

California Dungeness Crab Domoic Acid Updates & Biotoxin Management Zones Draft Proposal



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Biotoxin Management in CA Dungeness Crab Fishery

- Domoic testing update for 2019-2020 season
- Overview of Current Management : Health agencies and CDFW
- Biotoxin Mgmt Zones – Proposed Boundary Map

Update on 2019-20 Dungeness Preseason Domoic Testing – Sept/Oct 2019

Number	1 st Round Collection sites (N to S)	Port Area	Collection Date	CDPH Received	Results
1	George Reef	Crescent City	10/3/2019	10/8/2019	
2	Klamath River	Crescent City	10/3/2019	10/8/2019	
3	Lagoons	Trinidad	10/2/2019	10/8/2019	
4	Trinidad Head	Trinidad	10/2/2019	10/8/2019	
5	LP Eureka	Eureka	10/2/2019	10/8/2019	
6	Eel River	Eureka	10/2/2019	10/8/2019	
7	Usal	Fort Bragg	10/11/2019	10/15/2019	
8	Manchester	Fort Bragg	10/11/2019	10/15/2019	
9	Salt Point	Bodega Bay	9/21/2019	9/26/2019	Yes – Done
10	Russian River	Bodega Bay	9/21/2019	9/26/2019	Yes – Done
11	Bodega Head	Bodega Bay	9/25/2019	9/26/2019	Yes – retest 10/8
12	Point Reyes	Bodega Bay	9/25/2019	9/26/2019	Yes – Done
13	Duxbury	Half Moon Bay/SF	10/14/2019	TBD – 10/16/19	
14	Between Farallons and Golden Gate	Half Moon Bay/SF	10/14/2019	TBD – 10/16/19	
15	Halfmoon Bay/Pillar Point	Half Moon Bay/SF	9/27/2019	10/3/2019	Yes – Done
16	Pigeon Point	Half Moon Bay/SF	9/27/2019	10/3/2019	Yes – Done
17	Monterey Bay	Monterey	9/30/2019	10/3/2019	Yes – Done
18	Avilla Beach	Morro Bay	9/25/2019	10/1/2019	Yes – Done

9/25/2019: Solar Logger Track of Vessel Collecting Crab from Bodega Bay

Bodega Bay



Point Reyes



Google Earth

Data LDEO-Columbia, NSF, NOAA
Data CSUJMB SFML, CA OPC
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



10 mi

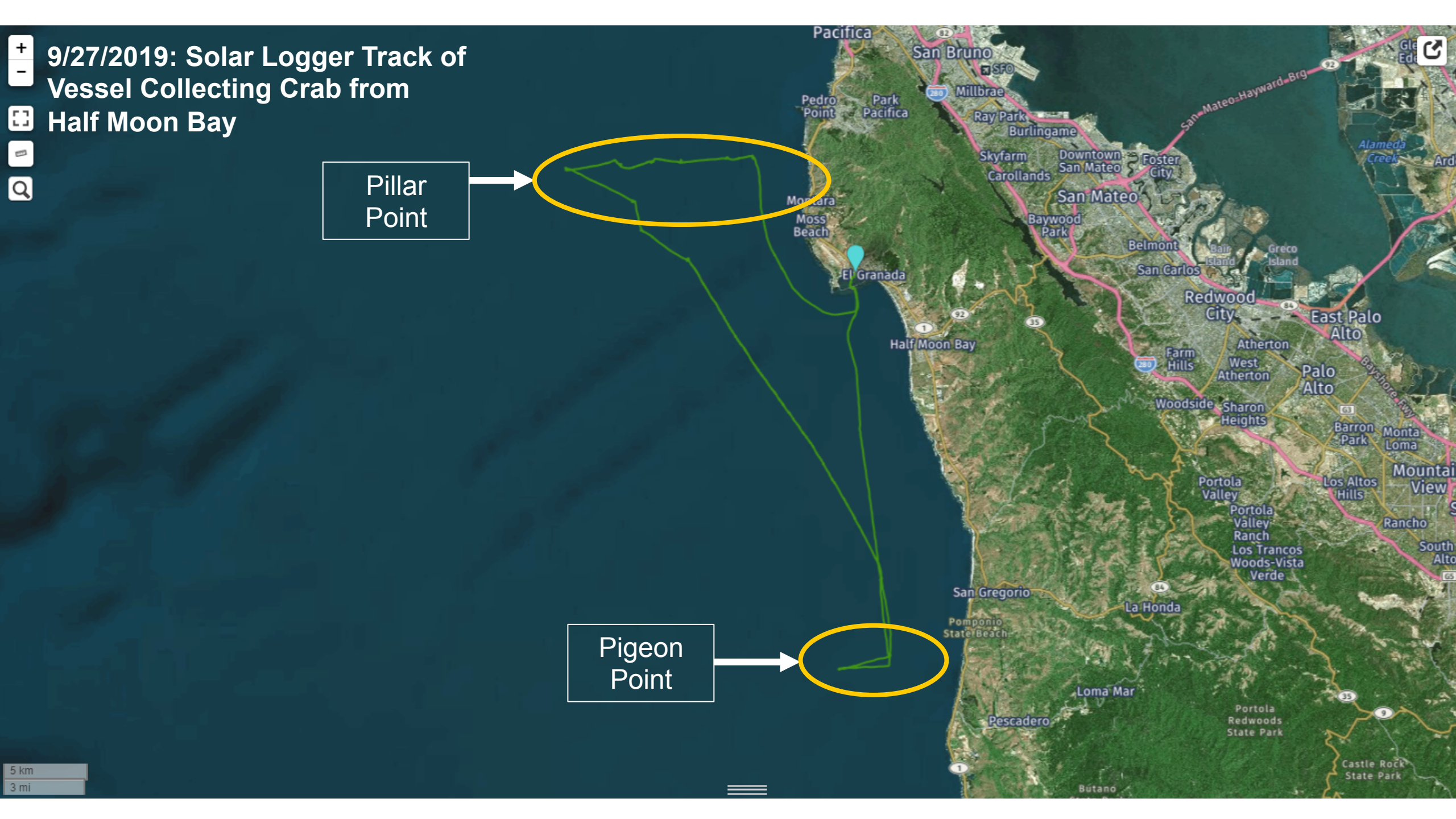
9/27/2019: Solar Logger Track of
Vessel Collecting Crab from
Half Moon Bay

Pillar Point

Pigeon Point



5 km
3 mi





Biotoxin Management Zones Draft Proposal

Agencies are establishing Biotoxin Management Zones

- Developed over concerns due to new fishing area openers
- For industry to anticipate fixed boundary lines and area closures when a sampling location has results above 30ppm

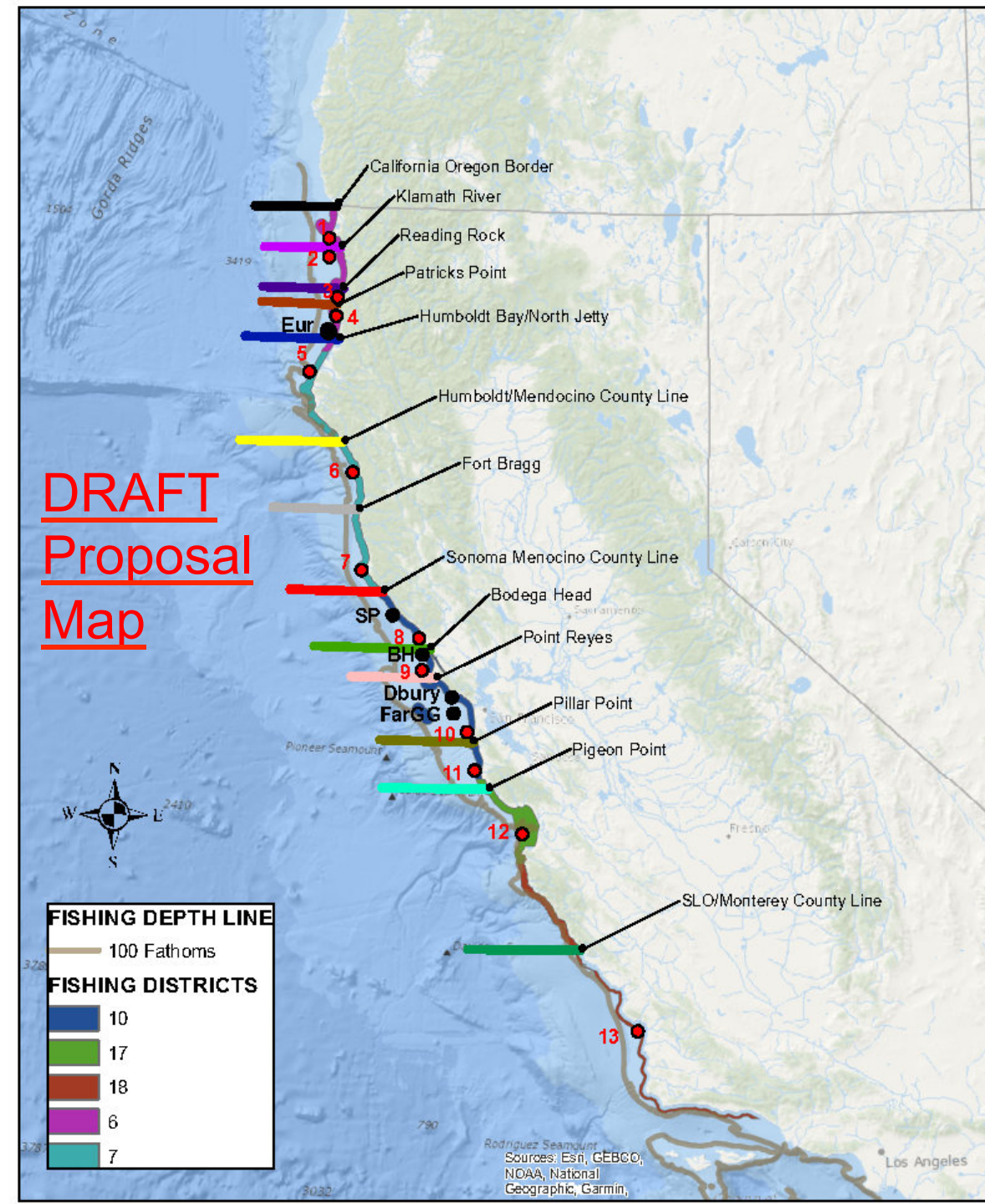
Questions for Industry:

- Do these boundaries have good geographic landmarks?
- Are zones allowing for deliveries in adjacent ports?
- Any other feedback?

Biotoxin Mgmt Zones: Proposed Statewide CA Map



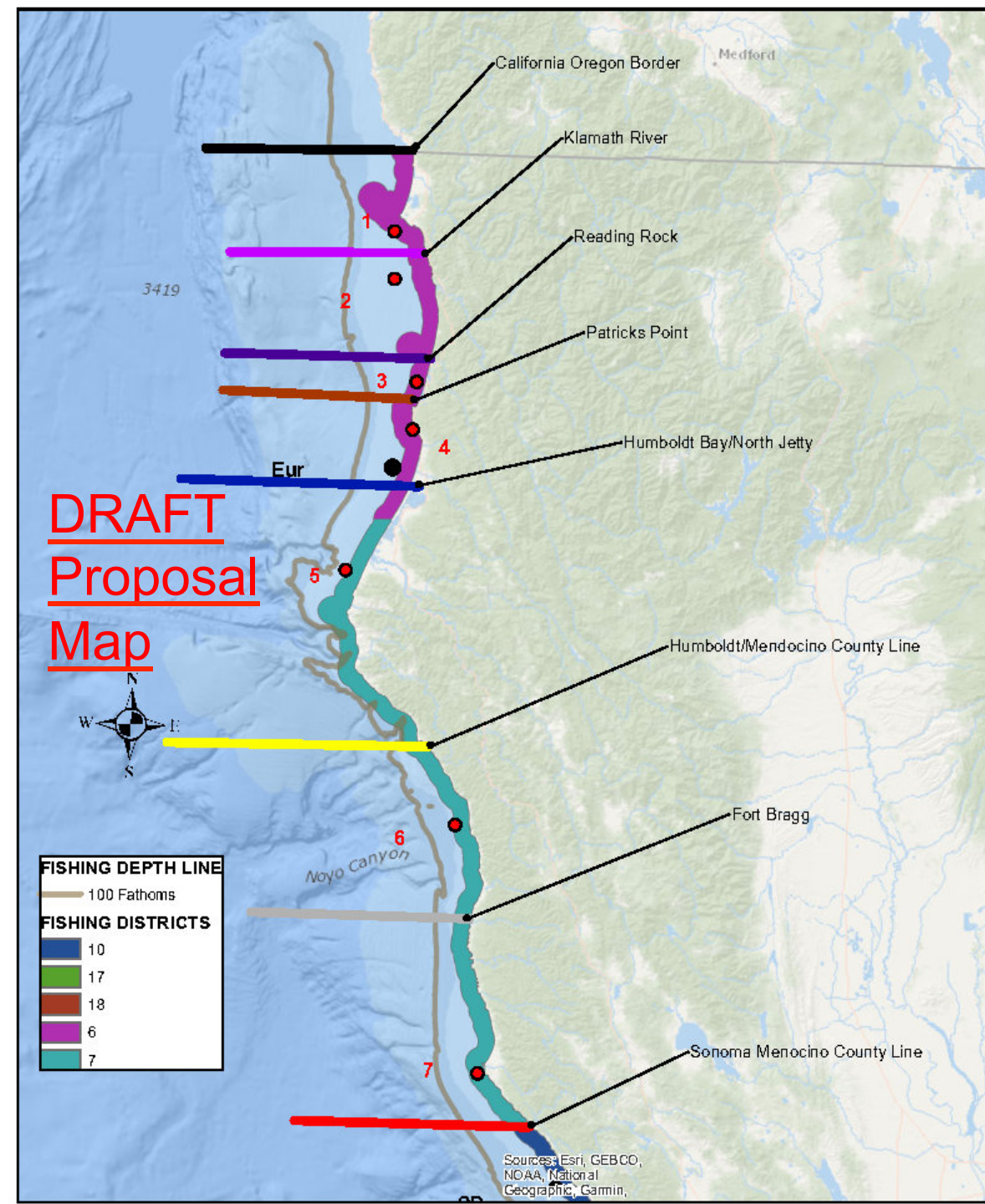
- All 18 sampling locations used since 2015-16 season (red and black dots; 13 red would remain based on these proposed boundaries)
- Shows proposed 13 Zones with boundary lines (multiple colored lines)
- Some boundaries have been used in past seasons (i.e. Pt. Reyes, Bodega Head, North Humboldt jetty, Patrick's Point)



Biotoxin Mgmt Zones: Proposed Northern CA Map



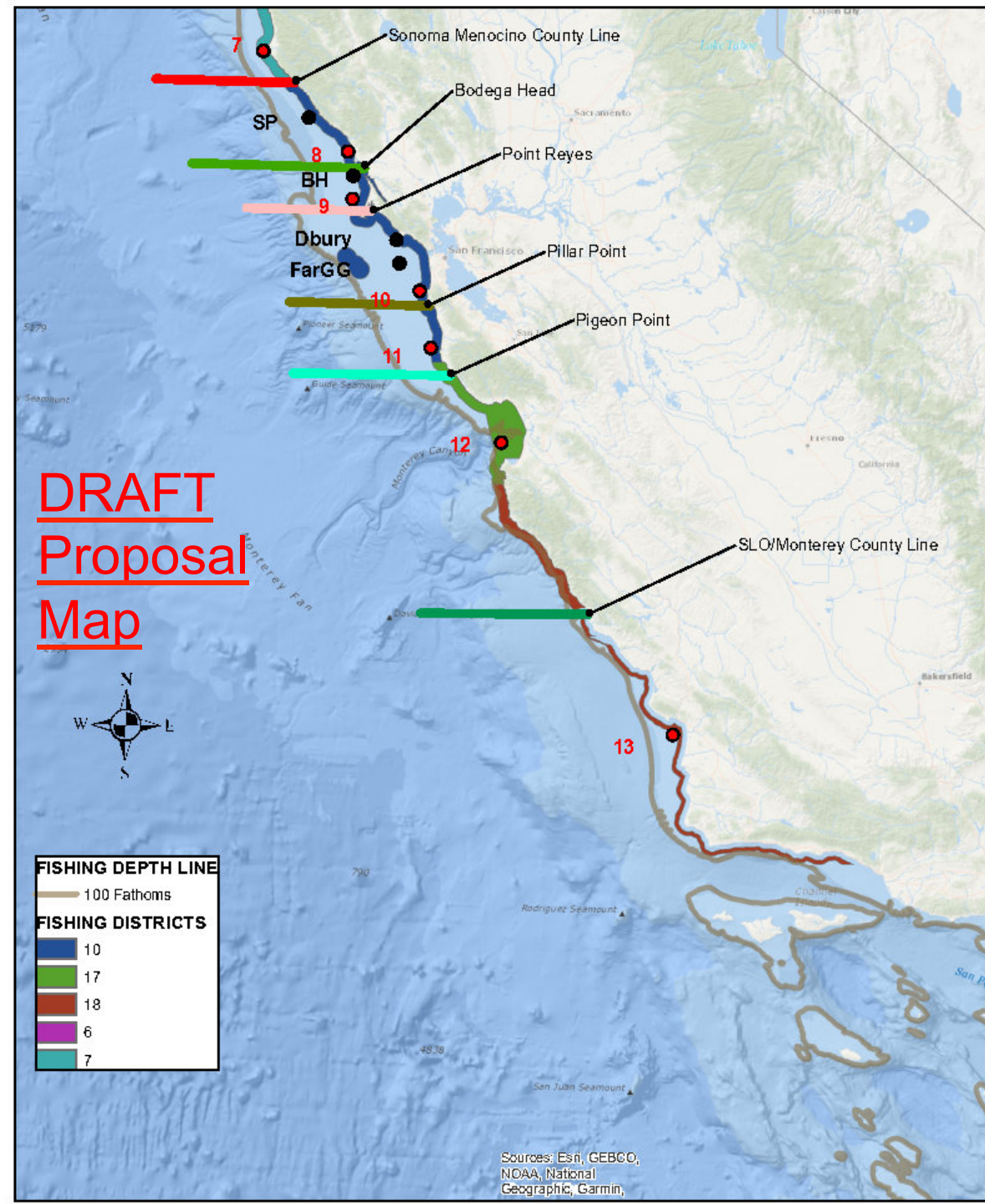
- 7 zones from CA/OR border to Sonoma/Mendocino County line
- Proposed boundary lines would currently remove 1 current testing location north of Eureka
- Broader areas in northern Mendocino based on remote geography from nearby ports
- Can any adjustments be made?



Biotoxin Mgmt. Zones: Proposed Central CA Map



- 6 zones from Sonoma/Mendocino County line to southern CA
- Proposed boundary lines would currently remove 4 current testing locations: Salt Pt, Bodega, Duxbury, outside of SF Bay
- Broader areas in northern Monterey and SLO counties based on remote geography from nearby ports; poor fishing grounds
- Can any adjustments be made?





Biotoxin Mgmt. Zones Draft Proposal: Input from Industry

Agencies are establishing Biotoxin Management Zones

- Developed over concerns due to new fishing area openers
- For industry to anticipate fixed boundary lines and area closures when a sampling location has results above 30ppm

Questions for Industry:

- **Do these boundaries have good geographic landmarks?**
- **Are zones allowing for deliveries in adjacent ports?**
- **Any other feedback?**



California Agencies: Roles & Responsibilities



- 1) CA Dept. of Public Health (CDPH) – conducts and coordinates domoic testing of crab samples w/CDFW and fishermen; regulates commercial processors
- 2) Director of Office of Environmental Health Hazard Assessment (OEHHA) - in consultation with CDPH, if they determine based on thorough and adequate scientific evidence that any species or subspecies is likely to pose a human health risk from high levels of toxic substances, then they recommend fishery closures to CDFW Director (§5523, CA Fish and Game Code)
- 3) Director of CA Dept. of Fish and Wildlife (CDFW) – is legislatively authorized to close/delay or open fisheries based on OEHHA recommendations

How are biotoxin delays, evisceration orders and closures implemented in California?

- 1) Control measures/regulations currently not in place to restrict harvest sales to processors when areas have crab above alert level (>30ppm).
- 2) OEHHA Recommendation Memo Received by CDFW Director - specifies closure area_
- 3) CDFW Director Declares Fishery Delay/Closure – announcement made via press release



Legal Authority



CA Authorities (CDFW and CDPH)

CA Fish and Game Code –

5523 Fish and Game Code – Open, Delay, and Close Fisheries

CA Health and Safety Code –

110545 – Defines adulterated foods

Action Limit –

Agency interpretation of FDA guidance confirmed by FDA CFSAN personnel

110560 – Adulterated foods, whole or in part

110620 – Unlawful to sell or hold adulterated foods

110630 – Unlawful to receive in commerce any adulterated foods

21 CFR 123 – Seafood HACCP Regulation

Processor controls significant hazard of Domoic Acid toxins (i.e. evisceration)

CA
Dept. of
Fish
and
Wildlife



Harvest



Landing



Distribution

CA
Dept.
of
Public
Health



Wholesale Processor



Direct to Public

Retailer

