

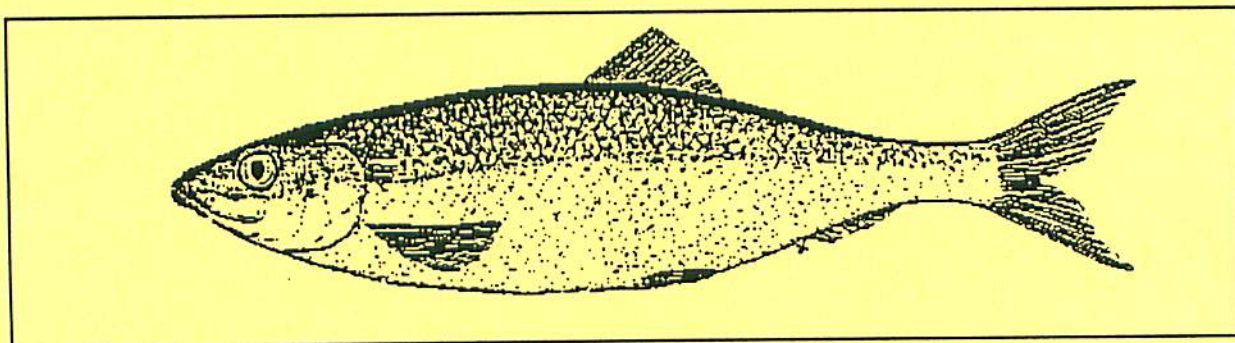
SCH No. 98052052

**FINAL**

**SUPPLEMENTAL ENVIRONMENTAL DOCUMENT**

**PACIFIC HERRING  
COMMERCIAL FISHING REGULATIONS**

(Sections 163, 163.5, and 164, Title 14, California Code of Regulations)



1999

**STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF FISH AND GAME**

**FINAL SUPPLEMENTAL ENVIRONMENTAL DOCUMENT  
PACIFIC HERRING COMMERCIAL FISHING REGULATIONS**

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## **SUMMARY**

### **S.1 Introduction**

This final supplemental environmental document (FSED) to the Final Environmental Document (FED), Pacific Herring Commercial Fishing Regulations, 1998, provides the review and analysis required by California Environmental Quality Act (CEQA) Guidelines to assist the State's Fish and Game Commission in regulating the commercial harvest of Pacific herring throughout California ocean and estuarine waters. Specifically, the FSED reviews and evaluates proposed regulatory changes for the 1999-2000 fishing season, replacing the proposed project in the FED. A Notice of Preparation (NOP) was used to identify and incorporate concerns and recommendations of the public into the review and analysis of these proposed changes.

The FSED, includes six chapters. Chapter 1 discusses the authorities and responsibilities under which the FSED was developed and describes its intended use. Chapter 2 describes the proposed project and alternatives for regulating the commercial harvest of herring. The existing environment is described in Chapter 3. The impacts of the proposed project and cumulative effects are addressed in Chapter 4. Impacts of the alternatives to the proposed project are addressed in Chapter 5. Chapter 6 identifies consultations. Chapter 7 responds to comments received on the Draft Supplemental Environmental Document (DSED).

Based on the analysis in this FSED, the proposed project is identified as the preferred alternative because it provides a set of regulations most likely to achieve the State's policy with respect to the conservation, maintenance and utilization of the Pacific herring resource.

### **S.2 Proposed Project**

The proposed project is a body of recommended regulations governing the commercial harvest of herring for roe products, the harvest of herring eggs-on-kelp, and the harvest of herring for fresh food, bait, and pet food. The proposed project takes the form of recommendations for continuation, amendment, or change to an existing body of regulations in effect since 1998 (Sections 163 and 164, Title 14, California Code of Regulations (CCR)).

The proposed project will establish fishing quotas by area and permit type for the 1999-

2000 herring fishing season, based on the most recent assessments of the spawning populations of herring in San Francisco and Tomales bays. Other changes relating to seasons, permittee qualifications, permit suspensions, landing receipts, assist boats, authorized agents, method of take, and harvesting, landing and processing requirements are recommended to improve the clarity of the regulations, to provide for the efficient harvest and orderly conduct of the fishery, and to protect the resource.

The specific regulatory changes recommended for the 1999-2000 season will: 1) provide for a 5,925 ton quota for San Francisco Bay (15 percent of the estimated spawning biomass for the 1998-1999 season); 2) provide an initial 400-ton fishing quota for Tomales Bay with provisions to increase the quota in season if escapement goals are achieved by February 15, 2000; 3) provide special provisions for the participation of four Tomales Bay permittees in a study to determine the size and age composition of herring caught in gill nets of varying mesh and twine size; 4) modify the regulations to state that the Department of Fish and Game will approve, rather than provide, the gill nets used in the study; 5) set the dates of the roe herring fisheries in San Francisco Bay from 5:00 p.m. on Sunday, November 28, 1999 to noon on Wednesday, December 22, 1999 ("DH" gill net platoon only), and from 5:00 p.m. on Sunday, January 2, 2000 to noon on Friday, March 10, 2000; 6) set the dates of the roe herring fishery in Tomales Bay from 5:00 p.m. on Sunday, January 2, 2000 to noon on Friday, March 10, 2000; 7) delete the requirement that all herring permittees must hold an operator license; 8) prohibit a permittee whose permit has been suspended for the entire season from participating in any herring fishery in the State that season; 9) require herring buyers to list on the landing receipt the number of fish in, and the weight of, each roe test for the landing reported on the receipt; 10) require a copy of a herring eggs-on-kelp (HEOK) permit to be aboard each vessel that is harvesting, processing or transporting herring eggs-on-kelp under the authority of the permit; 11) require a HEOK permittee or his or her authorized agent to be aboard each vessel that is harvesting, processing or transporting HEOK under the authority of the permit; 12) and clarify the definition of permanent structures to exclude buoys.

Other aspects of the existing herring regulations will remain unchanged.

### **S.3 Project Alternatives**

Three alternatives are considered in the FSED. These alternatives include: 1) a no project (no fishery) alternative; 2) using existing regulations; and 3) establishing individual vessel quotas for gill net vessels in the herring roe fishery. Refer to Section 2.4, Project Alternatives, and Chapter 6, Analysis of Alternatives, of the FED, for a thorough description of alternatives and analysis of their impacts.

### **S.4 Existing Environment**

Although the proposed project consists of regulatory changes for San Francisco Bay and Tomales Bay fisheries, the existing environment potentially affected by the proposed project and alternatives includes the open ocean and bays in which herring occur. However, the environments most likely to be affected are San Francisco Bay and Tomales Bay. Herring fisheries also occur in the Crescent City area, Humboldt Bay, and in the open ocean, primarily Monterey Bay. Refer to Section 3.3 of the Final Environmental Document, Pacific Herring Commercial Fishing Regulations, for a thorough description of these environments.

### **S.5 Environmental Impacts**

#### **S.5.1 Proposed Project**

An analysis of the potential impacts of the proposed project did not identify any new potential impacts that are not analyzed in the FED. Several areas of potential concern were identified in the FED. The FED identified the area with the highest potential for impacts as the San Francisco Bay area, which, coincidentally, supports the largest herring roe fishery in the State. Localized, short-term, and less than significant impacts were identified in the FED for several areas of potential concern including: boat and vehicle traffic circulation, water quality, air quality, housing and utilities, geology, scenic quality, recreation, and noise. The FED found biological impacts to have the greatest potential for significant environmental impact, but found these impacts to be localized, short-term, and less than significant, with mitigation provided by current management strategy and herring population monitoring. Refer to Chapter 4 of the FED for a thorough environmental impact analysis of the proposed project.

### **S.5.2 Alternatives**

The alternatives proposed in this FSED are the same as those described in the FED. A thorough analysis of the impacts of these alternatives is provided in Chapter 6 of the FED.

#### **Alternative 1 (no fishery)**

Localized, short-term, and less than significant impacts to vessel and vehicle traffic circulation, water quality, air quality, housing and utilities, scenic quality, recreational opportunities, and noise levels identified for the proposed project would be eliminated or redistributed in an unpredictable manner.

Potential biological impacts associated with a no project alternative include an increased rate of natural mortality, the potential for deterioration in the condition of the herring population as it reaches carrying capacity, and potential impacts to other species that compete with herring for food resources.

#### **Alternative 2 (existing regulations)**

In most regards, the environmental impacts will be comparable to those of the proposed project. However, existing regulations do not address certain fishery-related problems considered in amendments or changes to existing regulations.

#### **Alternative 3 (individual vessel quota)**

Individual vessel quotas, rather than the platoon-based quota system currently used in the herring roe gill net fishery, would add incrementally to most impacts due to longer actual fishing seasons. However, these impacts are still expected to be short-term, localized, and less than significant for most environmental categories.

Wastage of resource could result from sorting to remove males from the catch to achieve higher roe content (and higher prices). However, fewer illegal nets are likely to be lost, reducing impacts from "ghost" net fishing.

### **S.5.3 Cumulative**

An analysis of the cumulative impacts of the proposed project revealed no additional impacts to those addressed in the FED. An analysis of cumulative impacts is provided in Chapter 5 of the FED.

A variety of factors have the capacity to influence Pacific herring population status in

California in addition to the proposed project including: 1) biological events, 2) competitive interactions with other pelagic fish and fisheries, 3) oceanographic events, 4) habitat loss, and 5) water quality. However, as with potential impacts from the on-going commercial harvest of herring, continued monitoring of the herring resource should herald any directional trends long before the stock's reproductive potential would be jeopardized.

#### **S.6 Areas of Controversy**

The following areas of controversy have been identified regarding commercial herring fishing:

1. Potential interactions between marine mammals and commercial fishing activities;
2. Importance of herring as a forage species for sea birds, marine mammals, and other fishes;
3. Inadequate knowledge of the resource;
4. Errors in stock assessment;
5. Insufficient management resources;
6. Potential impact of unforeseen events or catastrophes (e.g. oil spills; chemical spills).

#### **S.7 Issues to be Resolved**

At issue is whether or not to provide for commercial fishing as an element of herring management in California. If commercial fishing is authorized, decisions are needed to specify the areas, seasons, fishing quotas and other appropriate special conditions under which fishing operations may be conducted. This document and the FED include a review and discussion of the proposed project as well as alternatives.

## **Chapter 1. INTRODUCTION**

### **1.1 Background**

The Final Supplemental Environmental Document (FSED) presented here provides the review and analysis necessary to aid the Commission in taking action to regulate the commercial harvest of herring in California. It was prepared using the California Environmental Quality Act (CEQA) Guidelines. The project being considered is the proposed changes to the regulations for the 1999-2000 commercial herring fishing season.

The Department and Commission hold the public trust for managing the State's wildlife populations, including herring. That responsibility is fulfilled by a staff of experts including experts in marine resource management and enforcement issues related to California's herring resource. The knowledge and training represented by that expertise qualifies them to perform the review and analysis of proposed commercial herring harvest regulations contained in this document.

### **1.2 The Functional Equivalent**

CEQA requires all public agencies in the State to evaluate the environmental impacts of projects that they approve or carry out. A Final Environmental Document for Pacific Herring Commercial Fishing Regulations was certified by the Fish and Game Commission in 1998. Section 1.2 of the Final Environmental Document (FED) provides an explanation of how the FED satisfies that requirement. A subsequent FED is required when subsequent changes are proposed in the project which require important revisions of the previous FED due to new significant environmental impacts not considered in a previous FED or when new information of substantial importance to the project becomes available (CEQA Guidelines Section 15162, Public Resources Code Section 21166).

The agency may choose to prepare a supplement to a FED instead of a subsequent FED if only minor additions or changes are necessary to make the previous FED adequately apply to the project in the changed situation. This supplement to the FED need only contain the information necessary to make the previous FED adequate for the project as revised. The draft supplemental

document is given the same notice and public review given to a draft environmental document, and may be circulated by itself without the previous FED. A Notice of Preparation for the DSED was circulated to interested parties on May 20, 1999. A 45-day public comment period for the DSED ended at 5:00 p.m. August 6, 1999. When the agency decides whether to approve the project, the decision-making body considers the previous FED as revised by the supplemental environmental document. (CEQA Guidelines Section 15163).

### **1.3 Scoping Process**

The Department invited interested parties to a public meeting held April 7, 1999, to receive input on the proposed project and the content of the DSED. The Department also distributed a notice of preparation (NOP) to interested parties on May 20, 1999. This provided an opportunity for the concerns of responsible agencies and citizens to be addressed in the DSED.

### **1.4 Report Availability**

The Draft Supplemental Environmental Document is available at depository libraries, libraries for each of the counties in the affected areas, the Fish and Game Commission, and Department of Fish and Game offices. The Final Supplemental Environmental Document is available

### **1.5 Authorities and Responsibilities**

The Legislature formulates the laws and policies regulating the management of fish and wildlife in California. The State's policy with respect to aquatic resources is to encourage the conservation, maintenance and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the state. It is also the State's policy to promote the development of local fisheries and distant-water fisheries based in California in harmony with international law respecting fishing and the conservation of the living resources of the oceans and other waters under the jurisdiction and influence of the State (Section 1700, Fish and Game Code, Appendix 1 of FED).

The Legislature provides further policy direction regarding herring management in

sections 8550 through 8559, Fish and Game Code (Appendix 1 of FED). The Legislature delegated authority to the Commission, whose members are appointed by the Governor, to regulate the commercial harvest and possession of herring (section 8553). The remaining code sections provide for a limited entry fishery and require periodic review of regulations and policies. The Commission holds public meetings at its discretion to consider and adopt revisions to these regulations. Recommendations and comments from the Department, other agencies and the public are received typically at two public meetings each year (June and August).

The authority to prepare a supplemental environmental document is given in Section 21166 of the Public Resources Code.

## **Chapter 2. PROJECT DESCRIPTION**

### **2.1 Project Objectives**

The proposed project as defined in the FED is the regulation of Pacific herring fisheries under the State's jurisdiction. The regulations are considered for inclusion in the California Code of Regulations (CCR) to implement the State's policies for managing the commercial use of Pacific herring [Sec 1.5 <sup>1</sup>]. The proposed project and alternatives addressed in this document (FSED) take the form of recommendations for amendment or change to an existing body of regulations (Sections 163, 163.5, and 164, Title 14, CCR). The recommendations and alternatives are based on biological assessments of existing stock conditions and comments received from interested individuals, commercial fishermen, and from the Director's Herring Advisory Committee. The California Fish and Game Commission, whose members are appointed by the Governor, has legislatively delegated authority to act on these recommendations.

Project objectives include:

- maintaining healthy Pacific herring stocks in California;
- controlling commercial harvest of Pacific herring to maintain a sustainable fishery;
- providing sufficient Pacific herring to support recreational uses; and
- providing sufficient Pacific herring to conserve living resources of the ocean that utilize herring as a food source.

Under existing law, herring may be taken for commercial purposes only under a revocable permit, subject to such regulations as the Commission shall prescribe (Section 8550 Fish and Game Code, Appendix 1 FED). Current regulations specify: permit qualifications, permit validation requirements, permit limitations, permit areas, seasons, fishing quotas, gear restrictions, and landing and monitoring requirements.

The proposed project addressed by this FSED consists of amendments and changes to existing regulations for the 1999-2000 commercial herring fishing season. The proposed project changes fishing quotas by area and gear type. Quota recommendations for San Francisco Bay and Tomales Bay are based on the most recent assessments of the size of the spawning populations of herring in those areas. Other proposed amendments and changes are intended to improve the

efficient and orderly conduct of herring fisheries and the management of herring stocks. No amendments or changes to the regulations are proposed for Crescent City, Humboldt Bay, and open ocean herring fisheries for the 1999-2000 commercial herring fishing season.

## **2.2 Project Locations**

Permits have been issued for commercial herring fishing in five geographically distinct areas of the ocean and estuarine waters under the jurisdiction of the state of California (Figure 2.1). Many of the regulations considered by this document are specific to an area and type of fishing operation. This section describes each area for which regulatory changes are proposed, including current commercial fisheries for herring, and proposed seasons, quotas, and geographical restrictions for those fisheries. A complete description of commercial herring fishing areas is provided in Section 2.2 of the FED. The environmental setting for each geographical fishing area is detailed in Section 3.3 of the FED.

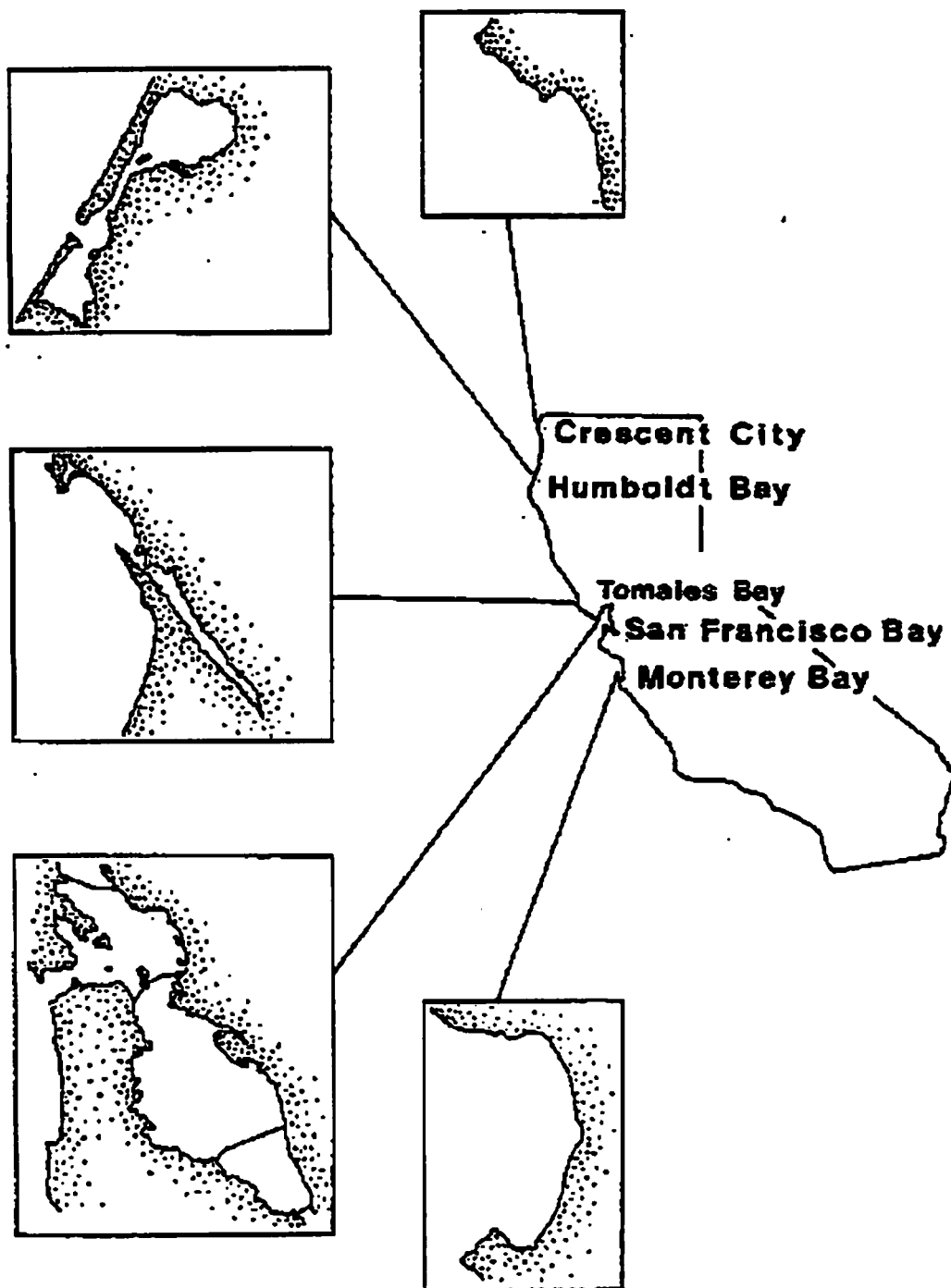


Figure 2.1. Locations of commercial herring fisheries

## **2.2.1 San Francisco Bay**

### **2.2.1.1 Herring Roe Fishery**

**Season:** Noon on November 28 until noon on December 22, and 5:00 p.m. on January 2 until noon on March 10.

Note: Herring fishing is not permitted from noon Friday through 5:00 p.m. Sunday.

Gill net permittees (DH) November 28-December 3, December 5-10, December 12-17, December 19-22, and, if necessary, after other platoons have reached their quotas until DH quota is reached or last day of season.

Gill net permittees (Even #) January 9-14, January 23-28, February 6-11, February 20-25, March 5-10.

Gill net permittees (Odd #) January 2-7, January 16-21, January 30-February 4, February 13-18, February 27-March 3.

**Quota:** 5,905 tons

Note: The overall quota for the roe fishery will be reduced by transfers to the eggs-on-kelp fishery.

**Area:** Waters of Districts 12 and 13 and that portion of District 11 lying south of a line extending from Peninsula Point (the most southerly extremity of Belvedere Island) to the easternmost point of the Sausalito ferry dock.

1) Regulations prohibit the setting or operating of nets within 300 feet of the following piers and recreation areas: Berkeley Pier, Paradise Pier, San Francisco Municipal Pier between the foot of Hyde Street and Van Ness Avenue, Pier 7 (San Francisco), Candlestick Point State Recreation Area, the jetties in Horseshoe Bay, and the fishing pier at Fort Baker. Regulations also prohibit the setting or operating of nets within 70 feet of Mission Rock Pier.

2) Regulations prohibit the setting or operating of nets in Belvedere Cove north of a line drawn from the tip of Peninsula Point to the tip of Elephant Rock. Regulations also prohibit the setting or operating of gill nets from November 30 through February 15 in the area bounded by a line drawn from the middle anchorage of the western section of the Oakland Bay Bridge (Tower C) to the Lash Terminal buoy #5 to the easternmost point at Hunter's Point (Point Avisadero), from Point Avisadero to the Y"A" buoy, from the Y"A" buoy to Alameda NAS entrance buoy #1 (entrance to Alameda Carrier Channel) to the Oakland Harbor Bar Channel buoy #1, and then to from the first Bar Channel buoy to Tower C of the Bay Bridge.

### **2.2.1.2 Herring Eggs-On-Kelp Fishery**

**Season:** December 1 to March 31

**Quota:** An individual quota of 2.8 tons for transferred gill net permits, an individual quota of 10.4 tons for transferred "CH" permits.

**Note:** The combined quota for harvest of herring eggs-on-kelp depends on the number of "CH" and gill net permits transferred to the herring eggs-on-kelp fishery.

**Area:** Waters of Districts 11, 12, and 13, and that portion of District 2 known as Richardson Bay.

**Note:** The area open to the herring eggs-on-kelp fishery is further restricted. Rafts and lines may not be placed in any waters or areas otherwise closed or restricted to the use of herring gill net operations, except the areas known as Belvedere Cove and Richardson Bay or except where written permission is granted by the owners or controlling agency (e.g., Navy, Coast Guard). When rafts or lines are placed in Belvedere Cove or Richardson Bay, they must be tied to a permanent structure (e.g. pier, dock).

### **2.2.1.3 Fresh Food Fishery (not for roe purposes)**

**Season:** November 2 through November 15 and April 1 through October 31.

**Quota:** 20 tons

**Note:** No permittee may take or possess herring except in the amount specified on a current daily market order, not to exceed 500 pounds, from a licensed fish dealer.

**Area:** Same as herring roe fishery

## **2.2.2 Tomales Bay**

### **2.2.2.1 Herring Roe Fishery**

**Season:** 5:00 p.m. on January 2 until noon on March 10.

**Note:** Herring fishing is not permitted from noon Friday through 5:00 p.m. Sunday.

**Quota:** The total take of herring for roe purposes shall not exceed 400 tons for the season. However, if spawning escapement, as determined by the Department, reaches or exceeds 4,000 tons prior to February 15, the quota shall be increased as follows: 1) if spawning escapement is more than 4,000 tons, the total take of herring shall not exceed 500 tons for the season; 2) if spawning escapement is more than 5,000 tons, the total take of herring shall not exceed 600 tons for the season; 3) if spawning escapement is more than 6,000 tons, the total take of herring shall not exceed 700 tons for the season; and 4) if spawning escapement is more than 7,000 tons, the total take of herring shall not exceed 800 tons for the season.

**Area:** Tomales Bay includes the waters of District 10 lying south of a line drawn west, 252° magnetic, from the western tip of Tom's Point to the opposite shore.

#### **2.2.2.2 Fresh Food Fishery (not for roe purposes)**

**Season:** November 2 through November 15 and April 1 through October 31.

**Quota:** 10 tons

Note: No permittee may take or possess herring except in the amount specified on a current daily market order, not to exceed 500 pounds, from a licensed fish dealer.

**Area:** Same as herring roe fishery.

### **2.3 Project Characteristics**

The proposed project recommends continuation of the existing regulations as modified by changes discussed below for San Francisco Bay and Tomales Bay. No modifications are proposed for Crescent City, Humboldt Bay, and open ocean herring fisheries. These regulations, as amended, will assist in the control of the commercial harvest of herring at a level that meets the state's policy with respect to the use of aquatic resources. This section states the specific purpose of the regulations and summarizes the factual basis for the regulation.

The commercial herring roe and eggs-on-kelp fisheries are closely regulated through a catch quota system to provide for adequate protection and utilization of the herring resource. The Department conducts annual assessments of the size of the spawning population of herring in San Francisco and Tomales Bays [Sec 3.2.2.1]. These data serve as the basis for establishing fishing quotas for the next season.

Three alternative fishing quotas were proposed for the 1998-99 season in San Francisco Bay Due to the uncertainty that existed regarding the continued effects of the 1997-98 El Nino: (1) 4,000 tons, which was 20 percent of the 1997-98 spawning biomass estimate; (2) 3,000 tons, which was 15 percent of the 1997-98 spawning biomass estimate; and (3) no fishery. Following the Department's recommendation, the Fish and Game Commission chose the 15 percent exploitation rate, resulting in a 3,000-ton quota. Additional regulatory changes proposed for the 1998-99 season were approved by the Fish and Game Commission as proposed (Section 2.3 of the FED).

In addition to annual changes in the quota, management recommendations to improve or provide for the efficient harvest and orderly conduct of the herring fisheries are solicited from interested fishermen and individuals at public meetings and from the Director's Herring Advisory Committee, which is composed of various representatives from the commercial herring fishing industry. The proposed amendments to Section 163, 163.5 and 164, Title 14, CCR, addressed by this FSED, reflect both Department and public recommendations.

Annual assessments of the size of the herring spawning populations in San Francisco and Tomales Bays are conducted by the Department. In San Francisco Bay, assessments are made using both hydroacoustic and spawning ground surveys. In Tomales Bay, assessments are made using spawning ground surveys. Hydroacoustic surveys use sound transmitted from a transducer on a boat and record returning echoes to determine the size and density of fish schools (Section 3.2.2.1.2 of the FED). Spawning ground surveys assess the total number of eggs spawned and back calculate the parental population size (Section 3.2.2.1.1 of the FED). Annual fishing quotas are conservative and limit the total commercial catch to no more than 20% (exploitation rate) of the previous season's spawning biomass. This exploitation level was selected, based on computer simulations (Section 3.2.4 of the FED), to help ensure adequate protection for the herring resource and to provide for the long-term yield of the fishery. Typically, exploitation rates of no more than 15% are recommended to ensure that the 20% maximum is not exceeded. Quotas are not determined by a fixed mathematical formula, but are modified based on additional biological and fishery data collected each season, such as growth rates, strength and importance of individual year-classes, and recruitment of incoming year-classes.

### **2.3.1. Herring Roe Fisheries**

#### **2.3.1.1. San Francisco Bay 1999-2000 Quota**

The 1998-1999 spawning biomass estimate for San Francisco Bay is 39,500 tons (including catch), nearly twice the previous season's estimate, but below the 21-year average of 54,950 tons. The increase in biomass is largely due to the increased number of 2- and 3-year-old herring from the 1997 and 1996 year-classes, respectively. These two ages made up approximately 75 percent of the 1998-99 season's spawning population by number, and 60 percent by weight. Based on the increased biomass, good recruitment, and favorable ocean productivity, the Department recommends a total quota of roe herring for San Francisco Bay of 5,925 tons, which represents a 15 percent exploitation rate.

Within the overall quota in San Francisco Bay, separate quotas are established for each gill net platoon (i.e., fishing groups). The overall quota is divided among the three platoons in proportion to the number of permits in each platoon. Slight annual adjustments in the quota assignments for each gill net platoon are needed to account for attrition of permittees and the use of herring permits in the herring eggs on kelp fishery.

#### **2.3.1.2. Tomales Bay 1999-2000 Quota**

The 1998-1999 spawning biomass estimate for Tomales Bay is 4,069 tons, approximately six times last season's estimate of 586 tons and nearly equal to the 25-year average of 4,537 tons. The 1996 and 1997 year-classes appear strong and, by number, comprised more than 50 percent of the population this season. The Department recommends continuing the existing management regime and proposes an initial fishing quota of 400 tons (10 percent of the 1998-1999 spawning biomass estimate). The proposed regulations also contain provisions to increase the quota based on in-season estimates of spawning escapement. If escapement goals are achieved prior to February 15, 2000, then the quota would be increased with the amount of the increase dependent on the level of escapement. If spawning escapement does not exceed 4,000 tons prior to February 15, 2000, then no additional fishing quota would be provided.

#### **2.3.1.3. Season Dates**

Season opening and closing dates for San Francisco and Tomales bays, as well as the dates

of various provisions of the regulations, are adjusted each year to account for annual changes in the calendar. The consensus of the Director's Herring Advisory Committee was to set the dates of the roe herring fisheries in San Francisco Bay from 5:00 p.m. on Sunday, November 28, 1999 to noon on Wednesday, December 22, 1999 ("DH" gill net platoon only), and from 5:00 p.m. on Sunday, January 2, 2000 to noon on Friday, March 10, 2000. This season the consensus among Tomales Bay permittees was to recommend opening at 5:00 p.m. on Sunday, January 2, 2000 and closing at noon on Friday, March 10, 2000.

#### **2.3.1.4. Gill Net Mesh Study**

The Department wants to conduct a study in Tomales Bay to determine the size and age composition of herring caught with commercially configured gill nets of varying mesh size. The goal of the study is to determine the minimum mesh size needed to keep the percentage of 2- and 3-year-old herring in the catch low and keep the age of full recruitment to the fishery at four years. The proposed amendments provide for the participation of four Tomales Bay gill net permittees in the study. Each permittee will be given an individual quota of 10.25 tons (the average per-permit share of the quota). The individual quotas will be part of the overall roe herring quota for the bay and the group quota will be adjusted to account for the removal of those permits from the group quota. Thus, if the four permits are issued, the initial group quota will be reduced by 41 tons (four permits at 10.25 tons per permit). If the overall roe herring quota is increased in-season, the individual quota of each permittee participating in the study will be increased in proportion to the overall increase. Any herring caught in excess of an established individual quota will be forfeited to the Department. The study participants will be required to fish during the regular season, under the direction of the Department, and will use gear approved by the Department. Some of the mesh used in this study will be less than 2 1/8 inches. The study participants will be required to comply with all Fish and Game laws and regulations.

Existing regulations provide for a mesh size study in San Francisco Bay. The regulation states that the Department will provide the gill nets used in the study. To facilitate the study, the Department proposes modifying the regulation to state that the Department will approve, rather than provide, the gill nets used in the study.

#### **2.3.1.5. Permit Requirements**

Subsections 163(a) and 163(c) establish the qualification requirements for obtaining a herring permit. The Department proposes that subsections 163(a)(1), 163(c)(1)(B) and 163(c)(1)(C) be amended to delete the requirement that all herring permittees must hold an operator license. Anyone operating a boat will still need an operator license under Fish and Game Code Section 7852. This modification will reduce the cost of fishing for those permittees who do not operate the boat upon which the permit is fished.

#### **2.3.1.6. Permit Suspension**

Existing regulations provide that any herring permit may be cancelled or suspended by the Commission for cause. In addition, the regulations specify that a person whose herring permit has been revoked may not participate in the fishery during the following season, and that a temporary substitute who causes a permit to be suspended or revoked may not participate in any herring fishery during the following season. The proposed amendments to subsection 163(i) would apply the same penalty to both a permittee and a temporary substitute. Specifically, when a herring permit is revoked, neither the person whose permit has been revoked nor, if applicable, the temporary substitute who caused the permit to be revoked may participate in any herring fishery in the State during the season following the permit revocation. In addition, the proposed amendment would specify that, when a permit is suspended for the entire season, neither the permittee nor, if applicable, the temporary substitute who caused the permit to be suspended may participate in any herring fishery in the State during the season the permit is suspended. The intent of Subsection 163(i) is to reduce the incentive to commit violations. Under existing regulations, a permittee whose permit has been suspended could fish as a temporary substitute for another permit during his or her suspension, and, thus, the penalty of suspension is relatively low. Several modifications in language are proposed for consistency and clarity. Section 79 of the Fish and Game Code states that "shall" is mandatory and "may" is permissive. To be consistent with the Code and to clarify that the provisions were mandatory, the Department recommends changing may to shall when describing the restrictions placed on the permittee and the temporary substitute in Subsection 163(i).

### **2.3.1.7. Landing Receipt Requirement**

Subsection 163(j)(2) and Fish and Game Code Section 8043 specify the requirements for landing receipts. The proposed amendment is intended to aid in effective enforcement of mesh size regulations; it would require herring buyers to list on each landing receipt the number of fish in, and the weight of, each roe test for the landing reported on the receipt. It is common practice for fish buyers to test a herring landing for roe content (roe weight as a percent of total fish weight) and fish size (recorded as the number of fish in a specified weight which equals the average weight of a fish in the landing). The proposed amendment requires the fish buyers to provide the Department with data they are already collecting, and, thus, places no additional burden on the fish buyers. The long-term benefits to the resource from effective enforcement of mesh size regulations out-weigh the small effort required by fish buyers.

### **2.3.2. Roe-on-Kelp Fishery**

#### **2.3.2.1. Permit Conditions**

Currently, a herring eggs-on-kelp permit is issued with special conditions that are not listed in the regulations or on the permit application form. The proposed amendments will add four conditions to the regulations and remove them from the permit. The listing of the conditions in the regulations, rather than in the permit, is intended to facilitate dissemination of information about the conditions and aid in compliance. 1) The proposed amendments will add to the regulations the condition that the permittee must submit a royalty report form with payment to the Department's Menlo Park office on a monthly basis (no later than 30 days after the close of the month in which the herring eggs-on-kelp was landed). 2) The permit currently requires that a copy of the herring eggs-on-kelp permit be aboard each vessel harvesting, processing or transporting herring eggs under the authority of the permit, the proposed amendments will add this condition to the regulations, but modify it to require that the copy be Department-issued. 3) The proposed amendments will add to the regulations the condition that the permittee or his or her authorized agent be aboard each vessel that is harvesting, processing or transporting herring eggs under the authority of the permit. 4) Existing regulations give examples of permanent structures, and the current permit states that buoys are not permanent structures. The proposed

amendments add language to the regulations to clarify that buoys are not permanent structures. The proposed amendments will also establish a new permit application form (FG 1406(4/99) Herring-eggs-on-kelp Permit Application); the completed form with a Department-issued stamp will serve as the permit. The Department will issue to the permittee the original permit and two additional copies for use by the permittee and his or her designated alternates and assist boats.

#### **2.3.2.2. Vessel Identification**

Herring eggs-on-kelp permittees have argued that they need more than one vessel for their fishing operations. The additional vessels are used to move rafts, to provide a platform for harvesting and to transport product. Existing regulations accommodate the permittees' request for multiple vessels. However, the use of multiple vessels by a permittee makes it difficult for enforcement officers to ensure all product is reported. The proposed modifications will improve enforcement of individual quotas. The proposed modifications will require that permittees notify the Department in writing of the name and Fish and Game boat registration number of any vessel that will be used for harvesting, processing or transporting herring eggs under the authority of the permit (i.e., assist boat). The names of all assist boats received by the Department before the permit is issued will be listed on the permit. Any changes after the permit is issued will be listed on a permit amendment provided by the Department. The proposed modification will also require that the permit amendment be attached to the permit before the new assist boat can be used for harvesting, processing or transporting herring eggs under the authority of the permit.

#### **2.3.2.3. Authorized Agent**

Existing regulations allow each permittee to designate two authorized agents by submitting an Authorized Agent Information Sheet to the Department. The regulations also allow the permittee to change authorized agents by submitting a new Authorized Agent Form. The existing regulations allow a person to act as an authorized agent when the department receives the Authorized Agent Form. The Department proposes modifying the regulations to state that a person can act as an authorized agent only after the permittee has received written approval from the Department. Any authorized agent approved by the Department before the permit is issued will be listed on the permit. Any changes after the permit is issued will be listed on a permit amendment provided by the Department. The proposed modification will also require that the

permit amendment be attached to the permit before the new authorized agent can work under the authority of the permit. Existing regulations allow authorized agents to act in place of the permittee. No other fishery in the State provides for authorized agents. The herring eggs-on-kelp permittees have argued that, to provide a premium product and reduce waste, they cannot stop harvesting to transport, land and process the herring eggs-on-kelp product, and thus, need authorized agents. The proposed modification is designed to improve enforcement of individual herring eggs-on-kelp quotas and other regulations. When an enforcement officer boards a vessel, he or she currently has no way of determining from the permit if a person, other than the permittee, may act under the authority of the permit. The proposed modifications eliminate this problem.

#### **2.3.2.4. Simultaneous Fishing**

The herring eggs-on-kelp permittees have requested that the regulations be modified to allow simultaneous fishing of two permits on the same raft. The permittees have stated that this will be economically beneficial to them when quotas are low or when little remains on an individual's quota. The proposed amendment will allow simultaneous fishing of two permits on the same raft if the ownership of each line on the raft is clearly identified with the corresponding permit number. Co-mingling of product from two or more permits will continue to be prohibited. If enforcement of the provisions for simultaneous fishing of two permits on a raft proves difficult, the provisions will be removed from the regulations in subsequent years.

#### **2.3.2.5. Notification Phone Number**

Existing regulations list the phone number that permittees must call to notify the Department of their intent to harvest on Saturday or Sunday. Phone numbers and area codes are subject to change. Thus, the Department proposes removing the phone number from the regulations and listing it on the permit. This will eliminate any confusion that might arise if the phone number is changed.

#### **2.3.2.6. Notification**

Subsection 164(j)(2) describes the requirements for notifying the Department when kelp is suspended. One of the requirements is to tell the Department where the rafts and lines will be fished. The intent of this provision is to aid the Department's enforcement and biological staff in

locating the rafts and lines for monitoring purposes. The rafts and lines are frequently moved in an attempt to maximize the amount of spawn on the kelp. The proposed amendment clarifies that, when notifying the Department of kelp suspension, the permittee must state where he or she intends (i.e., plans) to fish each raft or line. The Department recognizes that the rafts or lines may subsequently be moved to another location. The Department will request that the permittees, on a voluntary basis, notify the Department if a raft or line is moved.

#### **2.3.2.7. Corrections and Clarifications**

Several modifications in language are proposed to correct or clarify. The proposed amendment deletes the reference to Subsection 165(c)(5) in Subsection 164(f)(2) and replaces it with the correct reference, which is Section 165, Title 14, CCR. Subsection 164(i)(2) refers to subsections 164(j)(3), 164(j)(4) and 164(j)(5); the proposed amendment replaces these references with the correct reference, 164(j). The proposed amendment deletes the reference to Fish and Game Code Section 7787 in Subsection 164(i)(5).

### **2.4 Project Alternatives**

Three alternatives to the proposed project are considered. Two of these alternatives take the form of additional changes to the existing regulations that could feasibly be joined. The third alternative is a no project (no fishery) alternative. In evaluating alternatives, the comparative merits and impacts of individual alternatives that could be logically and feasibly joined should be considered as so joined unless otherwise stated. The alternatives to be considered are:

- Alternative 1 (no project, ie. no fishery, alternative). Under this alternative, the commercial harvest of herring would be prohibited.
- Alternative 2 (existing regulations). Under this alternative, existing regulations would be modified only by adjusting quotas to reflect current biomass estimates and by adjusting dates to reflect changes in the calendar.
- Alternative 3 (individual vessel quota for gill net vessels in herring roe fishery). Under this alternative the proposed regulations would be modified by establishing an individual vessel quota for all gill net vessels. The proposed individual gill net vessel quota would equal the overall gill net quota divided by the number of permittees using gill net gear.

The following section states the specific purpose of the alternatives and summarizes the factual basis for determining that the alternatives are reasonably necessary.

#### **2.4.1 Alternative 1 (no project)**

This is a CEQA required alternative. It provides a reference for comparison to the proposed project and alternatives 2 and 3.

#### **2.4.2 Alternative 2 (existing regulations)**

The existing regulations for the commercial herring fishery are for the 1998-99 season. This alternative would apply those 1998-99 season regulations to the 1999-2000 season, with changes in the quotas to reflect current biomass estimates and changes in season dates to reflect annual changes in the calendar. None of the other amendments to the regulations contained in the proposed project would be considered.

#### **2.4.3 Alternative 3 (individual vessel quota)**

This alternative would establish an individual herring quota for each San Francisco Bay gill net permittee. Under existing regulations [Section 163(g)(4)(C), Title 14, CCR] an overall herring quota is established for each of three gill net groups (platoons) in San Francisco Bay, allowing individual permittees to take and land as much fish (tonnage) as they are capable of until the overall quota for their respective group is reached. An individual permit quota has been suggested each season for the past several years. However, there has never been a clear consensus of support or opposition among industry members about this issue. See section 2.4.3 of the Final Environmental Document for a full description of this alternative.

## Chapter 3. ENVIRONMENTAL SETTING

### 3.1 General

A thorough description of the environmental setting is provided in Chapter 3 of the Final Environmental Document, including Pacific herring life history, ecology, status of stocks, and fisheries, and biological and environmental descriptions of herring fishery locations (Crescent City area, Humboldt Bay, Tomales Bay, San Francisco Bay, Monterey Bay). A general description of Pacific herring life history, ecology, stock status, and fisheries is presented here.

Pacific herring, *Clupea pallasii*, are found throughout the coastal zone from northern Baja California on the North American coast, around the rim of the North Pacific Basin to Korea on the Asian coast (Outram and Humphreys 1974, Hart 1973). In California, herring occur offshore at open ocean feeding grounds. From November through March, schools of adult herring migrate inshore to bays and estuaries to spawn. The largest spawning aggregations occur in San Francisco and Tomales bays with peak spawning in January. At first, schools hold in deep water to ripen (gonadal maturation) for up to two weeks, then move into shallow areas to spawn.

It is during spawning season that most of the harvest of herring occurs. The sac roe fisheries harvest herring as they move in to the shallows to spawn, when the eggs in the females are ripest. The product from this fishery is the roe (eggs) in the females. These fisheries occur in the Crescent City area, Humboldt Bay, Tomales Bay, and San Francisco Bay. The roe-on-kelp fishery hangs giant kelp, *Macrocystis pyrifera*, from rafts, for herring to spawn on. The product in this fishery is the egg-coated kelp. This fishery takes place in San Francisco Bay. The only existing ocean fishery occurs during the non-spawning season in Monterey Bay. Small fisheries for fresh fish occur during the non-spawning season in Tomales and San Francisco Bays.

Spawning occurs in the intertidal and shallow subtidal zones. Pacific herring males release milt into the water column while females extrude adhesive eggs on a variety of surfaces including vegetation, rocks, and man-made structures such as pier pilings. Embryos (fertilized eggs) typically hatch in about ten days, depending on water temperature. Larval herring metamorphose into juvenile herring in about ten to twelve weeks. In San Francisco Bay, juvenile herring typically stay in the Bay through summer, then migrate out to sea.

Herring are a food source for many species of birds, fish, invertebrates, and mammals. Predation is particularly high during spawning when adult fish and eggs are concentrated and available in shallow areas. Predation during the egg stage is a significant cause of natural mortality.

The Pacific herring roe fishery in California has been intensively regulated since its inception in 1973. Estimates of the spawning population have provided the major source of information used to set fishery quotas to control the harvest of herring and provide for the long-term health of the herring resource. Annual estimates of spawning biomass are made in Tomales Bay using egg deposition surveys. In San Francisco Bay, spawning biomass is estimated annually using egg deposition surveys and hydroacoustic surveys. In addition to these estimates of spawning biomass, the Department also collects age composition data on the population as well as the fishery, and assesses the strength of each year's young-of-the-year herring. All of this information is used to assess the status of the population.

The 1998-1999 spawning biomass estimate for San Francisco Bay is 39,500 tons (including catch), nearly twice last season's estimate, but below the 21-year average of 54,950 tons. As with other short-lived pelagic fish populations, Pacific herring population size fluctuates widely due to variations in year-class strength (the number of fish at age) (Table 3.1). The increase in biomass is largely due to the increased number of 2- and 3-year-old herring from the 1997 and 1996 year-classes, respectively (Table 3.1). These two ages made up approximately 75 percent of this season's spawning population by number, and 60 percent by weight.

The 1998-1999 spawning biomass estimate for Tomales Bay is 4,069 tons, approximately six times last season's estimate of 586 tons and nearly equal to the 25-year average of 4,537 tons. The 1996 and 1997 year-classes appear strong and, by number, comprised more than 50 percent of the population this season.

**Table 3.1. Estimated Numbers of Herring at Age in the San Francisco Bay Spawning Population, 1982-83 to present**

<b>Age</b>									
<b>Season</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
82-83	NA	87,908	149,971	182,936	118,040	30,478	17,177	8,121	797
%		14.8	25.2	30.7	19.8	5.1	2.9	1.4	0.1
83-84	NA	332,699	69,654	92,565	73,840	17,306	1,168	117	0
%		56.6	11.9	15.8	12.6	2.9	0.2	0	0
84-85	NA	184,695	190,998	46,613	22,153	25,914	6,652	688	0
%		38.7	40.0	9.8	4.6	5.4	1.4	0.1	0
85-86	NA	162,422	160,613	126,535	26,790	16,038	7,752	717	182
%		32.4	32.1	25.3	5.3	3.2	1.5	0.1	0
86-87	NA	168,962	194,365	134,528	64,598	9,182	6,175	1,065	246
%		29.2	33.6	23.2	11.2	1.6	1.1	0.2	0
87-88	NA	233,193	292,508	136,604	66,494	25,337	5,027	3,939	0
%		30.6	38.3	17.9	8.7	3.3	0.7	0.5	0
88-89	NA	146,525	222,058	139,906	44,435	12,310	3,030	534	0
%		25.8	39.0	24.6	7.8	2.2	0.5	0.1	0
89-90	NA	294,631	237,377	136,248	84,361	23,970	6,572	0	0
%		37.6	30.3	17.4	10.8	3.1	0.8	0	0
90-91	NA - incomplete data								
91-92	1,356	13,666	126,016	206,930	82,870	23,764	3,490	0	0
%	0.3	3.0	28.0	45.2	18.1	5.2	0.8	0	0
92-93	NA	48,925	50,398	79,045	51,713	8,642	0	0	0
%		20.5	21.1	33.1	21.7	3.6	0	0	0
93-94	11,485	22,403	134,870	160,335	63,331	25,926	4,808	355	0
%	2.6	5.1	31.0	36.9	14.6	6.0	1.1	0.08	0
94-95	2,276	39,363	236,783	94,833	42,850	18,223	3,196	0	0
%	0.5	9.0	54.1	21.7	9.8	4.2	0.7	0	0

**Table 3.1 (continued). Estimated Numbers of Herring at Age in the San Francisco Bay Spawning Population, 1982-83 to present**

<b>Age</b>									
<b>Season</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
95-96	3,142	483,164	359,357	282,069	81,768	28,904	1,687	0	0
%	0.3	38.9	29.0	22.7	6.6	2.3	0.1	0	0
96-97	1,184	290,497	359,459	183,370	120,029	33,098	8,935	270	0
%	0.1	29.1	36.0	18.4	12.0	3.3	0.9	0.02	0
97-98	42	45,092	129,411	65,637	18,724	2,259	1,430	0	0
%	0.01	17.2	49.3	25.0	7.1	0.9	0.5	0	0
98-99*	1,960	215,448	139,588	61,938	49,384	6,360	239	0	0
%	0.4	45.4	29.4	13.0	10.4	1.3	0.05	0	0
* Preliminary - based on fish lengths									

## **Chapter 4. ENVIRONMENTAL IMPACT ANALYSIS AND CUMULATIVE EFFECTS**

This chapter addresses the impacts and cumulative effects of the proposed project (changes to the commercial herring fishing regulations) on the existing environment described in Chapter 3 of this document and the FED. The proposed project and two of the three alternatives will permit a continuation of the regulated commercial harvest of Pacific herring in California. An analysis of the impacts of the proposed project and its cumulative effects identified no new impacts that were not already addressed in the FED.

Existing regulations permit the commercial harvest of herring in five geographical areas: San Francisco Bay, Tomales Bay, Humboldt Bay, the Crescent City area, and the open ocean. Chapter 4 of the FED examined the environmental sensitivity of each of these areas at existing harvest levels. Thirteen environmental categories were considered, including: land use, traffic circulation, water quality, air quality, housing, public utilities, geological, biological, archaeological, scenic, recreation, noise, and growth inducement. Three categories (land use, archaeology, and growth inducement) were considered to have no environmental sensitivity to commercial herring fishery activity in any of the five geographical areas and were not considered in the impact analysis. The basis for this assessment is provided in detail in section 4.1 of the FED.

Section 4.2 of the FED provided a detailed impact analysis for the ten categories found to have environmental sensitivity to commercial herring fishery activity. Potential impacts to traffic circulation, water quality, air quality, housing and utilities, geology, and scenic, recreation, and noise that were identified as an aspect of herring fisheries varied in degree with geographic area, but all were considered to be localized, short-term, and less than significant. Some of these potential impacts are mitigated by various existing regulations.

Section 4.2.6 of the FED provided a detailed analysis of the potential environmental impacts to biological resources that exist from commercial herring fisheries. The proposed project adds no new impacts to be analyzed. The FED divided potential impacts into two categories: 1) direct harvest impacts and 2) trophic level impacts. Short and long term potential adverse impacts exist within each of these categories. Many of these potential impacts are mitigated by current management practices including annual stock assessments and regulations

that control harvest and fishery impacts. Others are considered localized, short-term and less than significant.

Chapter 5 of the FED provided a detailed analysis of the factors that have the capacity to influence future Pacific herring population status in California in addition to the existing herring fisheries or alternatives (cumulative effects). The proposed project introduces no new cumulative effects to those addressed by the FED. The FED discussed in detail the factors with greatest potential for cumulative effects, including: continued commercial harvest of herring, unusual biological events, competitive interactions with other pelagic fish, unusual weather events, habitat loss, and water quality. Mitigation for these potential cumulative effects will be provided by annual stock assessments, annual changes in the level of harvest, or the selection of a no fishery alternative.

## **Chapter 5. ANALYSIS OF ALTERNATIVES**

An analysis of the potential environmental impacts of the three alternatives described in section 2.4 is provided in Chapter 6 of the Final Environmental Document. The three commercial harvest alternatives were selected for consideration by the Commission based on Department consideration, public comment received during the normal review process, or in response to the Notice of Preparation (NOP). These alternatives were selected to provide the Commission with a range of commercial harvest alternatives. The two commercial harvest alternatives contain common elements with only selected elements of the management framework considered as alternatives. A "no project" (no commercial harvest of herring) alternative is also provided.

### **5.1 Alternative 1 (no project)**

The "no project" alternative would eliminate commercial harvest from the Pacific herring resource management framework. Selection of this alternative would be expected to: 1) reduce total mortality and allow herring stocks to increase to carrying capacity; 2) reduce the health of stocks through density dependent intraspecific interactions; 3) increase interspecific competition and reduce standing crops of closely related species; 4) increase the availability of herring to predators by reducing search effort and increasing capture success; 5) eliminate the ethical concern of those opposed to the commercial harvest of herring; 6) eliminate the scientific information on herring derived from sampling the commercial harvest; 7) eliminate revenues to local and regional economies and State and Federal agencies derived from the commercial harvest of herring.

Localized, short-term, and less than significant impacts to traffic circulation, water quality, air quality, housing, utilities, scenic quality, recreational opportunities, and noise levels would be eliminated.

Section 6.1 of the FED provides a full analysis of the potential impacts associated with this alternative.

### **5.2 Alternative 2 (existing regulations)**

Existing regulations, adopted in 1998, are for the 1998-99 Pacific herring commercial fishing season. Under alternative 2, the only changes to the 1998-99 regulations (existing regulation) would be to seasons and quotas, to adjust them to the current calendar and biomass estimates, respectively. In most regards, the environmental impacts of alternative 2 will be similar to those of the proposed project. However, alternative 2 does not address additional problems or conditions that are addressed by the proposed project. Some of the changes and amendments in the proposed project address harvesting requirements, permittee qualifications, permit suspensions, notification and/or administrative issues, eggs-on-kelp fishery issues, or are simply clarification changes and are without apparent environmental implications. Section 6.2 of the FED addresses the potential impacts of this alternative in more detail.

### **5.3 Alternative 3 (individual vessel quota)**

This alternative modifies alternative 2 by establishing individual boat quotas for the herring roe gill net fishery in San Francisco Bay. Localized, short-term, and less than significant impacts of this alternative to traffic circulation, water quality, air quality, housing, utilities, scenic quality, recreational opportunities, and noise levels are expected to be comparable to the proposed project. However, fishing effort could extend further into the season since the economic incentive would direct effort toward higher quality rather than quantity. Without individual boat quotas, overall quotas have typically been met long before season closure. Having the latitude to strive for higher quality could add incrementally to most impacts. Section 6.3 of the FED provides further analysis of the potential environmental impacts of this alternative.

## **Chapter 6. CONSULTATION**

Chapter 7 of the FED explains the role that consultation with other agencies, professionals, and the public plays in the Department's marine resource management programs.

Consultations also occur during the annual review of regulations guiding the commercial harvest of herring. The process began this year when the Department presented the results of its annual population assessment and discussed possible regulatory changes for the 1999-2000 season with the Director's Herring Advisory Committee on March 23, 1999.

The Department's recommendations were modified, as necessary, based on the Committee's comments, and presented at a public hearing on April 7, 1999. This meeting also served as a scoping session for the content of the DSED. The recommendations were again modified, as necessary, based on information and comments received during the public hearing, and will be presented to the Fish and Game Commission.

Prior to preparation of the DSED, the Department initiated a broader consultation by distributing a notice of preparation (NOP) that announced the intent to prepare the document. The NOP requested submittal of views on the scope and content of the environmental information to be contained therein. The notice was distributed to members of the public and interested organizations that had expressed prior interest in herring management. The NOP was also provided to the State Clearinghouse for distribution to appropriate responsible and trustee agencies.

Every effort has been made to consider relevant issues brought forth in response to the NOP in the draft supplemental environmental document, including development of alternatives to the proposed project.

## **Chapter 7. Responses to Comments Regarding the Proposed Project**

Pursuant to Sections 2180.5(d)(2)(vi) and 2180.5(d)(3)(ii) of the Public Resources Code, a copy of the Draft Supplemental Environmental Document was placed on file and made available for public review for a 45-day period. Notice was also given at the time of filing that any person interested could submit statements in writing relevant to the environmental document until 5:00 p.m. on August 6, 1999, at the Fish and Game Commission office in Sacramento. Written and oral comments relative to the draft supplemental environmental document were also solicited by the Commission at its August 6, 1999 meeting in Long Beach.

### **7.1 Summary of Comments Received**

No oral or written comments regarding the Draft Environmental Document were received by the Department during the public review period.

### **7.2 Department Response to Comments**

Not applicable.

### **7.3 Copy of Letters Received**

None received.