# Beyond the Golden Gate

An Interdisciplinary Assessment of Boundary Expansion Options for the Monterey Bay National Marine Sanctuary



### The Bren School Group Project



James Frew (Faculty Advisor), Hugo Hoffman, Cameron Gray, Emma Freeman, Carey Batha, Sarah Pierce, Jenna Driscoll



### The proposed sanctuary expansion area





### Research Question #1:

# Have the original reasons for exclusion changed? Were they valid concerns?

- 1. the anticipated discharge plume of the combined sewer overflow component
- 2. the **shipping channel** providing access to and from San Francisco Bay
- 3. the dredged material disposal site

Federal Register v.57, no. 182, September 18, 1992



### Research Question #2:

# Does the area meet the criteria for "special national significance" under the National Marine Sanctuaries Act?

- Its conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or aesthetic qualities;
- 2. The communities of living marine resources it harbors; or
- 3. Its resource or human-use values

National Marine Sanctuaries Act



- 1. Sewer overflow
- 2. Shipping channel
- 3. Dredge material deposition sites



#### 1. Sewer overflow

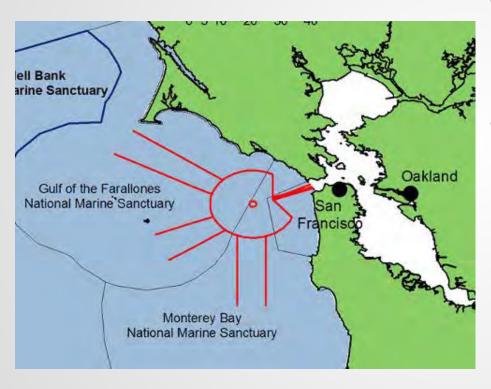
Between 1993 and 1997:

- Secondary treatment capacity increased from 0 to 43 million gallons per day (MGD)
- Wet-weather storage capacity increased by 21 MGD





### 2. Shipping channel

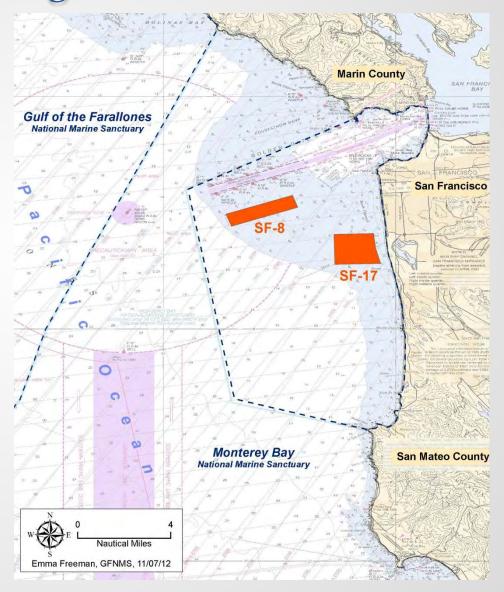


- Main Shipping Channel route has <u>not</u> changed since designation.
- Was vessel traffic in the Main Shipping Channel a valid reason for exclusion in the first place?



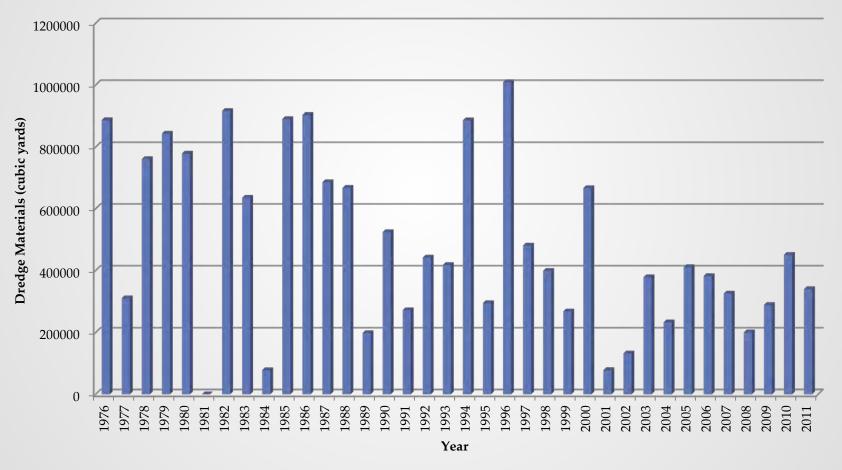
## 3. Dredge Material Deposition Sites

- Decrease in dredge material deposition since 1992
- Dredging of Main Shipping Channel is ongoing
- Coastal Regional
  Sediment Management





### Volume of material dredged from Main Shipping Channel, 1976-2011





# How might the area be of "special national significance" under the National Marine Sanctuaries Act?

## Natural resource and ecological properties

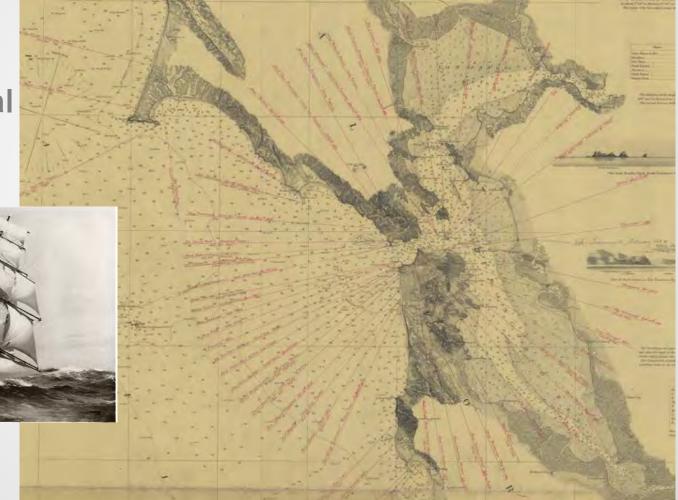
- Species present
- Ecosystem structure
- Habitat
- Biogeographic qualities





# How might the area be of "special national significance" under the National Marine Sanctuaries Act?

Historical, cultural, and archaeological significance



# How might the area be of "special national significance" under the National Marine Sanctuaries Act?

#### Human uses

Commercial and recreational fishing

Other commercial and recreational uses

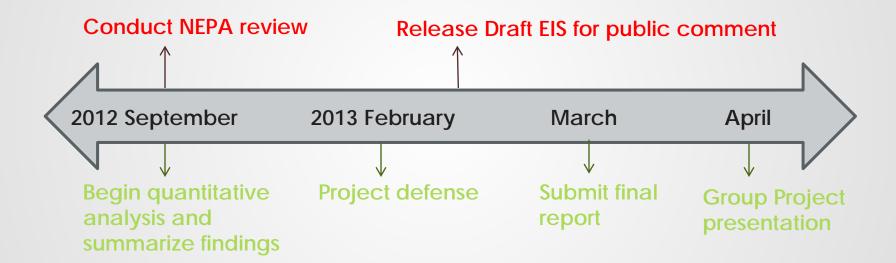
Research and education





## Project timeline

### **NOAA/GFNMS**



#### **Bren GP**



### Thank You!

Any questions?

Emma Freeman:

efreeman@bren.ucsb.edu

Cameron Gray:

cgray@bren.ucsb.edu



### **Public Comment Period**

### August 7- October 10

#### **How to Submit Comments**

#### 1. Online

• Federal eRulemaking Portal: <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Submit electronic comments via the Federal eRulemaking Portal with Docket Number NOAA–NOS–2012–0153.

#### **2. Public Scoping Meetings** (Verbal or Written Comment)

Santa Cruz, CA August 16, 2012

LOCATION: Louden Nelson Community Center

ADDRESS: 301 Center Street

TIME: 4:00 pm to 6:00 pm

San Francisco, CA August 23, 2012

LOCATION: Golden Gate National Recreation Area Headquarters

TIME: 5:30 pm to 7:30 pm

Pacifica, CA September 12, 2012

LOCATION: Pacifica Community Center, The Card Room

TIME: 6:00 pm to 8:00 pm