

AMENDED IN ASSEMBLY AUGUST 15, 2016

AMENDED IN ASSEMBLY JUNE 29, 2016

AMENDED IN SENATE MAY 31, 2016

AMENDED IN SENATE APRIL 26, 2016

AMENDED IN SENATE MARCH 28, 2016

SENATE BILL

No. 1363

Introduced by Senator Monning

(Coauthor: Senator Pavley)

(Coauthors: Senators Pavley and Wieckowski)

(Coauthors: Assembly Members Gonzalez, Mark Stone, and Williams)

February 19, 2016

An act to amend Section 35650 of, and to add ~~Sections 35630 and 35631 to~~, *Chapter 3.1 (commencing with Section 35630) to Division 26.5 of*, the Public Resources Code, relating to coastal resources.

LEGISLATIVE COUNSEL'S DIGEST

SB 1363, as amended, Monning. Ocean Protection Council: Ocean Acidification and Hypoxia Reduction Program.

The California Ocean Protection Act establishes the Ocean Protection Council and requires the council, among other things, to coordinate activities of state agencies that are related to the protection and conservation of coastal waters and ocean ecosystems, and to establish policies to coordinate the collection and sharing of scientific data related to coastal and ocean resources among agencies. The act creates the California Ocean Protection Trust Fund in the State Treasury and authorizes moneys deposited in the fund, upon appropriation by the

Legislature, to be expended by the council for projects and activities authorized by the council consistent with the purposes of the act.

This bill would require the council, in consultation with the State Coastal Conservancy and other relevant entities, to establish and administer the Ocean Acidification and Hypoxia Reduction Program for the purposes of achieving specified goals. The bill would authorize moneys in the trust fund to be expended for grants or loans for projects or activities that further public purposes consistent with the Ocean Acidification and Hypoxia Reduction Program.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

1 ~~SECTION 1. Section 35630 is added to the Public Resources~~
2 ~~Code, to read:~~
3 ~~35630. The Legislature finds and declares all of the following:~~
4 ~~(a) Ocean acidification and hypoxia, an abnormal deficiency of~~
5 ~~oxygen in marine environments, are two major threats to ocean~~
6 ~~and coastal ecosystems globally, and west coast states are~~
7 ~~particularly vulnerable, according to the April 2016 findings of~~
8 ~~the West Coast Ocean Acidification and Hypoxia Science Panel.~~
9 ~~(b) Ocean acidification is caused primarily by global carbon~~
10 ~~dioxide emissions. Local carbon dioxide emissions and local~~
11 ~~nutrient inputs can intensify the effects of ocean acidification.~~
12 ~~(c) The West Coast Ocean Acidification and Hypoxia Science~~
13 ~~Panel recommends that California and other west coast states~~
14 ~~actively employ strategies that address local factors that can reduce~~
15 ~~ocean acidification and hypoxia exposure, including protecting~~
16 ~~and restoring critical coastal and aquatic habitats.~~
17 ~~(d) Eelgrass ecosystems are among the most diverse and~~
18 ~~productive ecosystems in the world, with particular importance to~~
19 ~~farmed shellfish aquaculture and other forms of sustainable~~
20 ~~aquaculture and to commercially and recreationally valuable~~
21 ~~species, including shellfish, crabs, finfish, waterfowl, and~~
22 ~~shorebirds.~~
23 ~~(e) Eelgrass protection and restoration efforts help promote a~~
24 ~~healthier ocean for ecosystems and industry.~~

1 (f) ~~Since the 1850s, 90 percent of California’s eelgrass acreage~~
2 ~~has been destroyed, and the remaining 10 percent is continuously~~
3 ~~exposed to multiple stressors and threats.~~

4 (g) ~~Scientific research has shown that eelgrass habitat provides~~
5 ~~multiple benefits, including the following:~~

6 (1) ~~Providing essential fish habitat for salmon, groundfish, and~~
7 ~~Pacific herring, providing Dungeness crab nurseries, and supporting~~
8 ~~commercial fisheries important to California’s coastal economy.~~

9 (2) ~~Improving water quality by filtering polluted runoff and by~~
10 ~~absorbing excess nutrients.~~

11 (3) ~~Helping to mitigate hypoxia.~~

12 (4) ~~Sequestering carbon in the underlying sediments.~~

13 (5) ~~Protecting the shoreline from erosion by absorbing wave~~
14 ~~energy and helping to mitigate the impacts of sea level rise.~~

15 (h) ~~Advancing the protection and restoration of eelgrass beds~~
16 ~~in California’s coastal environments, based on scientific and~~
17 ~~evidence-based approaches, is a critical strategy in enhancing~~
18 ~~California’s ability to cope with ocean acidification and hypoxia.~~

19 ~~SEC. 2. Section 35631 is added to the Public Resources Code,~~
20 ~~to read:~~

21 ~~35631. (a) To the extent funds are available from bonds or~~
22 ~~other sources, the council, in consultation with the State Coastal~~
23 ~~Conservancy and other relevant entities, shall establish and~~
24 ~~administer the Ocean Acidification and Hypoxia Reduction~~
25 ~~Program for the purposes of achieving the following goals:~~

26 (1) ~~Developing demonstration projects to research how~~
27 ~~important environmental and ecological factors interact across~~
28 ~~space and time to influence how geographically dispersed eelgrass~~
29 ~~beds function for carbon dioxide removal and hypoxia reduction.~~

30 (2) ~~Generating an inventory of locations where conservation or~~
31 ~~restoration of aquatic habitats, including eelgrass, can be~~
32 ~~successfully applied to mitigate ocean acidification and hypoxia.~~

33 (3) ~~Incorporating consideration of carbon dioxide removal for~~
34 ~~eelgrass restoration projects during the habitat restoration planning~~
35 ~~process in order to fully account for the benefits of long-term~~
36 ~~carbon storage of habitat restoration in addition to the habitat value.~~

37 (4) ~~Supporting science, monitoring, and coordination to ensure~~
38 ~~that ocean and coastal policy and management in California reflect~~
39 ~~best readily available science on strategies to reduce ocean~~
40 ~~acidification and hypoxia.~~

1 ~~(b) In advancing approaches in the program to remove carbon~~
 2 ~~dioxide from seawater, the council shall consider approaches that~~
 3 ~~provide multiple cobenefits, including, but not limited to, providing~~
 4 ~~essential fish and bird habitat, improving water quality, and~~
 5 ~~mitigating sea level rise.~~

6 *SECTION 1. Chapter 3.1 (commencing with Section 35630)*
 7 *is added to Division 26.5 of the Public Resources Code, to read:*

8
 9 *CHAPTER 3.1. OCEAN ACIDIFICATION AND HYPOXIA*
 10 *MITIGATION*

11
 12 *35630. The Legislature finds and declares all of the following:*

13 *(a) Ocean acidification and hypoxia, an abnormal deficiency*
 14 *of oxygen in marine environments, are two major threats to ocean*
 15 *and coastal ecosystems globally, and west coast states are*
 16 *particularly vulnerable, according to the April 2016 findings of*
 17 *the West Coast Ocean Acidification and Hypoxia Science Panel.*

18 *(b) The West Coast Ocean Acidification and Hypoxia Science*
 19 *Panel was a binational collaboration of leading scientists from*
 20 *California, Oregon, Washington, and British Columbia that was*
 21 *convened at the request of the council and the California Ocean*
 22 *Science Trust. The West Coast Ocean Acidification and Hypoxia*
 23 *Science Panel's executive summary report outlines findings,*
 24 *recommendations, and actions to address ocean acidification and*
 25 *hypoxia.*

26 *(c) Ocean acidification is caused primarily by global carbon*
 27 *dioxide emissions. Local carbon dioxide emissions and local*
 28 *nutrient inputs can intensify the effects of ocean acidification.*

29 *(d) The West Coast Ocean Acidification and Hypoxia Science*
 30 *Panel recommends that California and other west coast states*
 31 *actively employ strategies that address local factors that can*
 32 *reduce ocean acidification and hypoxia exposure, including*
 33 *protecting and restoring critical coastal and aquatic habitats.*

34 *(e) Eelgrass ecosystems are among the most diverse and*
 35 *productive ecosystems in the world, with particular importance*
 36 *to farmed shellfish aquaculture and other forms of sustainable*
 37 *aquaculture and to commercially and recreationally valuable*
 38 *species, including shellfish, crabs, finfish, waterfowl, and*
 39 *shorebirds.*

1 (f) Eelgrass protection and restoration efforts help promote a
2 healthier ocean for ecosystems and industry.

3 (g) Since the 1850s, 90 percent of California’s eelgrass acreage
4 has been destroyed, and the remaining 10 percent is continuously
5 exposed to multiple stressors and threats.

6 (h) Scientific research has shown that eelgrass habitat provides
7 multiple benefits, including the following:

8 (1) Providing essential habitat for salmon, groundfish, and
9 Pacific herring, providing Dungeness crab nurseries, and
10 supporting commercial fisheries important to California’s coastal
11 economy.

12 (2) Improving water quality by filtering polluted runoff and by
13 absorbing excess nutrients.

14 (3) Helping to mitigate hypoxia.

15 (4) Sequestering carbon in the underlying sediments.

16 (5) Protecting the shoreline from erosion by absorbing wave
17 energy and helping to mitigate the impacts of sea level rise.

18 (i) Advancing the protection and restoration of eelgrass beds
19 in California’s coastal environments, based on scientific and
20 evidence-based approaches, is a critical strategy in enhancing
21 California’s ability to cope with ocean acidification and hypoxia.

22 35632. (a) To the extent funds are available from bonds or
23 other sources, the council, in consultation with the State Coastal
24 Conservancy and other relevant entities, shall establish and
25 administer the Ocean Acidification and Hypoxia Reduction
26 Program for the purpose of achieving the following goals:

27 (1) Developing demonstration projects to research how
28 important environmental and ecological factors interact across
29 space and time to influence how geographically dispersed eelgrass
30 beds function for carbon dioxide removal and hypoxia reduction.

31 (2) Generating an inventory of locations where conservation
32 or restoration of aquatic habitats, including eelgrass, can be
33 successfully applied to mitigate ocean acidification and hypoxia.

34 (3) Incorporating consideration of carbon dioxide removal for
35 eelgrass restoration projects during the habitat restoration
36 planning process in order to fully account for the benefits of
37 long-term carbon storage of habitat restoration in addition to the
38 habitat value.

39 (4) Supporting science, monitoring, and coordination to ensure
40 that ocean and coastal policy and management in California reflect

1 *best readily available science on strategies to reduce ocean*
2 *acidification and hypoxia to implement this section.*

3 *(b) In advancing approaches in the program to remove carbon*
4 *dioxide from seawater, the council shall consider approaches that*
5 *provide multiple cobenefits, including, but not limited to, providing*
6 *essential fish and bird habitat, improving water quality, and*
7 *mitigating the impacts of sea level rise.*

8 ~~SEC. 3.~~

9 SEC. 2. Section 35650 of the Public Resources Code is
10 amended to read:

11 35650. (a) The California Ocean Protection Trust Fund is
12 established in the State Treasury.

13 (b) Moneys deposited in the fund may be expended, upon
14 appropriation by the Legislature, for both of the following:

15 (1) Projects and activities authorized by the council consistent
16 with Chapter 3 (commencing with Section 35600).

17 (2) Upon authorization by the council, for grants or loans to
18 public agencies, nonprofit corporations, or private entities for, or
19 direct expenditures on, projects or activities that do one or more
20 of the following:

21 (A) Eliminate or reduce threats to coastal and ocean ecosystems,
22 habitats, and species.

23 (B) Improve the management of fisheries through grants or
24 loans for the development and implementation of fishery
25 management plans pursuant to Part 1.7 (commencing with Section
26 7050) of Division 6 of the Fish and Game Code, a part of the
27 Marine Life Management Act of 1998, that promote long-term
28 stewardship and collaboration with fishery participants to develop
29 strategies that increase environmental and economic sustainability.
30 Eligible projects and activities include, but are not limited to,
31 innovative community-based or cooperative management and
32 allocation strategies that create incentives for ecosystem
33 improvement. Eligible expenditures include, but are not limited
34 to, costs related to activities identified in subdivisions (a), (b), and
35 (d) of Section 7075 of the Fish and Game Code, fishery research,
36 monitoring, data collection and analysis to support adaptive
37 management, and other costs related to the development and
38 implementation of a fishery management plan developed pursuant
39 to this subparagraph.

- 1 (C) Foster sustainable fisheries, including grants or loans for
- 2 one or more of the following:
- 3 (i) Projects that encourage the development and use of more
- 4 selective fishing gear.
- 5 (ii) The design of community-based or cooperative management
- 6 mechanisms that promote long-term stewardship and collaboration
- 7 with fishery participants to develop strategies that increase
- 8 environmental and economic sustainability.
- 9 (iii) Collaborative research and demonstration projects between
- 10 fishery participants, scientists, and other interested parties.
- 11 (iv) Promotion of value-added wild fisheries to offset economic
- 12 losses attributable to reduced fishing opportunities.
- 13 (v) The creation of revolving loan programs for the purpose of
- 14 implementing sustainable fishery projects.
- 15 (D) Improve coastal water quality.
- 16 (E) Allow for increased public access to, and enjoyment of,
- 17 ocean and coastal resources, consistent with sustainable, long-term
- 18 protection and conservation of those resources.
- 19 (F) Improve management, conservation, and protection of
- 20 coastal waters and ocean ecosystems.
- 21 (G) Provide monitoring and scientific data to improve state
- 22 efforts to protect and conserve ocean resources.
- 23 (H) Protect, conserve, and restore coastal waters and ocean
- 24 ecosystems, including any of the following:
- 25 (i) Acquisition, installation, and initiation of monitoring and
- 26 enforcement systems.
- 27 (ii) Acquisition from willing sellers of vessels, equipment,
- 28 licenses, harvest rights, permits, and other rights and property, to
- 29 reduce threats to ocean ecosystems and resources.
- 30 (I) Address coastal water contamination from biological
- 31 pathogens, including collaborative projects and activities to identify
- 32 the sources of pathogens and develop detection systems and
- 33 treatment methods.
- 34 (J) (i) Provide funding for adaptive management, planning,
- 35 coordination, monitoring, research, and other necessary activities
- 36 to minimize the adverse impacts of climate change on California's
- 37 ocean ecosystem, including, but not limited to, the effects of sea
- 38 level rise, changes in ocean productivity, and ocean acidification
- 39 on coastal and ocean habitat, wildlife, fisheries, chemistry, and
- 40 other key attributes of ocean ecosystems and to increase the state's

1 understanding of the ocean’s role in carbon sequestration. Adaptive
2 management strategies, planning, research, monitoring, or other
3 activities shall be designed to improve the management of coastal
4 and ocean resources or aid the state to adapt to climate change
5 impacts.

6 (ii) Information or activities developed under clause (i), to the
7 extent appropriate, shall provide guidance to the State Air
8 Resources Board for the adoption of early action measures for the
9 elimination or reduction of emissions from sources or categories
10 of sources pursuant to the California Global Warming Solutions
11 Act of 2006 (Division 25.5 (commencing with Section 38500) of
12 the Health and Safety Code).

13 (c) Grants or loans may be made to a private entity pursuant to
14 this section only for projects or activities that further public
15 purposes consistent with Sections 35510, 35515, 35617, and ~~35631~~.
16 ~~35632~~.

17 (d) Consistent with the purposes specified in Section 35515,
18 and in furtherance of the findings in Sections 7059 and 7060 of
19 the Fish and Game Code, the council, in authorizing grants or loans
20 for projects or expenditures pursuant to this section, shall promote
21 coordination of state programs and activities that protect and
22 conserve ocean resources to avoid redundancy and conflicts to
23 ensure that the state’s programs and activities are complementary.