

## Economic Impact Assessment

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

Depending on which option is selected by the Fish and Game Commission, the proposed regulations may, or may not, have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. For illustration, the following table provides an overview of five quota options with analyses of the projected economic impacts to the State. The five quota options and specific tonnage as a percent of the average herring biomass were defined solely for the economic impact assessment and are not specifically under consideration in the ISOR. The quantities are set to evaluate the range of potential impacts that may occur given the chosen quota that is unknown at the time of this economic assessment.

<b>California Herring Fishery 2014-2015</b>						
<i>(Based on average biomass estimate of 52,000 tons)</i>	No Change	Opt1	Opt2	Opt3	Opt4	
	3,737	0%	4.7%	5%	10%	
<b>Proposed 2014-2015 Quota in Tons</b>	3,737	-	2,444	2,600	5,200	
Ex-Vessel Revenue Potential (for allowable harvest quota)	\$ 3,618,000	\$ -	\$ 2,366,000	\$ 2,518,000	\$ 5,035,000	
Total Economic Output Contribution	\$ 6,874,000	\$ -	\$ 4,495,000	\$ 4,783,000	\$ 9,564,000	
Total Earnings (Labor Wages) Contribution	\$ 2,618,000	\$ -	\$ 1,712,000	\$ 1,822,000	\$ 3,643,000	
Total Jobs (Employment) Contribution	97	-	63	67	134	
Total Value-Added Contribution	\$ 4,118,000	\$ -	\$ 2,693,000	\$ 2,866,000	\$ 5,730,000	
Total State & Local Tax Contribution	\$ 347,000	\$ -	\$ 227,000	\$ 241,000	\$ 483,000	
Landings Tax Revenue Contribution to CDFW (\$.0013/lb)	\$ 10,000	\$ -	\$ 6,000	\$ 7,000	\$ 14,000	
<b>Incremental Impact of Proposed Regulations Relative To Last Season's Allowable Harvest Quota of 3,737 tons</b>						
<b>Change in Tons</b>	-	(3,737)	(1,293)	(1,137)	1,463	
Direct Impact to Fishermen Ex-Vessel Revenue	\$ -	\$ (3,618,000)	\$ (1,252,000)	\$ (1,101,000)	\$ 1,417,000	
Total Economic Output Impact	\$ -	\$ (6,874,000)	\$ (2,378,000)	\$ (2,091,000)	\$ 2,691,000	
Total Earnings (Labor Wages) Impact	\$ -	\$ (2,618,000)	\$ (906,000)	\$ (797,000)	\$ 1,025,000	
Total Jobs (Employment) Impact	-	(287)	(33)	(29)	38	
Total Value-Added Impact	\$ -	\$ (4,118,000)	\$ (1,425,000)	\$ (1,253,000)	\$ 1,612,000	
State & Local Taxes Impact	\$ -	\$ (347,000)	\$ (120,000)	\$ (106,000)	\$ 136,000	
Landings Tax Revenue to CDFW (\$.0013/lb)	\$ -	\$ (10,000)	\$ (3,000)	\$ (3,000)	\$ 4,000	
<i>* All dollar amounts are in 2013 prices.</i>						

As shown above, we can project the incremental economic impacts under a range of options, relative to the last season's allowable harvest of 3,737 tons of Pacific herring in San Francisco Bay. Thus any quota over 3,737 tons could potentially generate incremental increases in each of the economic indicators for the State. Conversely, an allowable quota less than 3,737 tons could result in adverse incremental impacts Statewide. 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 these 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 the Crescent City Area in the last six years, we conclude no adverse incremental economic impacts to businesses under a recommended zero quota allocation for those three areas.

#### Effects of the regulation on the creation or elimination of jobs within the State

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. Conversely, a zero 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. 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.

#### 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. 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.

#### Effects of the regulation on the expansion of businesses currently doing business within the State

Any quota option over 3,737 tons would likely encourage some expansion of businesses currently doing business in the State.

#### 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.

#### Benefits of the regulation to worker safety

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

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.

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".