

STATE OF CALIFORNIA
FISH AND GAME COMMISSION
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION
(Pre-publication of Notice Statement)

Amend Sections 163 and 164
Title 14, California Code of Regulations
Re: Harvest of Herring and Harvesting of Herring Eggs

- I. Date of Initial Statement of Reasons: June 15, 2015
- II. Dates and Locations of Scheduled Hearings:
 - (a) Notice Hearing: Date: August 4, 2015
Location: Fortuna, CA
 - (b) Discussion and Adoption Hearing: Date: October 7, 2015
Location: Los Angeles, CA
- III. Description of Regulatory Action:
 - (a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

The purpose of these regulations is to update the annual quota for the commercial herring fishery taking into account changes to the Pacific herring population (referred to as the “biomass”). The Fish and Game Commission (Commission) and the Department of Fish and Wildlife (Department) are responsible for safeguarding Pacific herring as an important forage species (food source) on which other species depend in marine and estuarine ecosystems. Moreover, the adaptive regulations also help ensure that the fishery is sustainable through the use of precautionary management principles which identify problems and opportunities when setting harvest targets in the commercial fishery. Annual regulation updates are necessary to this fishery as the biomass fluctuates significantly year to year and is key to sustaining the ecosystem, managing the fishing industry, and providing benefits to the people of California through the orderly conduct of commercial fishing activity.

Under existing law, herring (Section 163) and herring eggs (Section 164) may be taken for commercial purposes only under a revocable permit, subject to regulations prescribed by the Commission. Current regulations specify: permittee qualifications, permit application procedures and requirements, permit limitations, permit areas, vessel identification requirements, fishing quotas, seasons, gear restrictions, landing and monitoring requirements, permit categories and conditions, royalty fees,

permit performance deposit requirements, fishing and harvesting restrictions, processing requirements, and permit suspension conditions and procedures.

The Department is proposing regulations that would establish the 2015-16 season quotas for fishing operations in San Francisco Bay and make a minor change to the permit renewal date in the Herring-Eggs-On-Kelp (HEOK) fishery. These changes are necessary to incorporate the most recent biological condition data into herring management and increase the efficiency of herring permitting.

Management recommendations are solicited annually from the Director's Herring Advisory Committee (DHAC) and from interested individuals during public meetings and comment periods. The proposed amendments to sections 163 and 164 reflect Department recommendations based on additional input from the public and support of DHAC representatives. No changes or recommendations are being proposed for fishing areas outside San Francisco Bay.

Environmental Report

Pursuant to the requirements of the California Environmental Quality Act, the Department has prepared a 2015 Draft Supplemental Environmental Document (DSED) to the 1998 Final Environmental Document for Pacific Herring. The Department relied upon the DSED for biological analysis and to make recommendations for regulatory change. The DSED is currently available for public comment and can be found on the Department's Marine Region Website: <http://www.dfg.ca.gov/marine/herring/>.

Certification of the 2015 Final Supplemental Environmental Document is scheduled to occur at the October 7, 2015, Commission meeting in Los Angeles.

Overview of Herring Management and Environmental Document Summary

As with most coastal pelagic species, herring populations fluctuate depending on a variety of factors, including: food availability, spawning conditions, competition, predation, and fishing pressure. Pacific herring gill net fisheries are regulated in four spawning areas: Tomales Bay, Humboldt Bay, Crescent City area, and in San Francisco Bay, which is the primary fishing area. The HEOK fishery is only allowed in San Francisco Bay. Tomales Bay, Humboldt Bay, and Crescent City area have not been subjected to any fishing pressure for a number of seasons due to poor market conditions and unique site constraints at each location. No changes to quotas are proposed for these three fishing areas for the 2015-16 season. The Department manages the populations in the four spawning areas as

separate stocks. The commercial herring fisheries on these stocks are regulated through a catch quota system to provide for adequate protection and utilization of the herring resource. In San Francisco Bay, the Department conducts annual assessments of the herring spawning population size (spawning biomass). In addition to the assessment of spawning biomass, the Department examines the age composition of the spawning population, growth and general condition, biological aspects of the catch, and environmental conditions. These data serve as the basis for establishing fishing quotas for the next season. Department fishery managers are then able to set appropriate harvest targets, providing a sustainable fishery and ensuring a forage base for other species that depend on herring as a food source.

Annual fishing quotas are necessary to provide for a sustainable fishery and have historically been limited to a total commercial take not to exceed 20 percent (harvest percentage) of the previous season's estimated spawning biomass. This harvest percentage is based upon the results of a peer reviewed model that assumes stable environmental and biological conditions. Quotas are the principal regulatory tool to establish adequate protection for the herring resource and provide for the long-term sustainable yield of the fishery. Each year, the Department recommends a harvest percentage that is not determined by a fixed mathematical formula; rather, the recommendation is based upon the modeling results and takes into account additional data collected each season, including: ocean productivity and estuarine conditions, growth rates of herring, strength of individual year-classes, and predicted size of incoming year-classes (i.e., recruitment). In response to poor recruitment or indication of population stress and/or unfavorable oceanographic conditions, harvest percentages for the past ten years have been set at or below ten percent in San Francisco Bay. The ten year average exploitation rate has been less than four percent. Over the past five years, the Department has recommended even more precautionary harvest percentages which have been less than or equal to five percent of the previous season's estimated spawning biomass. Actual exploitation rates during that five year period have averaged approximately three percent of the total spawning biomass.

Fishing effort and participation has also declined over the ten year period due to a reduction in herring value and lower demand on international markets. The traditional product from this fishery, *kazunoko*, is the sac roe (eggs) removed from the females, which is processed and exported primarily for sale in Japan.

The Department's proposal to make a minor change in HEOK effectively reduces the total herring catch because a larger proportion of the overall quota will be allocated as HEOK. This is beneficial because the HEOK fishery only harvests herring eggs, allowing adult herring to escape, thus

safeguarding a larger portion of the population as an important forage source. This recommendation is also supported by DHAC and members of the conservation community. This allocation is further described in the 2015 DSED, Chapter 2.2, and in Section 163 of these regulations.

The spawning biomass estimate for the 2014-15 season was 16,674 tons, which fell below the historical average (1979-80 season to present) of 51,300 tons. This was a significant decrease in spawning biomass from the previous season's estimate of 60,600 tons, and is the fourth-lowest estimated biomass on record. Accordingly, the Department will continue to recommend a precautionary harvest level for the 2015-16 season to safeguard the herring fishery and protect its role as a key forage species.

Department Recommendations for the San Francisco Bay Herring Fishery

The Department is providing the Commission a quota option range for the 2015-16 season from zero (0) to five percent of the 2014-15 San Francisco Bay spawning biomass estimate of 16,674 tons as described in the 2015 DSED. The Department is recommending a five percent quota equal to 834 tons of Pacific herring.

Department Recommendations for the Herring Eggs on Kelp Fishery

The Department is providing the Commission a quota option for the HEOK fishery to increase the total quota allocation from 0.79 to 1.0 percent. This fishery is regulated with the gill net fishery and the quota will be allocated as a proportion of the overall quota set each season for San Francisco Bay.

The Department is providing the Commission a recommendation to adjust the permit renewal date for the HEOK fishery to align with the gill net fishery due date. This would move the current due date for HEOK permits from August 1 each year to, "on or before the first Friday of October each year". This minor change would allow greater efficiency and time savings during the annual permit renewal process by the Department's License and Revenue Branch.

Recommended Amendments to Section 163

- Subsection 163(g)(4) is amended by deleting the current quota of "2,500" tons and replacing it with a quota selected by the Commission based on a range from zero (0) to five percent of the preceding year's spawning biomass estimate; and deleting "2014-2015". The Department is recommending a five percent quota equal to 834 tons.

Recommended Amendments to Section 164

- Subsection 164(g)(3) is amended by changing the form FG 143 HR (Rev. 2/14) to DFW 143 HR (REV. 06/04/15). The revision is necessary to conform to Department standards and to create a form without the need for an annual update. The old and revised forms are attached to this rulemaking.
- Subsection 164(h)(2) is amended to change the application deadline for renewal of all HEOK permits to be received by the Department, or if mailed, postmarked, on or before the first Friday of October each year. This change in the deadline will align the renewal dates for all other herring permits and be less confusing for the herring permit holders.
- Subsection 164(j)(4) is amended by increasing the quota allocation for HEOK permits from 0.79 to 1.0 percent of the overall quota as specified in Section 163 for harvest of herring.

(b) Authority and Reference Sections from the Fish and Game Code for Regulation:

Section 163:

Authority cited: Sections 1050, 5510, 8550, 8552.1, 8553 and 8555, Fish and Game Code.

Reference: Sections 713, 1050, 7852.2, 8043, 8550, 8552, 8552.6, 8553, 8554, 8555, 8556, 8557 and 8559, Fish and Game Code.

Section 164:

Authority cited: Sections 1050, 5510, 8389, 8552.1, 8553 and 8555, Fish and Game Code.

Reference: Sections 713, 1050, 7850, 7850.5, 7852.2, 7881, 8043, 8053, 8389, 8550, 8550.5, 8552.1, 8552.2, 8552.3, 8552.4, 8552.5, 8552.6, 8552.7, 8552.8, 8553, 8554, 8555, and 8556, Fish and Game Code.

(c) Specific Technology or Equipment Required by Regulatory Change:

None

(d) Identification of Reports or Documents Supporting Regulation Change:
2015 Draft Supplemental Environmental Document for Pacific Herring

(e) Public Discussions of Proposed Regulations Prior to Notice Publication:

Director's Herring Advisory Committee Meeting, April 1, 2015, Sausalito, California.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:

No alternatives were identified.

(b) No Change Alternative:

A no-change alternative would not provide a quota or season for the 2015-16 commercial herring fishery. Current regulations specify a quota of 2,500 tons for the 2014-15 season and these regulations cannot apply to subsequent seasons.

A no-change alternative would not increase quota allocation for the HEOK fishery or amend current permit renewal dates.

(c) Consideration of Alternatives:

In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the proposed regulation, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

V. Mitigation Measures Required by Regulatory Action:

The 2015 Draft Supplemental Environmental Document has been prepared to review and analyze the proposed regulations for the commercial harvest of Pacific herring throughout the State's estuarine waters. Other than a recommendation for a new quota for the 2015-16 season, no mitigation measures are necessary.

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:

Herring roe prices are set on the international market and not directly impacted by California regulations and quotas. Recently, herring roe has declined in value due to a market oversupply and a decline in overall demand. As a result, no adverse incremental economic impact to businesses, including the ability of California businesses to compete with businesses in other states, is anticipated to occur with a quota allocation of 50 tons or more. However, a zero ton quota would eliminate any revenues

from the California herring fishery. This impact could be mitigated to the extent that fishermen can pursue other species; the total economic impact should not be significant.

- (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.

Due to poor market conditions and low participation by the herring fleet during the 2014-15 season, any quota option over 50 tons will likely result in positive incremental contributions to employment for the State: for example, an increase of about 71 jobs for a quota of 834 tons (see section VII). Conversely, a zero (0) ton quota could adversely impact about four jobs in the fishing industry and related industries. This is based on an employment multiplier of 27 jobs per each million dollar change in direct output from commercial herring fishing activities.

Most commercial herring industry participants are small businesses (as defined under California Government Code Section 11342.610), which may incur a detriment under a quota option less than 50 tons for San Francisco Bay. The total harvest of Pacific herring landed during the 2014-2015 season was 46 tons, though the allowable quota was 2,500 tons. This low exploitation rate and participation level by the herring fleet was driven by poor international market conditions. Due to the small scale and seasonality of the California herring fishery it is unlikely that any of the proposed quota options alone would cause the elimination of existing businesses in the State.

- (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. There are no new fees or reporting requirements stipulated under the proposed regulations.
- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None
- (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: None.
- (h) Effect on Housing Costs: None.

VII. Economic Impact Assessment:

Due to the small scale and seasonality of the California herring fishery, the overall economic impact on California business is not anticipated to be significant. Depending on which option is selected by the Commission, the proposed regulations are not anticipated to have significant adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. For illustration, the following table (California Herring Fishery 2015-16) provides an overview of two quota options with analyses of the projected economic impacts to the State relative to 2014-15 season catch of 46 tons.

California Herring Fishery 2015-16				
<i>(Based on average biomass estimate of 16,674 tons)</i>	No Change	Opt1 5%*	Opt2 0%*	2014-15 Actual Catch
Proposed 2015-2016 Quota in Tons	2,500	834	-	46
Ex-Vessel Revenue Potential (for allowable harvest quota)	\$ 1,035,000	\$ 345,000	\$ -	\$ 19,000
Total Economic Output Contribution	\$ 1,837,000	\$ 612,000	\$ -	\$ 28,000
Total Earnings (Labor Wages) Contribution	\$ 365,000	\$ 122,000	\$ -	\$ 5,100
Total Jobs (Employment) Contribution	97	75	-	4
Total Value-Added Contribution	\$ 705,000	\$ 235,000	\$ -	\$ 10,200
Total State & Local Tax Contribution	\$ 347,000	\$ 31,000	\$ -	\$ 1,400
Landings Tax Revenue Contribution to CDFW (\$.0013/lb)	\$ 6,500	\$ 2,168	\$ -	\$ 120
Incremental Impact of Proposed Regulations Relative To Last Season's Allowable Harvest Quota of 2,500 tons				
	No Change	Opt1 5%*	Opt2 0%*	Opt 1 change from Actual Catch
Change in Tons	-	(1,666)	(2,500)	788
Direct Impact to Fishermen Ex-Vessel Revenue	\$ -	\$ (690,000)	\$ (1,035,000)	\$ 326,000
Total Economic Output Impact	\$ -	\$ (1,005,000)	\$ (1,837,000)	\$ 584,000
Total Earnings (Labor Wages) Impact	\$ -	\$ (186,000)	\$ (365,000)	\$ 117,000
Total Jobs (Employment) Impact	-	(21)	(97)	71
Total Value-Added Impact	\$ -	\$ (370,000)	\$ (705,000)	\$ 225,000
State & Local Taxes Impact	\$ -	\$ (51,000)	\$ (347,000)	\$ 29,600
Landings Tax Revenue to CDFW (\$.0013/lb)	\$ -	\$ (4,300)	\$ (6,500)	\$ 2,050
* % of biomass (16,674 tons).				

The projected economic impacts and the incremental economic impacts under each option, relative to the last season's allowable harvest of 2,500 tons of Pacific herring in San Francisco Bay along with the impacts of the actual catch taken over the 2014-15 season are estimated. The proposed Option 1 for five percent of the 16,674 ton biomass estimate (an 834 ton allowable quota) represents a quota reduction of 1,666 tons from the 2014-15 quota.

If the total allowable harvest quota had been met over the 2014-15 season, the Option 1 quota could result in drops in total economic output as shown in the incremental impact portion of the California Herring Fishery 2015-2016 table. However, over the 2014-15 season, the actual landings recorded were 46 tons, substantially below the allowable harvest quota. Compared to the actual catch, the proposed Option 1 quota of 834 tons could result in an increase in total economic output should the catch exceed 46 tons.

The 2015-16 quota options for San Francisco Bay range from zero (0) to five percent of the 2014-15 spawning biomass estimate of 16,674 tons. The potential incremental changes to total State economic output for these three options: no change; five percent of the biomass (834 tons); or zero percent of the biomass estimate (0 tons) are: none, \$(1,005,000), or \$(1,837,000) respectively, relative to 2014-15 season's 2,500 ton allowable quota and the ex-vessel price per ton.

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

Any quota option over 50 tons has the potential to result in positive incremental contributions to employment for the State. The proposed Option 1 quota of 834 tons could result in about 71 additional jobs. The proposed Option 2 quota of zero tons could adversely impact approximately four jobs in the fishing industry and related industries. This is based on an employment multiplier of 27 jobs per each million dollar change in direct output from commercial herring fishing activities. In addition, under a zero ton quota, the existing 190 herring permittees would be unable to fish for herring. The extent to which these fishermen may be able to fish for other species during the herring season is unknown.

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

It is unlikely that any of the proposed quota options shown above would alone cause the elimination of existing businesses in the State.

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

It is unlikely that any of the proposed quota options shown above would alone cause the expansion of existing businesses in the State.

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

The proposed action(s) recommended by the Department are to ensure the sustained availability of Pacific herring resources, in support of goals and benefits set forth in the California Fish and Game Code.

(e) Benefits of the Regulation to Worker Safety:

The proposed regulations do not affect worker safety because they only set fishing quotas.

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

The expected benefits to the environment take the form of sustainable herring fisheries, and benefits to persons, businesses, and species dependent upon a healthy herring resource.

(g) Other Benefits of the Regulation:

The proposed changes to the regulations support the Marine Life Management Act (MLMA) [MLMA, Statutes 1999 Chapter 483], which declares that "conservation and management programs prevent overfishing, rebuild depressed stocks, ensure conservation, facilitate long term protection and, where feasible, restore marine fishery habitats".

INFORMATIVE DIGEST\POLICY STATEMENT OVERVIEW

Sections 163 and 164, Title 14, California Code of Regulations, specify that herring may be taken for commercial purposes only under a revocable permit, subject to such regulations as the Fish and Game Commission shall prescribe. Current regulations specify: permittee qualifications, permit application procedures and requirements, permit limitations, permit areas, vessel identification requirements, fishing quotas, seasons, gear restrictions, and landing and monitoring requirements.

Annual fishing quotas are necessary to provide for a sustainable fishery. The proposed regulatory changes in Section 163 will establish the fishing quota for the 2015-16 season in San Francisco Bay:

- Set the San Francisco Bay quota for the 2015-16 season from zero (0) to five percent of the 2014-15 San Francisco Bay spawning biomass estimate for Pacific herring as provided in the 2015 Draft Supplemental Environmental Document. The Department is recommending a quota of five percent or 834 tons.

The proposed regulatory changes in Section 164 will establish the HEOK fishing quota and amend the permit renewal date and form for the San Francisco Bay fishery:

- A minor editorial change will be made to Section 164 indicating a change in the revision date (Rev. 2/14) to (Rev. 06/04/15) on the HEOK Royalty Report Form.
- A minor change will be made to Section 164 indicating that renewal of all HEOK permits are to be received by the Department, or if mailed, postmarked, on or before the first Friday of October each year. The revision is necessary to update the "permit application date" and align with the renewals dates for all other herring permits.
- Increase the San Francisco Bay HEOK quota allocation for individual HEOK permits from 0.79 to 1.0 percent of the overall quota as specified in Section 163 for harvest of herring.

Benefits of the Regulation

The Commission anticipates benefits to the State's environment and the health and welfare of California residents. The proposed regulation changes are intended to set annual harvest quotas within a range that will maintain sustainable herring populations for their ecological values and commercial use. Maintaining a sustainable herring fishery also encourages consumption of local seafood.

The Commission does not anticipate any non-monetary benefits to worker safety as a result of the proposed regulation.

Consistency with State or Federal Regulations

The proposed regulations are neither inconsistent nor incompatible with existing state regulations. Section 20, Article IV, of the State Constitution specifies that the Legislature may delegate to the Fish and Game 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 the commercial take of herring (sections 8550 and 8553, Fish and Game Code). The Commission has reviewed its own regulations and 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 the commercial take of herring. There are no comparable federal regulations for the commercial harvest of herring.