch and release angling is permitted. Proposed subsection (c) changes the annual bag limit of “three fish per year statewide” to “one fish per calendar year statewide”. This is necessary to reduce harvest of White Sturgeon in inland waters to ensure protection of the population impacted by the HAB-induced fish kill and provide protection during migration and spawning.
- Add subsection (d): Add a daily vessel maximum limit of two fish per day per vessel, regardless of how many anglers are on board. This will help reduce the daily amount of harvest associated with multi-angler vessels, both private and professional, and should contribute to less overall harvest of the adult population.
- Subsection (c), now (e): Change the minimum legal size from 40 to 42 in. fork length and the maximum size from 60 to 48 in. fork length. Reducing the slot limit to target a lower size range of adults is expected to reduce overall harvest and provide more protection of the larger, most reproductively valuable fish in the population.

- Subsections (d) through (j) will need to be re-lettered as subsections (f) through (l) to account for the splitting of subsection (b) and the addition of subsection (d) daily vessel maximum harvest.

### **Section 27.90, White Sturgeon**

These regulations refer to areas west of the Carquinez Bridge, which fall under the jurisdiction of marine fisheries. The proposed regulations amend the White Sturgeon open season and daily and annual bag limit in the following subsections:

- All subsections: White Sturgeon has been capitalized for consistency throughout the regulation.
- Subsection (a): West of the Carquinez Bridge, angling will be allowed all year, except as described in Section 27.95. This note has been added to explicitly draw attention the existing seasonal closure in San Francisco Bay.
- Subsection (b), now (b) and (c): Divide this subsection so there are individual subsections for daily and annual limits. Proposed subsection (b) specifies the daily limit and provides unambiguous clarification of when catch and release angling is permitted. Proposed subsection (c) changes the annual bag limit of “three fish per year statewide” to “one fish per calendar year statewide.” This is necessary to reduce harvest of White Sturgeon in marine waters to ensure protection of the population impacted by the HAB-induced fish kill and provide protection during migration and spawning.
- Add subsection (d): Add a daily vessel maximum limit of two fish per day per vessel, regardless of how many anglers are on board. This will help reduce the daily amount of harvest associated with multi-angler vessels, both private and professional, and should contribute to less overall harvest of the adult population.
- Subsection (c), now (e): Change the minimum legal size from 40 to 42 in. fork length and the maximum size from 60 to 48 in. fork length. Reducing the slot limit to target a lower size range of adults is expected to reduce overall harvest and provide more protection of the larger, most reproductively valuable fish in the population.
- Subsections (d) through (h) will need to be re-lettered as subsections (f) through (j) to account for the splitting of subsection (b) and the addition of subsection (d) daily vessel maximum harvest.

### **Subsection 27.92, White Sturgeon Report Card and Tagging Requirements for Ocean Waters**

The proposed regulations amend White Sturgeon report card and tagging requirements for ocean waters in the following subsections:

- All subsections: White Sturgeon has been capitalized for consistency throughout the regulation.
- Subsection (b): Edit text to reflect that report cards will come with only one tag rather than three. Add subsections (7) and (8) to clarify when anglers can continue to fish catch and release after harvesting a fish. Anglers will not be permitted to fish catch and release the same day they harvest a fish in order to prevent 1) take over the

daily possession limit and 2) “high grading” (holding a fish in captivity while continuing to fish in the hopes of catching a larger individual).

- Subsection (c)(1): Add a requirement for anglers to report length of caught fish to provide more data availability to inform future management options.
- Subsection (c)(2): Remove the current language that tells anglers if all lines on the card are filled any additional sturgeon caught and released do not need to be recorded and replace with language specifying that anglers may report additional sturgeon caught and released on the back of the card. This is necessary in order to track fishing pressure and success. It is valuable to track all fish caught by anglers and this should not be restricted simply by the size of the printed card. This type of data allows the Department to form a better understanding of the fishery as we plan long-term regulations for the fishery.

(b) Goals and Benefits of the Regulation

These harvest restrictions will protect the remaining population while new long-term regulations are developed, providing opportunity for surviving fish to spawn unmolested.

(c) Authority and Reference Sections from Fish and Game Code for Regulation

Section 5.79

Authority cited: Sections 200, 205, 265 and 399, Fish and Game Code.

Reference: Sections 200, 205 and 265, Fish and Game Code.

Section 5.80

Authority cited: Sections 200, 205, 265, 270, 275, 315 and 399, Fish and Game Code.

Reference: Sections 110, 200 and 205, Fish and Game Code.

(note: Sections 270 and 315 were added to the authority with this action to allow for Commission consideration for actions needed to manage the White Sturgeon fishery.)

Section 27.90

Authority cited: Sections 200, 205, 265, 275 and 399, Fish and Game Code.

Reference: Sections 110, 200, and 205, Fish and Game Code.

Section 27.92

Authority cited: Sections 200, 205, 265 and 399, Fish and Game Code.

Reference: Sections 200, 205 and 265, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change: None

(e) Identification of Reports or Documents Supporting Regulation Change

California Department of Fish and Wildlife (CDFW). 2023. White Sturgeon 2023 Emergency Regulation Change: Supporting Material. California Department of Fish and Wildlife, Fisheries Branch, West Sacramento, California.

Danos, A., J. DuBois, R. Baxter, J. T. Kelly, and M. L. Gingras. 2019. White Sturgeon, *Acipenser transmontanus*, Enhanced Status Report. California Department of Fish and Wildlife. <https://marinespecies.wildlife.ca.gov/white-sturgeon/>

Hause, C. L., C. Parker, D. Kratville, D. Stompe, J. A. Hobbs, and J. T. Kelly. 2023. Sturgeon Fishing Report Card: 2022 Summary Data Report. California Department of Fish and Wildlife, West Sacramento, California. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213586>

Hause, C. L., C. Parker, D. Kratville, D. Stompe, J. A. Hobbs, and J. T. Kelly. 2022. Sturgeon Fishing Report Card: 2021 Summary Data Report. California Department of Fish and Wildlife, West Sacramento, California. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=202750>

(f) Documents Providing Background Information

Beamesderfer, R. C. P., and R. A. Farr. 1997. Alternatives for the protection and restoration of sturgeons and their habitat. *Environmental Biology of Fishes* 48:407–417.

Blackburn, S. E., M. L. Gingras, J. DuBois, Z. J. Jackson, and M. C. Quist. 2019. Population Dynamics and Evaluation of Management Scenarios for White Sturgeon in the Sacramento–San Joaquin River Basin. *North American Journal of Fisheries Management* 39(5):896–912.

Chapman, F. A., J. P. Van Eenennaam, and S. I. Doroshov. 1996. The reproductive condition of white sturgeon, *Acipenser transmontanus*, in San Francisco Bay, California. *Fishery Bulletin* 94:628–634.

Fish, M. A. 2010. White Sturgeon Year-Class Index for the San Francisco Estuary and its Relation to Delta Outflow. *IEP Newsletter* 23(2):80–84.

Fox, D. A., E. A. Hale, and J. A. Sweka. 2020. Examination of Atlantic Sturgeon Vessel Strikes in the Delaware River Estuary: Final Report. NOAA-NMFS Award No. NA16NMF4720357.

Halvorson, L. J., B. J. Cady, K. M. Kappenman, B. W. James, and M. A. H. Webb. 2018. Observations of handling trauma of Columbia River adult white sturgeon, *Acipenser transmontanus* Richardson, 1836, to assess spawning sanctuary success. *Journal of Applied Ichthyology* 34(2):390–397.

Hildebrand, L. R., A. Drauch Schreier, K. Lepla, S. O. McAdam, J. McLellan, M. J. Parsley, V. L. Paragamian, and S. P. Young. 2016. Status of White Sturgeon (*Acipenser transmontanus* Richardson, 1863) throughout the species range, threats to survival, and prognosis for the future. *Journal of Applied Ichthyology* 32:261–312.

Jackson, Z. J., J. J. Gruber, and J. P. Van Eenennaam. 2015. White Sturgeon Spawning in the San Joaquin River, California, and Effects of Water Management. *Journal of Fish and Wildlife Management* 7(1):171–180.

Lamansky, J. A., K. A. Meyer, J. M. DuPont, B. J. Bowersox, B. Bentz, and K. B. Lepla. 2018. Deep hooking, landing success and gear loss using inline and offset circle and J

hooks when bait fishing for white sturgeon. Fisheries Management and Ecology 25(2):100–106.

Schaffter, R. G. 1997. White sturgeon spawning migrations and location of spawning habitat in the Sacramento River, California. California Fish and Game 83(1):1–20.

(g) Public Discussions of Proposed Regulations Prior to Notice Publication

Wildlife Resources Committee meeting, September 19, 2023

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

No alternatives to a regulatory change were identified by or brought to the attention of Commission staff that would have the same desired effect. At the October 11, 2023 Commission meeting, the Department recommended that all harvest of White Sturgeon within the recreational fishery be paused until new regulations could be developed to limit exploitation to sustainable rates based on monitoring, which was opposed by the recreational sturgeon fishing industry. Following a discussion between Department staff and sturgeon fishing industry representatives, the Commission voted in support of an emergency action that limited harvest via reductions in the bag and legal slot limits and instituted per-day vessel limits and seasonal and geographic closures of migrating and spawning habitat.

(b) No Change Alternative

A delay in prompt action to amend the regulations for White Sturgeon puts the species at risk. Under current environmental and management conditions, the White Sturgeon population cannot handle the current rate of exploitation and is not sustainable. The fish kill resulting from the 2022 HAB exacerbated what the Department believes to be an already unsustainable level of fishery exploitation of White Sturgeon. In order to protect the surviving population of White Sturgeon and maintain a recreational fishery into the future, it is necessary to reduce angler associated harvest of adult White Sturgeon and to minimize harassment and handling on the spawning grounds so that these adults can spawn successfully, and new individuals can recruit to the population.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States



The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. A bag limit maintains the existing economic climate because the reduction is not significant enough to alter fishing behavior beyond reducing daily harvest.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The Commission does not anticipate any impacts on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses or the expansion of businesses in California. This proposed action should allow for ongoing fishing activity similar to current and historical levels which would not affect the demand for jobs or the demand for goods and services. The Commission does not anticipate any benefits to the health and welfare of California residents, or worker safety. The Commission anticipates benefits to the State's environment by sustainably managing California's sportfishing resources.

- (c) Cost Impacts on a Representative Private Person or Business

The Department is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. No change in fees, nor gear or equipment requirements are introduced for the recreational White Sturgeon fishery.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

No costs or savings to state agencies or costs/savings in federal funding to the state are anticipated. The Department's existing level of monitoring and enforcement activities is expected to be unchanged by the proposed regulation. However, the Department anticipates a continuation of the reduction in White Sturgeon Report Cards sales revenue since the emergency had been implemented. Card sales revenue losses are estimated to be about \$20,000 in the 2024 license year.

- (e) Nondiscretionary Costs/Savings to Local Agencies: None

- (f) Programs Mandated on Local Agencies or School Districts: None

- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None

- (h) Effect on Housing Costs: None

## VII. Economic Impact Assessment

The proposed rulemaking would make the emergency White Sturgeon fishing regulations permanent. This is necessary to maintain current and future recreational fishing's economic and cultural benefits, while preventing additional mortality of the impacted White Sturgeon population and minimizing harassment of spawning individuals.

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Commission does not anticipate any impacts on the creation or elimination of jobs within the state because this proposed action should allow for ongoing fishing activity similar to current and historical levels which would not affect the demand for jobs.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Commission does not anticipate any impacts on the creation of new business or the elimination of existing businesses within the state because this proposed action should allow for ongoing fishing activity similar to current and historical levels which would not affect the demand for goods and services related to White Sturgeon fishing within the state.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The Commission does not anticipate any impacts on the expansion of businesses in California because this action will not affect the demand for goods and services related to White Sturgeon fishing within the state.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The Commission does not anticipate impacts on the health and welfare of California residents.

(e) Benefits of the Regulation to Worker Safety

The Commission does not anticipate any impacts to worker safety because the proposed regulation does not impact working conditions.

(f) Benefits of the Regulation to the State's Environment

The Commission anticipates benefits to the state's environment through this regulatory action to make near-term changes directed at reducing exploitation rate and protecting reproduction of the species until more updated management actions for the fishery are enacted that will adequately protect the remaining White Sturgeon population in the long-term. Based on fishery data, the White Sturgeon population was already overexploited under current regulations, and updated regulations were needed and are being considered.

## Informative Digest/Policy Statement Overview

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR).

White Sturgeon are an anadromous species of fish that reside primarily in the San Francisco Bay Delta (SF Bay) and migrate as adults into the major rivers of the Central Valley to spawn. Most spawning occurs in the Sacramento River approximately between Verona and Colusa (Schaffter 1997), with a lesser amount of spawning on the lower San Joaquin River (Jackson et al. 2015). Some additional spawning may occur in tributaries such as the Feather, Bear, and Yuba rivers. White Surgeon are long lived, potentially in excess of 100 years, with most reaching maturity by approximately 19 years, spawning every two to five years once mature (Chapman et al. 1996; Hildebrand et al. 2016). Successful recruitment to the adult population is uncommon, occurring approximately every six to seven years, highly correlated with above normal water years as measured by high mean daily Delta outflow (CDFW 2023; Fish 2010). The abundance of legal-sized White Sturgeon has declined considerably since the 1980s, when abundance was estimated to be approximately 175,000 fish (CDFW 2023; Danos et al. 2019). In 2015, the Department estimated abundance at about 48,000 fish (Danos et al. 2019), and the most recent estimate was about 33,000 fish (CDFW 2023).

Until the start of the emergency action on November 16, 2023, recreational anglers were permitted to keep one White Sturgeon per day, and a combined total of three per year, between 40 and 60 in. fork length (FL), meaning the measurement of the fish from the front of its head to the fork in its tail. The season was open year-round, with some limited regional and/or seasonal closures. As of November 16, 2023, the emergency action a) reduced the annual bag limit for White Sturgeon from three to one fish, b) reduced the legal-sized slot limit from 40-60" FL to 42-48" FL, c) placed a limit of two fish per day per boat, and d) closed White Sturgeon fishing in the migrating and spawning reaches of the Sacramento and San Joaquin rivers from January 1 through May 31.

Fishing pressure for White Sturgeon has remained stable at roughly 40,000 to 45,000 anglers per year since 2013 when fees were first charged for the Sturgeon Fishing Report Card (Card). Based on Card returns, the number of fish harvested by anglers has remained relatively stable. However, the number of fish caught and released has declined precipitously, indicating that fewer fish overall are being caught. According to Card data, in 2021, anglers kept 46% of landed fish (Hause et al. 2021). The majority of anglers that harvest fish keep only one a year (75%), with only about 5% of anglers that harvest (1% of Card-holders) keeping the full three-fish limit. Exploitation rate of White Sturgeon is estimated to be very high, ranging from 8 to 29.6% between 2007 and 2015 (Blackburn et al. 2019) and averaging 8.1% in the years since then (CDFW 2023). It is suggested that the highest exploitation rate that a sturgeon population can sustain is approximately 5 to 10% (Beamesderfer and Farr 1997) and that does not account for other anthropogenic sources of mortality such as habitat loss, altered hydrology, or contaminants. For comparison, Washington and Oregon use 3.8% as a target for management in areas that permit harvest.

During July and August 2022, the San Francisco Bay region experienced a major Harmful Algal Bloom (HAB) of *Heterosigma akashiwo* that resulted in significant mortality of fishes, including sturgeon. The Department recorded over 850 sturgeon carcasses, the majority legal-

sized or larger and within the age range of the core spawning population (CDFW 2023). The number of carcasses observed during the HAB was 62% of the number harvested by anglers in 2022. Based on carcass studies and fish kills of other species of sturgeon, it is thought that only a small percentage of the fish killed floated long enough to be detected (Fox et al. 2020). While the absolute magnitude of the HAB's impact on the White Sturgeon population is unknown, it is thought to be quite significant. In addition, in July and August of 2023, a HAB of the same species was detected in San Francisco Bay and at least 15 white sturgeon carcasses were reported, though the total impacts are unknown.

The fish kill resulting from the HAB exacerbated what the Department believed to be an already unsustainable level of fishery exploitation of White Sturgeon into a crisis situation. In order to protect the surviving population of White Sturgeon and maintain a recreational fishery into the future, immediate steps were necessary to reduce angler associated harvest of adult White Sturgeon and to minimize harassment and handling on the spawning grounds so that these adults can spawn successfully and new individuals can recruit to the population. The Department recommended that all harvest of White Sturgeon within the recreational fishery be paused starting January 2024, until new regulations could be developed to limit exploitation to sustainable rates based on monitoring, which was opposed by the recreational sturgeon fishing industry.

At its October 11, 2023 meeting, the Commission voted in support of an emergency action that limited harvest via reductions in the bag and legal slot limits, and institution of per-day vessel limits and seasonal and geographic closures of migrating and spawning habitat. This was intended to protect the existing population in the short term while allowing time for the Department to develop new long-term management measures for the future population. The proposed subject standard rulemaking would continue the existing one fish annual bag limit, reduced size limit, per-day vessel limit, and fishing closures established by emergency regulatory action on October 13, 2023.

#### Benefit of the Regulations:

The Commission anticipates benefits to the state's environment through this regulatory action to make near-term the emergency action directed at reducing exploitation rate and protecting reproduction of the species is necessary until more updated management actions for the fishery are enacted that will adequately protect the remaining White Sturgeon population in the long-term. Based on fishery data, the White Sturgeon population was already overexploited under current regulations, and updated regulations were needed and are being considered.

#### Consistency and Compatibility with Existing Regulations:

Article IV, Section 20 of the State Constitution specifies that the Legislature may delegate to Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. The Legislature has delegated to the Commission the power to regulate sport fishing in waters of the state (Fish and Game Code sections 200, 205, and 315). The Commission has reviewed its own regulations and finds that the proposed regulations are consistent with other recreational fishing regulations in Title 14, CCR, and therefore finds that the proposed regulations are neither inconsistent nor incompatible with existing state regulations. The Commission has searched the California Code of Regulations and finds no

other state agency regulations pertaining to temporarily prohibiting harvest of White Sturgeon due to population decline.