

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: March 18, 2014
- II. Dates and Locations of Scheduled Hearings:
- (a) Notice Hearing: Date: June 4, 2014
Location: Eureka, CA
- (b) Discussion and Adoption Hearing: Date: August 6, 2014
Location: San Diego, 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:

Under existing law, herring and herring eggs may be taken for commercial purposes only under a revocable permit, subject to regulations prescribed by the Fish and Game Commission (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 of Fish and Wildlife (Department) is proposing regulations that would establish the 2014-2015 season quotas for fishing operations in San Francisco Bay, as well as providing quota options for the Tomales Bay, Humboldt Bay and Crescent City Harbor herring fisheries.

Management recommendations to improve or provide for the efficient harvest and orderly conduct of the herring fishery 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 of Title 14 in the California Code of Regulations (CCR) reflect Department recommendations based on additional input from the public and DHAC representatives. The Department is preparing a Supplemental Environmental Document, pursuant to the requirements of the California Environmental Quality Act. The Draft Supplemental Environmental Document was released for public review on

April 4, 2014. Certification of the Final Supplemental Environmental Document is scheduled to occur at the August 6, 2014, Commission meeting in San Diego.

Background

Pacific herring gill net fisheries occur in four spawning areas: Tomales Bay, Humboldt Bay, Crescent City Harbor and in San Francisco Bay which is the primary fishing area. The Department manages these populations 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. The Department conducts annual assessments of the herring spawning population size (spawning biomass) in San Francisco Bay. 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.

Commercial fishing effort for Pacific herring has decreased significantly in California during the past decade. During the 1990s, the number of herring permits peaked at over 450 with over 120 vessels participating in the San Francisco Bay fishery. In contrast, during the 2013-2014 season, there were only 187 herring permit renewals and 35 vessels elected to participate in the gill net fishery. Decreased effort has affected the other fisheries outside San Francisco Bay as well with no commercial fishing activity occurring in Tomales Bay since 2007, in Humboldt Bay since 2005 and in Crescent City Harbor since 2002. However, for the 2013-2014 season, Tomales Bay had nine permit renewals and Humboldt Bay and Crescent City Harbor had four renewals.

The Herring-Eggs-On-Kelp (HEOK) fishery is only permitted in San Francisco Bay. A maximum of 10 gill net permittees for San Francisco Bay are allowed to convert their permit into a HEOK permit at the start of each season. This fishery is regulated with the gill net fishery and its proportion of the quota is allocated from the total quota set for San Francisco Bay.

Fishing Quotas

San Francisco Bay. 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 bay 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. The average over this period has been six percent and actual exploitation rates (catch percentage) have been approximately four percent. For the 2009-2010 season, the Department recommended a no fishery option (zero ton quota) when the herring spawning biomass estimate in 2008-2009 fell to a new low of 4,833 tons. The Commission adopted this recommendation and the commercial fishery was closed in San Francisco Bay for the 2009-2010 season. This was done to help safeguard the population as a forage reserve and to ensure a reproductive base to allow for stock rebuilding. Since re-opening the fishery for the 2010-2011 season, the Department has recommended harvest percentages less than or equal to five percent of the previous season's estimated spawning biomass, and actual exploitation rates have been approximately three percent of the total spawning biomass.

Separate permit quotas are allocated for each of the two gill net fishing groups (odd and even platoons, determined by permit number) from the overall quota for San Francisco Bay. Minor annual adjustments to the quota allocations for each fishing group are needed to account for permittee attrition and the transfer of herring permits to the herring eggs on kelp fishery. HEOK fishing is only allowed in San Francisco Bay and the fishery is regulated under Section 164, Title 14, CCR. The HEOK quota depends on the total herring fishery quota for San Francisco Bay established by the Commission under Section 163, Title 14, CCR. In 1994, the Commission provided HEOK permittees with a HEOK quota equal to approximately 0.79 percent of the overall quota.

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. The average spawning biomass estimate from the 1979-1980 season to the present equals 52,000 tons of adult herring.

The Department uses length frequency analysis and age analysis to determine the age composition of the herring population each season. Greater than 70 percent of the spawning population has been comprised of herring age four and younger, based on research catch data (1982-present). The remaining spawning population is typically comprised of 5 and 6-year-old herring with very few fish aged seven, eight and nine years. As noted, age and length frequency analysis provides critical information related to year class strength and the proportion of the biomass that can be attributed to a given year class. The Department also collects monthly young-of-the-year herring data in San Francisco Bay. This information is an indicator of spawning success as well as larval and juvenile survival. 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.

One of the Department's herring management goals is to ensure a healthy age structure for the San Francisco Bay herring population. Between 2009 and 2012, the percentage of age five and older herring that historically supported the gill net fishery declined to low levels. For a population that has been undergoing recovery from the record low 2008-2009 spawning biomass, it is expected that there would still be comparatively few age 6+ fish in the current population. Those year classes were associated with the low biomass estimated in 2008-2009, and there is a persistence factor as weak year classes pass through the population. The multi-year process of recovery requires that successive year classes be larger than the preceding ones, resulting in an age composition that is skewed towards the younger ages. During the last two seasons the proportion of age four and five herring has begun to recover. As this recovery progresses the proportion of older ages in the population has increased. The Department will continue to monitor the age composition of the San Francisco Bay herring population closely and recommend precautionary management principles for safeguarding the spawning population.

Crescent City Harbor Area, Humboldt Bay, Tomales Bay. During the August 7, 2013, Commission meeting, the Department was asked by the Commission and the conservation community to provide a zero (0) ton quota option for the Crescent City Harbor Area, Humboldt Bay, and Tomales Bay for the commercial harvest of herring during the 2014 rulemaking cycle

The herring fishery in Crescent City Harbor began in 1973. For years when the fishery was active, yearly landings ranged from 0.1 to 60 tons, with an average of 22 tons per year. The quota of 30 tons was established in 1978 and remains in effect today. The last recorded landings for Crescent City Harbor were in 2002 and totaled approximately 6 tons. The commercial fishery in Crescent City Harbor has been dormant since the 2002-2003 season.

Spawning ground surveys in Humboldt Bay were conducted during the 1974-1975, 1975-1976, 1990-1991, and 2000-2001 through 2006-2007 seasons. The average spawning biomass estimate for Humboldt Bay for the 11 seasons of spawn assessments is 386 tons. The most recent estimate from 2006-2007, however, was only 7 tons. The current quota of 60 tons, established in 1982, represents a potential harvest rate of 15.5 percent of the historical average. The commercial herring fishery in Humboldt Bay has been dormant since the 2004-2005 season.

In Tomales Bay, the Department began annual spawning biomass surveys in 1973 but discontinued the surveys after the 2005-2006 season. The last recorded spawning biomass estimate in 2005-2006 was 2,033 tons, which falls below the historical average of 4,847 tons, represented by 32 seasons of estimates. The current quota of 350 tons, which was established in 2006,

represents a potential harvest rate of 7.2 percent of the historical average. The commercial herring fishery in Tomales Bay has been dormant since the 2006-2007 season.

Based on decreased permit renewals, poor market conditions and unique site issues at each location, it is unlikely that fishing activity will return in the near future. As a result, these spawning populations are likely returning to unfished abundance, with one to two entire generations not having been subjected to any commercial fishing pressure. It should also be noted that as a result of state-wide reduced fishing effort, as well as reduced staffing and budget constraints, the Department no longer is able to conduct spawning biomass surveys in Tomales Bay, Humboldt Bay or the Crescent City Harbor area. Due to the lack of recent biomass data for each of these areas the Department is providing a zero (0) ton harvest option for the Commission to consider for the 2014-2015 season for Tomales Bay, Humboldt Bay, and the Crescent City Harbor area.

Quota Recommendations and Options

Crescent City Harbor Area. The Department is providing two options, either 30 tons (status quo) or zero (0) tons, for the Crescent City Area fishery quota for the 2014-2015 season

Humboldt Bay. The Department is providing two options, either 60 tons (status quo) or zero (0) tons, for the Humboldt Bay fishery quota for the 2014-2015 season.

Tomales Bay. The Department is providing two options, either 350 tons (status quo) or zero (0) tons, for the Tomales Bay fishery quota for the 2014-2015 season.

San Francisco Bay. The Department is recommending a quota between zero and 10 percent of the 2013-2014 San Francisco Bay herring spawning biomass estimate as described in the 2014 Draft Supplemental Environmental Document (DSED). Specifically, the Department recommends a quota of 2,500 tons for the 2014-2015 season. This amounts to approximately 4.1 percent of the 60,600 ton 2013-2014 herring spawning biomass estimate for San Francisco Bay.

Recommended Amendments to Section 163

- Crescent City Harbor Area: Subsection 163(g)(1) is amended by deleting the current quota not to exceed 30 tons and replacing it with a zero (0) ton or 30 ton quota to be selected by the Commission.
- Humboldt Bay: Subsection 163 (g)(2) is amended by deleting the current quota not to exceed 60 tons and replacing it with a zero (0) ton or 60 ton quota to be selected by the Commission.

- Tomales Bay: Subsection 163(g)(3) is amended by deleting the current quota not to exceed 350 tons and replacing it with a zero (0) ton or 350 ton quota to be selected by the Commission.
- Current language in all three subsections 163(g)(1)-(3) stating shall “not exceed” in reference to the selected quota is proposed to be replaced with shall “be” to more precisely specify the individual quotas.

Establish a New 2014-2015 Quota for Herring in San Francisco Bay:

- Subsection 163(g)(4) is amended by deleting the current quota of 3,737 tons and replacing it with 2,500 tons as recommended by the Department. This quota represents 4.1 percent of the preceding year’s spawning biomass estimate of 60,600 tons; this section is also amended by replacing “2013-2014” with “2014-2015” to specify the current season.

Recommended Amendments to Section 164

- Subsection 164(g)(3) is amended by changing the revision date of Form FG 143 HR (Rev. 5/13) to (Rev. 2/14). The revision to the Instructions on Preparing the Report, located on the reverse side of the form in Section III: Line 1, is necessary to delete “2013.” This is because the form is submitted “on August 1st each year.” The proposed change avoids the need for an annual update to this form. The old and revised forms are attached to this rulemaking.

- (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, 8552.9, 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:
Economic Impact Assessment.

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

(1) Town Hall Meeting, February 6, 2014, Sausalito, California

(2) Director's Herring Advisory Committee Meeting, April 1, 2014,
Sausalito, California.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:

No alternatives were considered.

(b) No Change Alternative:

A no change alternative would provide a quota for the 2014-2015 fishing season of 3,737 tons.

(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:

A Supplemental Environmental Document is being prepared to review and analyze the proposed regulations for the commercial harvest of Pacific herring throughout the State's estuarine waters.

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 Department is providing the Commission analyses on five potential 2014-2015 quota options for San Francisco Bay ranging from zero to 10 percent of the 10-year average biomass estimate of 52,000 tons (see attached Economic Impact Assessment, EIA). The potential incremental changes to total State economic output for the no change, zero (0) ton, 2,444 ton, 2,600 ton, or 5,200 ton quota, options are: none, \$(6,874,000), \$(2,378,000), \$(2,091,000), and \$2,691,000, respectively, relative to 2013-2014 season's 3,737 ton quota and the ex-vessel price per ton.

No adverse incremental economic impacts to businesses in California would occur under a quota allocation of 3,737 tons or more. Moreover, given the recent market conditions for herring roe (increasing demand overseas and higher prices), any allocation of 3,737 tons or less could affect the ability of California businesses to compete with businesses in other states. This is evident in the recent market reports from the National Marine Fisheries Service, showing a 78 percent increase (by weight) in exports of Pacific herring products from California in 2013, relative to 2012. The corresponding increase in nominal dollar value of exports of Pacific herring products from California was about 59 percent (unadjusted for inflation).

Since no commercial herring fishing activity has taken place in Tomales Bay, Humboldt Bay, and Crescent City Harbor in the last six years, we conclude no adverse incremental economic impacts to businesses under the recommended zero quota allocation for these three areas.

- (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:

Any quota option over 3,737 tons will result in positive incremental contributions to employment for the State: for example, an increase of about 38 jobs for a quota of 5,200 tons (see attached EIA). Conversely, a zero (0) ton or 2,444 ton allowable quota could adversely impact as many as 97 to 33 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 in California Government Code Section 11342.610), which may incur a detriment under a quota option less than 3,202 tons for San Francisco Bay. This 3,202 tons was the total harvest of Pacific herring landed during the 2013-2014 season, though the allowable quota was higher at 3,737 tons.

It is unlikely that any of the proposed quota options would alone cause the elimination of existing businesses in the State. This is in light of the favorable market conditions currently enjoyed by the herring processors and exporters. Given these promising market trends, it is possible that any quota option over 3,737 tons could potentially encourage investment, expansion, and creation of some new businesses in the State

Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

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 encourages consumption of a nutritious food.

No provisions of the regulation benefit worker safety because only fishing quotas are being set.

(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 in 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.

INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

Sections 163 and 164, Title 14, CCR, 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 quotas for Crescent City Area, Humboldt Bay and Tomales Bay; and for the 2014-2015 season in San Francisco Bay:

- Set the Crescent City Area quota at zero (0) tons or maintain status-quo of 30 tons.
- Set the Humboldt Bay quota at zero (0) tons or maintain status-quo of 60 tons.
- Set the Tomales Bay quota at zero (0) tons or maintain status-quo of 350 tons.
- Replace the language shall “not exceed” with shall “be” with respect to the quotas selected for the Crescent City Area, Humboldt Bay and Tomales Bay.
- Set the San Francisco Bay quota for the 2014-2015 season between zero (0) and 10 percent of the 2013-2014 San Francisco Bay spawning biomass estimate for Pacific herring as provided in the 2014 Draft Supplemental Environmental Document (DSED).
- A minor editorial change will be made to Section 164 indicating a change in the revision date (Rev 2/14) because of a minor revision to the HEOK Royalty Report Form FG 143 HR.

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 encourages consumption of a nutritious food.

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.