

CITY OF SANTA BARBARA WATERFRONT DEPARTMENT

MEMORANDUM

Date: April 19, 2012
To: Harbor Commissioners
From: Scott Riedman, Waterfront Director
Subject: Fish Die-Off Response Plan

RECOMMENDATION:

That Harbor Commission review and consider a draft Fish Die-Off Response Plan for Santa Barbara Harbor.

BACKGROUND:

On occasion, due to algal blooms in the Santa Barbara Channel, the harbor has experienced modest “die-off” events when schools of fish—primarily small baitfish like sardines and anchovies—succumb for lack of oxygen. Thankfully, major cleanup efforts have not been required.

In March 2011, however, a significant die-off event occurred in King Harbor (Redondo Beach), during which 175 tons of dead sardines piled 2’-3’ deep clogged fairways and finger docks. Removing the fish required a week-long effort by City staff, private contractors and 700 volunteers, who manned scoop-nets, buckets, Vactor trucks, small dredges and booms, dumping the “catch” into dumpsters that were hauled to an offsite landfill for disposal. Liveboards were evacuated and the harbor was intermittently closed to boat traffic as responders raced against time, the smell of decomposing fish in the blood-red harbor wafting through downtown Redondo. The cleanup cost \$300,000.

The following month, closer to home, a 14-ton fish die-off in Ventura Harbor prompted another cleanup, as volunteers, fishermen and Port District staff employed pool nets and commercial bait nets to remove dead sardines. In response to these events, the Waterfront Department is drafting a Fish Die-Off Response Plan to better prepare itself in case such an event occurs in Santa Barbara Harbor.

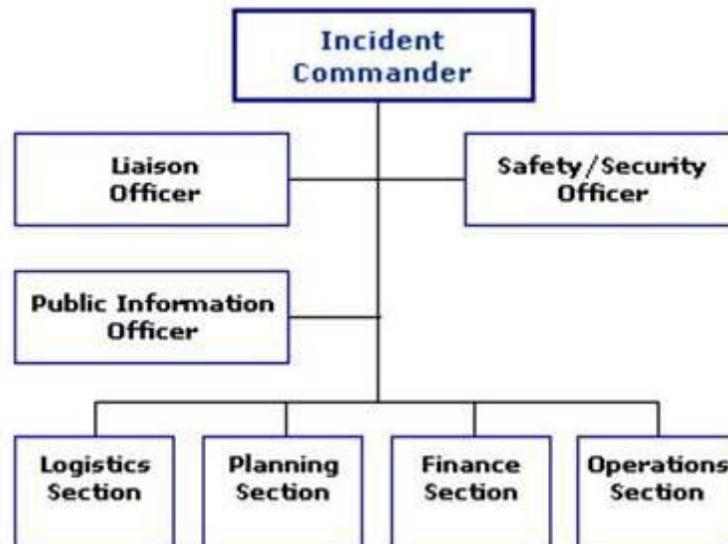
Last December, the Waterfront Director and Harbor Operations Manager met with the City of Redondo’s Fire Chief/Harbormaster to learn from their experience during the die-off emergency. Waterfront staff subsequently met or spoke with Ventura’s Harbormaster, Santa Barbara City’s Emergency Services Manager, representatives from public health agencies, fisheries scientists and officials at waste-disposal and composting facilities to help prepare the draft Plan. Following is a framework for the Fish Die-Off Response Plan—a blueprint for addressing this type of localized environmental disaster. After Commission review, staff will reconstitute the Plan into a “checklist” format, then add it to its manual of Emergency Response Plans that address events like earthquakes, coastal storms and oil spills.

DISCUSSION:

Although circumstances vary in any emergency, the primary lesson learned in Redondo was that a standard Incident Command System (ICS) is well suited to:

- Provide structure for coordinated planning
- Divide and identify tasks
- Provide an organizational framework for responders, including City staff, private contractors and volunteers, to work together effectively
- Integrate facilities, equipment and personnel procedures
- Communicate internally and with the public
- Resolve the crisis in a timely, efficient fashion

The ICS structure looks like this:



Incident Commander: The Waterfront Director serves as Incident Commander (IC), maintaining overall command and coordination of the incident response. The IC's primary role is to receive information on the overall incident from the Operations Section in the field, then organize operational briefings while continuing to receive regular updates. The IC and Public Information Officer (PIO) work jointly to prepare timely, accurate press releases and keep the City Administrator updated. The Director would likely establish a command post in the Waterfront Center Conference Room.

Liaison Officer: The Harbor Operations Manager serves as Liaison Officer, coordinating communication and responses with other involved agencies. In a fish die-off event, those include:

- City of SB Fire, Police, Public Works
- SB County Environmental Health Services
- County Office of Emergency Management

- California Department of Public Health, Environmental Management Branch
- California Environmental Protection Agency
- National Marine Fisheries Service
- Regional Water Quality Control Board
- California Department of Fish and Game
- Independent scientific advisor (Dr. David Caron—USC)

Safety/Security Officer: The City Risk Manager serves as Safety/Security Officer. His/her responsibility includes processing any and all injury claims. Security, including perimeter security and access/egress to the cleanup site, is provided by City Police. On the water, security is provided by Harbor Patrol.

Public Information Officer: The PIO, appointed by the Waterfront Director or supplied by City Fire (trained personnel), is one of the most important positions in the IC structure. The PIO works with other public agencies in a Joint Information Center to control rumors and provide accurate information from government sources, private contractors, scientists and field operatives. The PIO regularly updates and informs the City Administrator, City Council, the public and Waterfront community, via interviews, press releases and Blackboard Connect messages on:

- Mission Statement (“We have a Plan in place. . .”) + Clean Marina objectives
- Initial message: size and scope of the event
- Earliest possible determination of cause
- Public health concerns
- Mitigation strategies
- Anticipated duration of the event and cleanup

Logistic Section: The Waterfront Facilities Manager oversees the Logistics Section to:

- Direct staff recall and acquire staff resources from other City Departments
- Coordinate with public, private and volunteer entities to procure all clean-up and disposal materials, including: gloves, buckets, nets, booms, aerators, dock carts, dumpsters, tarps, small hydraulic dredges, power washers, front loaders and vector trucks
- Coordinate food and water deliveries for consecutive operational periods
- Coordinate disposal of dead fish
 - Compost sites in Ventura or Santa Maria
 - Landfill options (Tajiguas)
- Acquire trained volunteers, including Community Emergency Response Teams (CERT) from Santa Barbara County
- Coordinate and train “Good Samaritan” volunteers.
 - Fishermen, boaters
 - City College students, California Conservation Corps
 - Disaster Worker Service forms provided by Human Resources
 - Waiver forms
 - Check in/Check out
- Coordinate site clean-up

Planning Section: Overseen by the Waterfront Business Manager, the Planning Section will:

- Coordinate with Operations Section for ongoing situational status
- Establish operational areas
- Establish operational periods (10-hour)
- Establish goals for each operational period, communicate to PIO

Finance Section: Staffed by Waterfront Accounting, the Finance Section will:

- Process purchase orders
- Pay vendors

Operations Section: Overseen by the Harbor Patrol Supervisor and Harbor Maintenance Supervisor, the Operations Section will:

- Conduct initial “size-up”
 - “IDEA”—Isolate, Deny (access), Evacuate (as necessary), Assess
- Assist perimeter security with City PD
- Manage vessel traffic
 - Intermittent closures possible
- Assign “dock bosses” to each finger or operational area
- Oversee removal and disposal of dead fish
 - Direct use and distribution of personnel of materials
 - Direct placement of front-loaders, dumpsters, dredges
- Conduct regular, timely briefings
 - Include City Administrator, Fire Chief, Public Works Director, Waterfront Director

CONCLUSION:

Staff believes the addition of a Fish Die-Off Response Plan to its Emergency Response Plan Manual will position the City to address this type of event, should it occur in Santa Barbara Harbor. Staff wishes to thank the City of Redondo, the Ventura Port District and the City of Santa Barbara’s Emergency Services Manager for their contributions to this effort.

Prepared By: Mick Kronman, Harbor Operations Manager