

# Office of Environmental Health Hazard Assessment



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Edmund G. Brown Jr.  
Governor

## MEMORANDUM

**TO:** Charlton H. Bonham, Director  
California Department of Fish and Wildlife  
1416 Ninth Street, 12<sup>th</sup> Floor  
Sacramento, California 95814

**FROM:** Lauren Zeise, Ph.D.   
Director

**DATE:** December 20, 2016

**SUBJECT:** RECOMMENDATION ON OPENING OF DUNGENESS CRAB FISHERY  
IN STATE WATERS 1) BETWEEN 38° 34.5' N LATITUDE AND 38° 57.5'  
N LATITUDE AND, 2) BETWEEN 40° 46.15' N LATITUDE AND 40° 01' N  
LATITUDE

The Office of Environmental Health Hazard Assessment (OEHHA) has determined, in consultation with the California Department of Public Health (CDPH), that consumption of Dungeness Crab taken from state waters north of 38° 34.5' N (near Salt Point in Sonoma County) to 38° 57.5' N Latitude (near Point Arena in Mendocino County), and from waters in Humboldt County south of 40° 46.15' N Latitude (the north jetty at the Humboldt Bay entrance) to 40° 01' N (near Shelter Cove) no longer poses a significant threat for domoic acid exposure. This determination is based on data from repeated sampling of Dungeness Crab and analysis of these samples by CDPH laboratories.

The commercial Dungeness Crab fishery north of 38° 57.5' N Latitude (near Point Arena) and south of 40° 01' N Latitude (near Shelter Cove) should remain closed.

Domoic acid poisoning in humans may occur within minutes to hours after consumption of affected seafood and can result in signs and symptoms ranging from vomiting and diarrhea to permanent loss of short-term memory (Amnesic Shellfish Poisoning), coma, or death.

Current federal action levels for domoic acid are 20 parts per million (ppm) for all fish, with the exception of 30 ppm in the viscera of Dungeness crabs. State and federal laws prohibit the commercial distribution of seafood products that contain domoic acid levels above the action level. In contrast to levels seen earlier, concentrations of domoic acid

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in recent viscera samples of Dungeness Crab from 38° 34.5' N Latitude (near Salt Point) to 38° 57.5' N (near Point Arena) and from 40° 46.15' N Latitude (the north jetty of the Humboldt Bay entrance) to 40° 01' N Latitude (near Shelter Cove) did not test above the action level of 30 ppm. As such, OEHHA recommends the opening of the commercial Dungeness Crab fishery in these areas in a manner consistent with the emergency regulations adopted on November 15, 2016. The sampling results for Dungeness Crab caught in state waters from Point Reyes to the Oregon border are provided in the table on pages 3 and 4.

While CDPH and OEHHA concur that Dungeness Crab taken from this area are safe to consume, CDPH and OEHHA recommend as a best-preparation practice that consumers should avoid eating the viscera (internal organs, also known as “butter” or “guts”) of crabs, as the viscera usually contain much higher levels of domoic acid than the meat.

CDFW, CDPH, and OEHHA are continuing to monitor and analyze Dungeness Crab to determine when the crab fisheries between Point Arena and Shelter Cove can be opened safely.

If you have questions, please contact me at [Lauren.Zeise@oehha.ca.gov](mailto:Lauren.Zeise@oehha.ca.gov) or (916) 322-6325.

### Dungeness Crab Sampling Results

PORT	AREA	SAMPLE COLLECTION DATE	NUMBER OF SAMPLES	VISCERA SAMPLE RESULTS: RANGE	AVERAGE LEVEL IN VISCERA	SAMPLES EXCEEDING ACTION LEVEL (30 ppm in viscera)
Crescent City	North	9/14/16	6	6.7-53 ppm	19 ppm	17%
	South	11/1/16	6	<2.5-8.8 ppm	5 ppm	0%
	North	11/1/16	6	<2.5-14 ppm	7 ppm	0%
Trinidad	South	9/16/16	6	5.9-33 ppm	17 ppm	17%
	South	11/2/16	6	<2.5-7.6 ppm	4 ppm	0%
	North	11/1/16	6	<2.5-25 ppm	9 ppm	0%
Eureka	Samoa	9/16/16	6	8.2-20 ppm	14 ppm	0%
	Eel River	9/15/16	6	<2.5-29 ppm	14 ppm	0%
	Cape Mendocino	12/12/16	6	<2.5-9.8 ppm	4 ppm	0%
	Punta Gorda	12/13/16	6	<2.5-14 ppm	6 ppm	0%
Fort Bragg	Usal	9/16/16	6	<2.5-64 ppm	17 ppm	17%
	Usal	10/11/16	6	7.3-74 ppm	33 ppm	33%
	Usal	11/12/16	6	3.8-50 ppm	27 ppm	50%
	Pt. Arena	11/12/16	6	8-47 ppm	26 ppm	33%
	Usal	11/22/16	6	6-170 ppm	49 ppm	33%
	Pt. Arena	11/22/16	6	7.6-31 ppm	18 ppm	17%
	Usal	12/3/16	6	<2.5-17 ppm	4 ppm	0%
	Shelter Cove	12/3/16	6	<2.5-17 ppm	8 ppm	0%
	Usal	12/11/16	6	<2.5-64 ppm	20 ppm	33%

PORT	AREA	SAMPLE COLLECTION DATE	NUMBER OF SAMPLES	VISCERA SAMPLE RESULTS: RANGE	AVERAGE LEVEL IN VISCERA	SAMPLES EXCEEDING ACTION LEVEL (30 ppm in viscera)
Fort Bragg	Pt. Arena	12/7/16	6	<2.5-30 ppm	6 ppm	0%
	Pt. Arena	12/12/16	6	<2.5-7.2 ppm	2 ppm	0%
Bodega Bay	Point Reyes	9/9/16	6	<2.5-16 ppm	6 ppm	0%
	Russian River	9/10/16	6	4-60 ppm	21 ppm	17%
	Russian River	9/26/16	6	8-29 ppm	19 ppm	0%
	Russian River	10/12/16	6	<2.5-71 ppm	17 ppm	17%
	Bodega Head	10/12/16	6	<2.5-40 ppm	15 ppm	33%
	Bodega Head	10/27/16	6	<2.5-51 ppm	18 ppm	17%
	Russian River	10/27/16	6	5.4-51 ppm	18 ppm	17%
	Bodega Head	11/3/16	6	<2.5-65 ppm	13 ppm	17%
	Russian River	11/3/16	6	Non-detectable	Non-detectable	0%
	Bodega Head	11/10/16	6	5.5-14 ppm	9 ppm	0%
	Russian River	11/10/16	6	3.2-11 ppm	8 ppm	0%
	Bodega Head	11/26/16	6	<2.5-11 ppm	4 ppm	0%
	Salt Point	11/26/16	6	<2.5-26 ppm	7 ppm	0%
	Gualala	12/13/16	6	<2.5-28 ppm	10 ppm	0%