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NOVEMBER 2007 SAN FRANCISCO OIL SPILL: CAUSES AND RESPONSE

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FIELD HEARING

BEFORE THE

SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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November 16, 2007

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Coast Guard and Maritime Transportation

FROM: Subcommittee on Coast Guard and Maritime Transportation Staff

SUBJECT: Hearing on "San Francisco November 2007 Oil Spill Causes and Response"

PURPOSE OF HEARING

The Subcommittee on Coast Guard and Maritime Transportation will meet on Monday, November 19, at 10:00 a.m., to receive testimony on the San Francisco, California oil spill. The hearing has been called to consider both the circumstances leading to the allision of the M/V COSCO BUSAN with the San Francisco-Oakland Bay Bridge ("Bay Bridge") on Wednesday, November 7, 2007, and the response of the Coast Guard and other federal agencies to the subsequent spill of approximately 58,000 gallons of fuel oil into the waters of San Francisco Bay.

BACKGROUND OF ACCIDENT

According to Coast Guard reports, the M/V COSCO BUSAN hit a support under the Bay Bridge on November 7, 2007, at approximately 8:30 a.m., resulting in a release of approximately 58,000 gallons of fuel oil. Specific characteristics of the vessel are provided below:

Vessel: M/V COSCO BUSAN
Length: 902 ft.
Beam: 131 ft.
Draft: 40 ft.
65,131 gross tons
Built: 2001
Flag: Hong Kong
Owner: Regal Stone
Chartered to: Hanjin Group, South Korea

Shipowner's oil spill response contractor: O'Brien's Group who subcontracted for additional capacity with Marine Spill Response Corp.
Electronics on board: Radar, Electronic Chart System, Voyage Data Recorder, Automatic Identification System ("AIS")

The M/V COSCO BUSAN was loaded with containers for shipment to Pusan, Korea, and had approximately one million gallons of intermediate fuel oil (IFO 380) on board. The fuel was of a type commonly called "bunker fuel" (so named because the tanks that the fuel is stored in are called "bunker tanks"). The crew of the M/V COSCO BUSAN – including its officers – were Chinese nationals. The ship was sold on October 24, 2007, and had a new management company and crew.

Pilots and Pilotage

A pilot is an experienced mariner – usually one with an unlimited master's license – who assists the master of a vessel during transits into and out of harbors and river mouths. Many pilots are retired from positions on ocean-going vessels. Importantly, the master remains in full command of his or her vessel even when a pilot is on board; as a result, the pilot is generally not liable for his or her actions.

Under Federal law, pilots for ships on international voyages may be licensed by the State in which the pilot operates. Pilots for ships on coastwise voyages are licensed by the Coast Guard.

According to press reports, State Pilotage Commission records indicate that the pilot on the M/V COSCO BUSAN, Mr. John Cota, has been a pilot for 26 years and has been involved in four ship-handling incidents in the past 14 years. He was also reprimanded last year for errors in judgment when he ran a ship aground near Antioch, California.

According to the National Transportation Safety Board, Mr. Cota said he had concerns about the radar on the ship. According to one report, it "conked out" twice – once before departure from the port and once after the vessel was underway. Mr. Cota then relied on an electronic chart system with which he was not familiar. On Wednesday, November 14, the NTSB reported that both radars and other electronic equipment on the vessel performed "as expected", and confirmed that Mr. Cota claimed that he experienced problems with the radar just minutes before the allision.

Vessel Traffic Service System

According to the Coast Guard, "[t]he purpose of a Vessel Traffic Service (VTS) is to provide active monitoring and navigational advice for vessels in particularly confined and busy waterways."[1] The VTS system in San Francisco, California, uses several land-based sensors (radar, AIS, and closed circuit television sites) that output their signals to a central location where operators monitor and manage vessel traffic movement using a wide range of techniques and capabilities aimed at preventing vessel collisions, rammings, and groundings in the harbor, harbor approach, and inland waterway phase of navigation. The system is also designed to expedite ship movements, increase transportation system efficiency, and improve all-weather operating capability.

[1] For more information, *see* U.S. Coast Guard Navigation Center website http://www.navcen.uscg.gov/mwv/vts/vts_home.htm

VTS San Francisco was one of the first Vessel Traffic Service Systems established by the Coast Guard. It is responsible for the safety of vessel movements from offshore waters to the ports of Stockton and Sacramento. In 1995, Regulated Navigation Areas ("RNAs") were established in the San Francisco Bay Region. These RNAs were developed with input from the Harbor Safety Committee of the San Francisco Bay region, and are designed to improve navigation safety by organizing traffic flow patterns; reducing meeting, crossing, and overtaking situations in constricted channels; and by limiting vessels' speeds.

History of VTS in the United States

In January 1971, the tankers ARIZONA STANDARD and OREGON STANDARD collided under the Golden Gate Bridge in San Francisco, focusing nationwide attention on vessel safety issues and resulting in enactment of two significant Congressional maritime-related safety laws: the Bridge to Bridge Radiotelephone Act (33 U.S.C. 1201) and the Ports and Waterways Safety Act of 1972 ("PWSA") (33 U.S.C. 1221). The Coast Guard draws its authority to construct, maintain, and operate VTS from the PWSA that also authorizes the Coast Guard to require the carriage of electronic devices necessary for participation in the VTS system. PWSA established order and predictability on United States waterways by implementing fundamental waterways management practices.

Using the San Francisco Harbor Advisory Radar as the operational model and the authority of PWSA, the Coast Guard began to establish VTSs in critical, congested ports. The San Francisco VTS was formally established in 1972. The Coast Guard established VTSs in other port areas throughout the 1970s and 1980s. In 1988, the VTS program was curtailed because of budget cuts. Subsequent to the EXXON VALDEZ disaster in 1989, the Oil Pollution Act of 1990 mandated the Coast Guard to make participation mandatory at existing and future VTSs.

VTS is not Equivalent to Air Traffic Control

VTS is advisory in nature and differs in its function from an air traffic control system in that air traffic controllers have the authority to direct the movement of aircraft. VTS watch-standers obtain position reports from vessels transiting the system and provide "accurate, complete, and timely navigational safety information" to vessels using the system, and with the use of radar, closed-circuit television cameras, and computer-assisted tracking (i.e., AIS). VTS watch-standers can assist in the safe transit of vessels, but they cannot order a vessel to make changes in its operation, except in emergency situations.

Volunteers

Hundreds of volunteers have been utilized to clean beaches in several counties. Before the volunteers are able to participate, they are required to have four hours of Hazardous Waste Operations and Emergency Response Standard ("HAZWOPER") training. The State of California Office of Spill Prevention and Response ("OSPR") and the Coast Guard Pacific Strike Team are conducting the training. Supervisors and crew leaders are city and county personnel who are required to have 40 hours of HAZWOPER training. In addition to the required 40-hour training, the supervisors and crew leaders attend the four-hour training with the volunteers. After the volunteers have been trained, they are assigned to a crew and go with the crew leaders to beaches

that have already been professionally cleaned. The volunteers clean the beaches for any additional oil.

Chronology of the Allision [2]

All the facts and circumstances of the allision of the M/V COSCO BUSAN with the San Francisco Bay Bridge will not be known until the NTSB and the Coast Guard complete their reports. However, these facts are known to date:

At 6:00 a.m., on November 7, 2007, San Francisco Bay Bar Pilot John Cota boarded the M/V COSCO BUSAN at berth 55 of Oakland Inner Harbor. Because of thick fog, he elected to delay departure until the fog lifted.

At about 7:30 a.m., Cota advised Vessel Traffic Services that the fog had lifted and that he intended to depart the harbor via the Delta-Echo span of the San Francisco Bay Bridge. The vessel proceeded at a speed of 11 knots toward the span of the bridge accompanied by the tug REVOLUTION. (Escort tugs are not required for container vessels in this area; thus, the purpose of the tug is unclear.)

Shortly before 8:20 a.m., the radar failed, according to Cota. He then decided to rely on the electronic chart system on board the vessel. Being unfamiliar with the system, he asked the master to identify the center of the Delta-Echo span on the electronic chart, and gave a course and speed for that point.

At 8:20 a.m., Vessel Traffic Services advised Cota that the vessel was off course and heading parallel to the bridge. The vessel made a turn to the right just as the lookout reported the bridge tower ahead.

At 8:27 a.m., the vessel struck the Delta tower of the Bridge with a glancing blow that ripped a long gash in the port-side of the vessel and opened up two "bunker tanks".

At 8:30 a.m., Cota reported to Vessel Traffic Service System that the vessel had hit the Bridge tower. Shortly thereafter, the vessel reported that it was leaking oil. The vessel proceeded out the harbor and eventually was directed to Anchorage 7 in the vicinity of Treasure Island. The vessel had been releasing a sheen of oil while en-route to the anchorage.

According to the AIS, the tug REVOLUTION was near or alongside the M/V COSCO BUSAN until it reached the anchorage. It then immediately returned to a berth in the harbor.

Issues raised by this casualty

Casualties are rarely caused by one event; they are usually the result of several cascading events. This incident and the subsequent major oil spill resulting from the incident raise several marine safety issues. First, the visibility at the time of departure was limited, and operation of radar

[2] All of the information on the path of the vessel and the subsequent allision with the Bay Bridge are taken from available press reports, from a recording of the AIS, and from information supplied by the National Transportation Safety Board.

was questionable. Further, the pilot claims that he was not familiar with the Electronic Chart System on the vessel – a system that he ultimately relied on to attempt a transit under the Bay Bridge. In attempting to use the Electronic Chart System, he has claimed that the symbol that the master of the vessel said was the center of the span turned out to be the tower. Compounding the difficulties on the bridge that morning were language barriers that led to poor communication of vital information in a timely fashion.

As noted earlier, the NTSB is conducting an investigation into the circumstances leading up to the allision with the bridge and the Coast Guard response to the release of oil. Issues that should be addressed include:

- Should the pilot have gotten underway in limited visibility if he thought the radar was faulty and an was relying on an electronic chart system with symbols with which he was unfamiliar?
- Pilots in other regions use their own electronic chart systems (on laptop computers) to assist them, particularly when they are on a vessel with an electronic chart system with which they are not familiar. This casualty raises the question of whether this is a practice that should be encouraged in other regions – and internationally?
- Did language barriers lead to poor communication and ineffective "bridge management"?
- Should or could the VTS have warned the pilot sooner and more forcefully that the vessel was on course to strike the bridge tower?
- What role did the tug played in the navigation of the vessel, and why did it leave the scene immediately after the *COSCO BUSAN* reached the anchorage?
- Beginning on August 1, 2010, the MARPOL Convention will require "Oil Fuel Tank Protection" (double hulls) around "bunker tanks" for newly built vessels engaged on international voyages. Should there be a similar requirement for existing vessels entering U.S. ports? Should there be a similar requirement for U.S.-flag vessels on coastwise (domestic) voyages?

OVERVIEW OF RESPONSE TO THE OIL SPILL

Laws Pertaining to Oil Spill Response

A number of federal statutes address oil spill response, including the Clean Water Act, the Comprehensive Environmental Response, Compensation and Liability Act; and the Oil Pollution Act of 1990 (P.L. 101-380) (known as "OPA '90"), which consolidated oil spill response and prevention regimes for vessels and oil platforms under one single program.

Federal and State Oil Spill Response Plans and Protocols: As amended by OPA '90, the Clean Water Act prohibits the discharge of oil into the navigable waters of the United States and requires the President to assume control of the efforts to respond to oil spills to ensure a single, coordinated response.

The President has three specific options in the event of an oil spill:

- Perform an immediate clean-up operation utilizing federal resources;
- Monitor the response of the party that spilled the oil; or
- Direct the spiller's clean-up efforts.

To ensure that all responsible agencies are prepared to respond to a spill, OPA '90 required the establishment of a National Contingency Plan that clarifies the roles and responsibilities of all federal agencies, including the roles and responsibilities of Coast Guard spill response strike teams. The Plan specifies that the Coast Guard is responsible for leading the response to oil spilled from vessels while the Environmental Protection Agency assumes the lead in responding to oil spilled from facilities that are not involved in transportation. The Plan also defines the notice systems that are to be used to detect oil spills and to trigger notification among the agencies participating in the Plan. Further, the Plan includes specific provisions that address the protection of wildlife and natural habitats.

At the regional level, area committees work with state and local authorities to develop coordinated Area Contingency Plans to guide and coordinate the response to oil spills within certain areas. Area Contingency Plans define the roles and responsibilities of various federal and state agencies in the event of an oil spill and spell out the notification systems among them. Area Contingency Plans can be further broken into Geographic Response Plans that address response needs in smaller geographic areas.

Vessel Oil Spill Response Plans: Beginning in 2004, all vessels larger than 400 gross tons (including foreign vessels) were required to create an oil spill response plan and to submit that plan to the Federal Government. The plan lays out the procedures that the vessel's operators will follow in the event that they spill oil to minimize the spill and respond to its effects, including identifying the private companies that will be employed by the responsible parties to clean the spill.

Vessel Design Standards: OPA '90 requires that oil tankers operating in U.S. waters have double hulls around the tanks in which they transport oil supplies by 2015 to prevent the spillage of the oil in the event of an accident. Certain design modifications to existing vessels were also required by 2010.

Establishing Liability in Oil Spills: A cornerstone of OPA '90 is the polluter pays principle – and OPA '90 is structured to ensure that the party responsible for the spill pays for clean up of the spill within certain liability caps. The definition of a "responsible party" can include the owner, operator, or charterer of a vessel. All vessels over 300 gross tons are required to demonstrate their ability to meet their financial obligations in the event of an oil spill. Once a vessel has made this demonstration, it receives a Certificate of Financial Responsibility from the National Pollution Funds Center.

Under OPA '90, a "responsible party" can be responsible for a wide range of spill-related costs including, but not limited to:

- Loss of personal property;
- Injury to natural resources;
- Loss of revenues resulting from the destruction of property or natural resource injuries; and
- Cost of providing public services to respond to the spill.

Responsible parties are generally covered by certain liability caps. The liability caps for vessels are generally calculated on the basis of carrying capacity and are currently set at $1,900 per gross ton for double-hulled vessels and $3,000 per gross ton for single-hulled vessels. The liability for off-shore oil platforms is capped at $75 million while liability for on-shore and deepwater ports is limited to $350 million. Liability limits do not apply if the violation of any federal safety or operating requirements caused the spill.

OPA '90 specifically states that it will not pre-empt any State from imposing additional liability requirements with respect to the discharge of oil and, thus, various state laws may apply to oil spills, although the inspection and regulation of the shipping industry is generally a federal responsibility.

Oil Spill Liability Trust Fund: The Oil Spill Liability Trust Fund ("OSLTF") was created by Congress in 1986 but its statutory authorization was provided by OPA '90. The OSLTF is administered by the Coast Guard's National Pollution Funds Center.

The OSLTF may be used to:

- Promptly pay for the cost of responding to oil spills;
- Pay the costs incurred by federal and state trustees of natural resources to respond to the impact of oil spills on natural resources, including the replacement of the resources when possible;
- Pay for uncompensated removal costs and uncompensated damages (such as the financial losses suffered by fishermen as the result of an oil spill);
- Pay for the net loss of government revenue or for the increased costs incurred to provide public services to respond to the spill; and
- Pay for federal administrative and operational costs, including paying $25 million per year for the Coast Guard's operating expenses.

Funding for the OSLTF was originally generated through a five-cent-per-barrel tax on oil; however, the collection of this fee authorized in OPA '90 expired at the end of 1994 and collection of the tax did not resume until April 2006 as authorized by the Energy Policy Act of 2005. Under current law, this tax will sunset in 2014.

The OSLTF has a current balance of approximately $637 million. The Congressional Research Service ("CRS") reports that under current projections, the Fund is expected to accrue a balance of $1 billion by fiscal year 2014; however, possible claims arising from the clean-up of oil spills associated with Hurricane Katrina may impact the OSLTF's balance and their magnitude has not been reliably calculated.

The Coast Guard has warned that a major spill could use all available resources in the OLSTF. CRS notes that the EXXON VALDEZ spill resulted in $3 billion in total clean-up and natural resource damage claims. Under current laws, if a vessel identical to the EXXON VALDEZ caused an oil spill, the total liability of the ship if it were single-hulled would be $285 million and only $181 million if the vessel were double-hulled.

OPA '90 specifies that no more than $1 billion (or the total amount of funding in the OSLTF if the balance is less than $1 billion) may be used for all eligible costs.

International Conventions: The International Convention for the Prevention of Pollution from Ships (known as "MARPOL") is the most important international convention created to prevent environmental pollution from ships (whether through accidents or through the regular operation of a ship). It is comprised of two treaties (adopted in 1973 and 1978) that have been updated by a number of amendments. Among the many issues covered in the treaty are oil and chemical pollution, garbage, sewage, hazardous materials, tanker safety, protection of Antarctica, protection of the North Sea, and mandatory uses of double-hulled vessels. Vessels that fly the flag of countries that are signatories to MARPOL are subject to its requirements at all times.

MARPOL currently includes six technical annexes, including Annex I, which provides regulations for the prevention of pollution from oil. Under Annex I, vessels are required to have shipboard oil pollution emergency plans and they are required to carry equipment that minimizes oil discharges. Importantly, the shipboard oil pollution emergency plans are intended to guide crew members on the ship on emergency procedures for responding to oil spills. Annex I was implemented by the United States through the Act to Prevent Pollution from Ships (P.L. 96-478). This Act applies only to ships registered in the United States.

The International Maritime Organization ("IMO") will require double hulls in new vessels around the bunker tanks that power the vessels beginning August 1, 2010; however, the IMO is silent on the retrofitting of older vessels.

COAST GUARD RESPONSE TO THE M/V COSCO BUSAN SPILL

Presented below is a timeline of the Coast Guard's response on Wednesday, November 7, to the oil spill resulting from the allision of the M/V COSCO BUSAN with the Bay Bridge. This timeline was compiled from Coast Guard situation reports and Coast Guard press releases.

At 8:30 a.m. on **November 7, 2007**, the M/V COSCO BUSAN allided with the Bay Bridge. This created a tear in the vessel's hull approximately 100 feet long and 12 feet wide, two to ten feet above the waterline. The San Francisco Bar Pilot on board the vessel, Captain John Cota, notified the Coast Guard of the allision. Shortly thereafter, he observed a sheen in the water (indicating an oil spill) and notified the Coast Guard Vessel Traffic Service.

8:33 a.m.: The California Department of Transportation was notified.

8:36 a.m.: The Coast Guard issued a Safety Marine Information Broadcast.

8:52 a.m.: Personnel on board a pilot boat noticed a substantial flow of oil coming from the M/V COSCO BUSAN going into the water.

9:03 a.m.: The Coast Guard dispatched a small boat with a Pollution Investigation Team to assess the incident.

9:20 a.m.: The Coast Guard small boat arrived on scene at the Bay Bridge with a Coast Guard Pollution Investigation Team. The small boat followed the sheen to the vessel anchored in Anchorage 7, west of Treasure Island. At that time, visibility was limited to 100-500 yards. The reported sheen was three-feet wide.

9:22 a.m.: A private Oil Spill Response Organization ("OSRO"), Marine Spill Response Corporation ("MSRC"), was contracted by the vessel's owners to respond to the spill.

9:30 a.m.: The Coast Guard initiated a 100-yard safety zone around the vessel.

9:35 a.m.: The Pollution Investigation Team was alongside the vessel and observed the vessel's damage was a tear in the hull approximately 100-feet long, 12-feet high, and two to ten feet above the waterline.

9:39 a.m.: The California Department of Transportation conducted a bridge inspection and determined the bridge was safe for automobile traffic. Although there was extensive damage to the fendering system around the support struck by the M/V COSCO BUSAN, the bridge's structural integrity was not damaged.

9:50 a.m.: The Pollution Investigation Team boarded the vessel. Marine Spill Response Corporation dispatched its first vessel to the scene.

10:30 a.m.: The Coast Guard notified the California Office of Emergency Services ("OES"), California Department of Fish and Game, and the State of California Office of Spill Prevention and Response ("OSPR").

10:29 a.m.: The bar pilot completed alcohol testing at the Bar Pilot's office. The alcohol test was negative.

10:35 a.m.: The bar pilot completed drug testing at the Bar Pilot's office. The drug test results are pending.

10:37 a.m.: The Coast Guard approved moving the vessel to Anchorage 9 due to insufficient water depth at Anchorage 7.
10:39 a.m.: Marine Spill Response Corporation vessels arrived on scene and began skimming oil with four vessels.

10:44 a.m.: The Pollution Investigation Team confirmed vessel stopped discharging oil. Pollution Investigators and a OSPR officer worked with the vessel's Chief Engineer to determine the exact amount of oil released. The Coast Guard stated that the estimates were difficult to make because a sounding of the tank (to determine how much oil was spilled) could not be obtained because the sounding tube was damaged during the allision. Extensive calculations as well as nuanced study of vessel diagrams had to be completed due to the damaged sounding tube. They also had to take into account the fuel that had already burned during the transit and a four to five degree list in the vessel. M/V COSCO BUSAN's engineers estimated 146 gallons of bunker oil was discharged.

10:56 a.m.: Coast Guard Investigating Officers and Vessel Inspectors board the vessel from a Coast Guard Marine Safety and Security Team ("MSST") small boat to take statements from the crew, conduct a vessel inspection, and investigate the incident.

11:26 a.m.: OSPR reported heavy black sheening reached San Francisco piers from the north of the Bay Bridge.

11:30 a.m.: The vessel's bridge crew and Chief Engineer were tested for alcohol. Testing at this time exceeded the requirement that they be tested within two hours of the occurrence of the accident; part of the delay resulted from the fact that the vessel sought safe anchorage. All test results were negative.

11:53 a.m.: The Coast Guard's Pollution Investigation team collected oil samples.

12:00 noon: A unified command was established. The Coast Guard is the lead agency and agencies represented on the command include the National Oceanic and Atmospheric Administration ("NOAA"), the California Department of Fish and Game, the Environmental Protection Agency, the National Park Service, the State of California Office of Spill Prevention and Response, local counties and municipalities, and the representatives of the responsible party and hired contractors.

12:00 noon: Coast Guard Shoreline Cleanup Assessment Teams ("SCAT") were dispatched to conduct shoreline assessments.

12:00 noon: Coast Guard MSSTs were dispatched to enforce the safety zone placed around the M/V COSCO BUSAN and the bridge abutments.

12:10 p.m.: A press conference was held with the Coast Guard's Federal On Scene Coordinator ("FOSC"), California Department of Transportation, and OSPR.

12:15 p.m.: The unified command reported the oil release was 140 gallons, and determined it was too foggy to launch an aircraft to determine the spill size.

12:29 p.m.: SCAT team reported piers 28-30 are clear of oil, and the piers north of the Bay Bridge have black oil globules and a black sheen.

12:44 p.m.: SCAT team reported piers 1-2 had oiled birds and wildlife.

12:48 p.m.: The unified command set their objectives, and began coordinated response efforts.

1:05 p.m.: SCAT team reported piers one to three had oil.

1:30 p.m.: A joint press release from the unified command was issued.

1:37 p.m.: An oil boom was set up at Seals Cove.

1:48 p.m.: All aids to navigation in San Francisco's Bay were checked and all were on station and working properly.

1:48 p.m.: A conference call was held between the Coast Guard Deputy Sector Commander, the office of the San Francisco Mayor and San Francisco City and port stakeholders.

2:55 p.m.: The Coast Guard's FOSC got underway on a Coast Guard small boat to assess the damaged vessel, bridge piling fender, and pollution.

3:06 p.m.: Drug testing was completed on the ship's master by a consortium hired by the vessel's operator. The consortium did not test the entire crew as required. Due to the oversight of the consortium and the Coast Guard's Investigative Officer, the remaining crew members were tested 56 hours after the incident (rather than within the 32 hours required by law). The results are pending.

4:00 p.m.: Oil booms were set up at Aquatic Park and Fisherman's Wharf in San Francisco.

4:49 p.m.: California Office of Spill Prevention and Response personnel and the Coast Guard Pollution Investigators reported to the Unified Command that the estimated spill was 58,000 gallons.

5:00 p.m.: The Unified Command met to discuss the change in the amount released.

6:20 p.m.: Approximately 8,000 gallons of product were recovered by skimmers. Recovery operations ceased for the night.

8:00 p.m.: The Unified Command held a teleconference with the California Office of Emergency Services and county representatives regarding the revised estimate of the release amount.

9:00 p.m.: A press release was issued by the Unified Command indicating the new oil release amount.

The Coast Guard stated that all immediately deployable cleanup equipment in the local area was deployed upon the first notification of the release. The Coast Guard has indicated that the delay in reporting the second estimate of the amount of the release did not impact the timely arrival of OSPR or responsible party personnel and resources.

November 8, 2007: More than 200 people are involved in the response efforts. Two Coast Guard overflights were conducted to assess the damaged areas. Five skimmers worked in the Bay and three skimmers worked outside of the Golden Gate Bridge to recover oil. A skimmer is a mechanized oil recovery system, which utilizes a belt made from a material that attracts oil.

Approximately 18,000 feet of boom has been placed around the Bay Area to protect the beaches and wildlife.

November 9, 2007: More than 200 people from 19 federal, state and local agencies were involved in the response efforts. By 12:00 Pacific Standard Time, approximately 9,500 gallons of oil had been recovered from the water. Eleven skimmers and 13 workboats were working inside the Bay. The Unified Command prioritized the resources to focus on 10 areas inside the bay and 10 areas outside the Bay. Resource placements were prioritized by threat, value of affected natural resources, and severity of reported contamination. Approximately 18,000 feet of boom had been deployed at eight locations inside the Bay and at Bolinas Lagoon. Twelve beaches were closed.

California Governor Arnold Schwarzenegger proclaimed a State of Emergency and directed the California Office of Spill Prevention and Response to access the state-maintained, industry-supported trust fund to ensure all possible resources were being utilized to expedite the cleanup. Under the authority of the California Disaster Assistance Act, a proclamation of emergency allows the Governor's OES to deploy emergency personnel, equipment, and facilities and provide local government assistance to respond to the emergency.

November 10, 2007: The Coast Guard supported the U.S. Attorney in conducting a criminal investigation of the casualty. The Coast Guard's preliminary investigation had not discovered any vessel mechanical or system problems; human error was believed to be the most probable cause. The Coast Guard and the NTSB met to discuss the investigation and the Coast Guard transferred the investigation to the NTSB. The M/V COSCO BUSAN was moved from anchorage to the Port of Oakland, Berth 56. After an inspection and investigation, the vessel was detained by the Coast Guard under the International Safety Management ("ISM") Code, meaning it is not allowed to leave California until it is fully repaired and the safety deficiencies have been corrected.

The Unified Command continued containment of the oil using shore-side, boat, and helicopter surveillance patrols. Coast Guard helicopters were used to assess affected areas and determine which areas needed to be skimmed. Volunteers received HAZWOPER training from Coast Guard Pacific Strike Team personnel and then the volunteers deployed to Ocean Beach to assist in cleaning up oil. OSPR conducted wildlife recover training and certified the crews of 12 volunteer fishing vessels to participate and support boom movement and recovery operations. State of California Department of Fish and Game also organized, trained, and tasked volunteers in beach cleaning at organization and indoctrination centers in San Francisco, Marin and Contra Costa counties.

Over 30,000 feet of boom had been deployed, and 11,000 gallons of oily water mixture and 8,000 to 9,500 gallons of oil and seven cubic yards of oily solids had been recovered.
More than 450 people from 40 state, federal, local and private agencies were involved in the response, including 200 trained responders who supplemented the existing response teams. Resources included 20 oil spill response vessels, 12 skimmers, 29 work boats, 340 shore cleanup responders, four wildlife assessment teams, 23 shoreline assessment personnel, 20 wildlife recovery teams, 18 commercial fishing vessels deployed booms and assisted in skimming, three helicopters, and one state fixed-wing aircraft. Twenty-two beaches were closed.

November 11, 2007: Coast Guard helicopters were used to assess affected areas and determine which areas needed to be skimmed. A total of 12,270 gallons of gauged oil had been collected and decanted to date (decanting is the process of separating oil from oily water collected during the skimming process). More than 900 people from 40 state, federal, local and private agencies were involved in the response. Resources included 16 skimmers, 20 wildlife recovery teams, 20 commercial fishing vessels to deploy boom, and 416 contracted personnel manually cleaning 12 impacted sites in four counties. SCAT Teams coordinated with shoreline cleanup teams to clean contaminated areas. Additional SCAT personnel joined Coast Guard MSST small boats conducting waterside assessments of impacted piers in San Francisco and on Alcatraz.

November 12, 2007: Approximately 4,060 gallons of oil were estimated to have evaporated by this time. More than 27,500 feet of boom had been deployed. Resources involved in the response effort included: 1,048 personnel, including 641 shoreline clean up personnel, seven SCAT teams and 20 wildlife recovery teams. Additionally, skimmers and 20 fishing vessels were still deployed. OSPR trained 225 volunteers from San Francisco and 100 from Berkley to clean the beaches in their respective areas. The M/V COSCAN BUSAN was moved from the pier to Anchorage Nine upon approval of their repair plan. Twenty-two beaches remain closed.

November 13, 2007: Coast Guard assets conducted overflights for Senate staff, state and county officials, media and oil assessments. More than 12,745 gallons of oil had been collected and decanted; 27,000 feet of boom had been deployed; 11 shoreline cleanup assessment teams, seven SCAT teams, and 20 fishing vessels were deployed. The U.S. Attorney's Office and Department of Justice started conducting criminal investigations.

November 14, 2007: The Unified Command has moved from skimming operations to beach clean up, however there are still skimmers deployed to respond to oil sightings. More than 1,500 personnel are involved in beach cleanup and 400 Coast Guard personnel involved in the overall response. Captain Gugg relieved Captain Uberti as the Incident Commander.

Coast Guard chartered an incident specific preparedness review ("ISPR"). The ISPR is intended to be a fact finding body comprised of representatives from The City of San Francisco, California OES, Pacific States-British Columbia Oil Spill Task Force, Pacific Merchant Shipping Association, National Oceanic and Atmospheric Administration, and the Coast Guard. The intent is to identify strengths and weaknesses of the area contingency plan, regional contingency plan and overall preparedness system that was in effect during the incident.

ISSUES TO BE CONSIDERED DURING THE HEARING

This hearing is intended to look both at how the M/V COSCO BUSAN allided with the Bay Bridge and to examine the adequacy of the response to the oil spilled from the ship following the allision.

The issues include examining the time that it took from 8:30 a.m. until 4:49 p.m. to increase the estimate of the amount of oil discharged from the COSCO BUSAN. Given the early reports from pilots and other vessel operators in the area, should the estimate of the amount of oil discharged been increased earlier in the day? Even if responders did not know the exact amount of oil discharged, what changes to the response would have been made if there had been a significant

increase in the estimate of oil discharged (or at least notification that it significantly exceeded 140 gallons)? Did the Area Contingency Plan include provisions to require enough resources to be deployed within an adequate timeframe to control a significant oil spill before it disbursed through the Bay?

The hearing will also examine the specific circumstances of this event, including whether state and local officials were notified in a timely manner of the true magnitude of this spill (as is required under the oil spill response plan). Regarding the adequacy of the response to the oil spill, we will examine such issues as whether the response by the federal agencies and the private oil spill response contractors (who were working under contract to the ship's owner) conformed with the federally approved oil spill response plan for the vessel and for the area in which it was operating. Further, we will also examine the impact of this spill on San Francisco Bay, including on commercial activities in the Bay and on the marine environment.

More broadly, the hearing will examine what can be done to ensure that the human factors that were apparently at play in this allision do not factor into future accidents. The hearing will also consider what can be done to improve the Automatic Identification System (transponders)/Electronic Charting system on vessels to improve collision avoidance features. Further, we will assess whether there are difficulties in bridge communications between foreign crew members and U.S. pilots and whether problems are frequently encountered by U.S. pilots who are trying to read an electronic chart in a foreign language that may potentially use different symbols as navigational aids.

The hearing will also provide the opportunity to continue the examination of the Coast Guard's ability to carry out its traditional missions – such as oil spill response – while taking on significantly expanded homeland security responsibilities.

WITNESSES

PANEL I

The Honorable Gavin Newsom
Mayor
City of San Francisco

Panel II

Rear Admiral Craig E. Bone
Commander
Eleventh Coast Guard District

Ms. Deborah Hersman
Member
National Transportation Safety Board

Mr. William G. Conner, Ph.D.
Chief, HAZMAT Emergency Response Division
NOAA Office of Response and Restoration

Mr. Mike Chrisman
Secretary
California Resources Agency

Panel III

Mr. David Lewis
Executive Director
Save the Bay

Mr. Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Associations (PCFFA)

Captain Peter McIsaac
Port Agent
San Francisco Bar Pilots Association

HEARING ON SAN FRANCISCO NOVEMBER 2007 OIL SPILL CAUSES AND RESPONSE

Monday, November 19, 2007

HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
San Francisco, CA.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Golden Gate Club, 135 Fisher Loop, The Presidio, San Francisco, California, Hon. Elijah E. Cummings [Chairman of the Subcommittee] presiding.

Present: Representatives Cummings and Richardson.

Also Present: Representatives Pelosi, Lantos, Lee, Lofgren, McNerney, Miller of California, Tauscher, and Woolsey.

Mr. CUMMINGS. The Subcommittee is now in order.

Speaker Pelosi.

Speaker PELOSI. Thank you very much, Mr. Chairman.

On behalf of the people of California, the Bay area, I thank you so much for being so responsive to the request of Congresswoman Ellen Tauscher, Member of your Committee, to have this hearing so soon, and especially in light of the holiday coming up.

We are honored by our presence in our City. We are pleased to be joined by other Members of the Committee, Congresswoman Ellen Tauscher, Congressman Jerry McNerney, Congresswoman Laura Richardson, who will be joining us shortly, as well as many senior Members of our California delegation, from my right, Congresswoman Barbara Lee, Congresswoman Lynn Woolsey, Chairman George Miller, I mentioned Congresswoman Ellen Tauscher, mentioned Congressman Jerry McNerney, Chairman Tom Lantos and Chairwoman also, Zoe Lofgren.

Mr. Chairman, as you have heard over and over, over the years from us, all of us has a personal relationship with this bay. Every person who lives in the Bay area feels a sense of ownership for it. It is a source of environmental safety. It's a source of commerce, whether it's fishing, or commerce passing through on ships through our bay, it is a source of recreation. It's always, always renewing our community, whether it's taking my grandchildren down there to play in the water, or all of us joining together to make sure that we have the dredging funds and that that dredging is done in an environmentally sound way.

All of us have a stake, and have dedicated our work in Congress, in each of our offices, with a major emphasis on saving the bay. It is, as I said, a precious resource. Its biodiversity and fundamental

role in commerce and recreation make it essential to the vitality of the entire region. Protection of the bay, its safety, and its health, has always been a priority, as I mentioned, for our Members.

I remember when Chairman Miller went up, at the time of the Exxon Valdez, and he came back down and told us what was happening there, and informed us of how we needed to protect our bay. This oil spill and the quality of the response to the environmental disaster is of grave concern, given the harmful consequences that may have been avoided.

Following that Exxon Valdez spill, some of us introduced legislation in the 101st Congress to amend the Federal Water Pollution Control Act, to require the President to develop a Fish and Wildlife response plan that would better coordinate the efforts of various Government entities to protect fish and wildlife against oil spills. That legislation became part of the more major Oil Pollution Act.

And so, today's hearing will help us understand what could have been avoided and what more we can do, how to respond more effectively, and to, again, impress upon the Congress of the United States that this is not only important to us in our region, the San Francisco Bay is a national resource, a national treasure.

I want to thank you, Mr. Chairman, once again for your leadership on the Committee of jurisdiction, for the generosity of your time and changing your family plans so that you could be with us today. I think it speaks eloquently to your appreciate for what this bay means to us.

We are very proud in our community, Mr. Chairman, of our Mayor, who was recently reelected and will be our first witness today.

I'll yield back to you to recognize him.

As Speaker of the House, I am a witness and observer of this hearing, because I don't serve on any Committees. But, I wanted you to be sure to know how important your visit is to us, how important this bay is to our community and to our country, and thank you once again for joining us today.

Mr. CUMMINGS. Thank you very much, Madam Speaker, and before I begin, and first of all, I also thank you for your sense of urgency. Urgency is so very important, particularly, in these critical types of situations.

Before I begin, I ask unanimous consent that the following Members of Congress may sit with the Subcommittee on Coast Guard and Maritime Transportation and participate in this hearing, Congresswoman Pelosi, the Speaker of the House of Representatives, Congresswoman Ellen Tauscher, a Member of the Committee on Transportation and Infrastructure, Congressman Jerry McNerney, Member of the Committee on Transportation and Infrastructure, Congressman George Miller, Congressman Tom Lantos, Congresswoman Lynn Woolsey, Congresswoman Zoe Lofgren, and Congresswoman Barbara Lee, and without objection it is so ordered.

Of course, I also want to recognize the presence of Congresswoman Laura Richardson, who will be with us shortly, and is a Member, by the way, of this Subcommittee.

I particularly thank Speaker Pelosi and Congresswoman Tauscher and the entire Bay Area delegation and their staffs for their assistance in organizing this hearing. I wanted to commend

the Speaker and the Bay Area delegation for their leadership on this issue. They moved to hold this hearing and to begin oversight on this issue immediately, after the spill occurred.

The leadership is exemplified by the Speaker's presence with us today, and it is my honor to have her with us. The Subcommittee convenes today in San Francisco, California, to consider the circumstances that led the COSCO BUSAN, a 992-foot ocean-going container ship flagged in Hong Kong to hit the San Francisco open Bay Bridge on November 7th, an event known as an allision.

The allision created a gash of more than 200 feet long and 12 feet wide in the side of the vessel, which in turn allowed approximately 58,000 gallons of intermediate fuel oil to rush into the San Francisco Bay. The consequences of this spill have been simply devastating, evident with every oil-covered bird and seal and in the desolation of every closed beach.

It is the responsibility of the Congress to oversee the programs and operations of the Executive Branch. I've closely followed the reports of the events and the discoveries occurring in the wake of this catastrophe and, frankly, I'm deeply disturbed by and what I have been hearing. Too many questions remain unanswered.

This year, the Subcommittee has been receiving testimony from the maritime industry and labor detailing the loss of expertise in the Coast Guard's Marine Safety Program. Today, we are here to shine a spotlight onto the problems in all aspects of the Marine Safety Program, including prevention, response, and investigation, that this accident again brings to our attention.

If we cannot yet see clearly into every corner, or onto every oil-covered beach or isolated inlet, we will at least be able to point investigators in the directions where they should look for the answers we expect.

Let me lay out just some of the questions to which we need answers. Should the Coast Guard have prevented this ship from departing the port in heavy fog? Frankly, I'm interested in understanding how this ship could hit this bridge, as its position should be obvious even to those not trained in navigation. The Bay Bridge is not a small marker or buoy floating in the water. It is an enormous landmark.

Did the pilot understand the charts he was using to navigate the bay, and were there communication difficulties among the bridge crew members?

There are also questions about why the Vessel Traffic Service, manned by the Coast Guard personnel, asked the ship's crew what its intentions were, rather than warning it of the impending allision.

It appears, and I emphasize, that the final word on this matter will likely not be written until the National Transportation Safety Board completes its investigation, but it appears that this question was asked because the vessel was not completing a turn that is part of the normal course taken by ships heading to sea.

However, it is also unclear whether the Vessel Traffic Service was even able to warn the ship of the impending allision, because the tracking systems in place in the service center are not advanced enough to provide the kind of detail that would be necessary for such a warning.

Our National Vessel Traffic Service Systems were created by Congress as a result of a collision that occurred right here, under the Golden Gate Bridge in 1971, between the Arizona Standard and the Oregon Standard. Now, 36 years later we are back in the San Francisco Bay trying to understand why that Vessel Traffic Service did not, or could not, alert the COSCO BUSAN that its course would lead to disaster.

Regarding the response to the oil spill, the initial estimates of the amount of oil discharged from the COSCO BUSAN were ridiculously low, particularly, given that the entire spill occurred in what, apparently, was a very short span of time. And, some eye witnesses reported seeing a large sheen almost immediately after the allision, despite the fact that they, apparently, had many assets in the water around the COSCO BUSAN, very quickly after the spill Coast Guard personnel initially reported that only 140 gallons had been released. It was not until some eight hours later that the Coast Guard investigators reported to the Unified Command that nearly 58,000 gallons had, in fact, been spilled.

Why were the initial reports of the total volume spilled so inaccurate? We are not talking about being off by a few gallons here. There's a significant difference between 140 and 58,000. Did the Area Contingency Plan, agreed to by the Federal, state and local agencies, have adequate provisions to enable them to contain a significant spill in this area before it spread throughout the bay region?

And finally, what problems have occurred in the investigation of the cause of this marine casualty?

We now understand that the drug and alcohol testing of the crew members and pilot did not conform to the Coast Guard regulatory requirements. We also understand that the Coast Guard investigators were unaware of, and did not obtain, a copy of the voyage data recorder that contained valuable information regarding conversations on the bridge, radar displays, electronic chart displays, and the heading and speed of the vessel.

It is imperative that the Coast Guard and all parties to the this incident provide whatever information and records they have to the National Transportation Safety Board so that there can be a complete investigation, both of the events leading up to this accident, as well as of the responders' efforts.

I also emphasize that our Subcommittee will continue to follow this investigation as it progresses, until we get clear and definitive answers to every question, no matter how uncomfortable the questions might be.

Finally, before I close, I want to put the significance of today's hearing into a broader context. Since the beginning of the 110th Congress, when I assumed Chairmanship of this Subcommittee, our Subcommittee has been comprehensively examining the operational capabilities of the Coast Guard. The United States Coast Guard is an organization that is undergoing profound changes, as many of the agencies of the Federal Government have undergone after the terrible events of 9/11.

Prior to 9/11, the Coast Guard was a service that combined such responsibilities as conducting research, rescue operations and law enforcement operations, regulating the maritime industry, pro-

tecting our Nation's marine resources and performing some military functions pertaining to security.

After 9/11, while retaining all of these additional responsibilities, the Coast Guard has assumed significant new responsibilities for homeland security. The Coast Guard must ensure the security at ports and port facilities, it must assist in the roll out of the TWIT card that is intended to control access to secure port facilities, and it must conduct a variety of operations to ensure security around U.S. vessels and waterside facilities in Iraq.

Our Subcommittee has been assessing how the Coast Guard, integrating these new responsibilities with the additional responsibilities, and in no way do we question how critical the new homeland security initiatives are, the security of our Nation is, obviously, the highest concern to me, to the Subcommittee, and to this Congress.

I note that under the leadership of Speaker Pelosi, the first bill the current Congress considered this term was HR1, a bill that will increase the scanning of cargo containers carried to our Nation on ships from the current level of approximately 5 percent to 100 percent. However, the scene of oil scattered on the beaches throughout this region illustrates, in the starkest possible terms, how critical the traditional missions performed by the Coast Guard remain to our Nation, particularly, given our growing dependence on imported oil.

I often say that the Coast Guard is our thin blue line at sea, and we absolutely must ensure it is not being stretched too thin as it continues to seek balance among its missions. It must be prepared to stand between our Nation's 360 ports, 25,000 miles of domestic waterways, and 95,000 miles of coastline, and a spreading oil slick at the same time as it stands between us and the terrorists who threaten our Nation.

It is my understanding that Members of the Committee will be submitting their opening statements for the record. Is there anyone that—everybody consents? Very well.

Mr. CUMMINGS. We will now hear from Mayor Newsom, and thank you very much, sir, for being with us.

TESTIMONY OF THE HONORABLE GAVIN NEWSOM, MAYOR, CITY OF SAN FRANCISCO, CALIFORNIA

Mayor NEWSOM. Thank you, Mr. Chairman, and thank you for being here and convening this Subcommittee, and I thank the Speaker for her leadership and her willingness to organize this so quickly after the oil spill and, of course, the congressional delegation from the Bay Area is about as good as it gets. So, we feel in very good hands.

I will submit my written testimony as well, though I want to just very briefly, and I recognize the shortness of time, hit on five key points. One is the issue of notification, issue of incident command and response, volunteer management questions, issues that you brought up, Mr. Chairman, around navigational safety procedures, vessel control, and then the broader issues of clean-up and some closing comments.

It is, indeed, true, as you say, Mr. Chairman, the notification was lax, and, in fact, arguably, there was no notification, even of the 140 gallons of oil being spilled. It turns out the incident that oc-

curred, roughly occurred at 8:30 in the morning, wasn't til at 9:24 that a part-time fire boat operator, name of Phil McCormick, called our Fire Boat Operations and talked to a Lt. Dudier, about this incident. The Coast Guard did not call us, Fish and Game did not call us, it was a part-time fire boat operator that called to say something is going on.

We immediately began the process of coordinating potential dispatch of that fire boat, only to find out after we initiated calls to the Coast Guard that, indeed, there was an incident and they did not need our fire boat.

We then began to receive phone calls from our port, and representatives of the City Government, that were complaining about employees with headaches and nausea, and this is at 9:30, 9:45, 10:00, which was curious at best, in fact, precipitated a phone call with the port directors behind me saying, directly with me, thinking she, frankly, was over-reacting, to be candid, 140 gallons is significant, but I thought it was a bit of an over-reaction. Nonetheless, it precipitated in our desire to organize a conference call at 1:00 after the evacuation of our port and Pier One property was complete.

Again, we initiated that conference call. We were fortunate to have on that conference call the Coast Guard, that did participate, but, again, only with the information confirming this 140 gallon spill.

Hours went beyond the 1:00 conference call, and we were unaware that at 4:49 the state was notified that the spill was, indeed, much larger. Mr. Chairman, your comment about eight hours versus 12 hours, indeed, the State was notified of a 58,000 gallon spill, 53,500 to 58,000 gallon spill, at 4:49, the City was not. At 4:49, no one from the State contacted us, 6:00, 7:00 nothing had changed, still 140 gallons, 7:00, 8:00, 8:30, 9:00, all of a sudden on the radio, I'm in my car and I'm hearing about the fact it's 58,000 gallons. This is before the conference call was initiated at 9:00 from the State OES with all the various agencies. So, I'm finding out pursuant to a press release that the spill was not 140 gallons, but 58,000 gallons. Again, the State OES, apparently, had that information as well, and for whatever reason they did not notify us.

Now, here's why I think they didn't. You have very different procedures under the Oil Pollution Act of 1990, that are absolutely foreign to the procedures that are well organized out here to deal with all hazards response, as it relates to earthquakes, et cetera. In fact, we just worked for two years with your support Homeland Security money to fund the first major regional emergency operation plan in the history of our State. We have very strong protocols, the State OES being the lead agency.

In this case, pursuant to that Area Contingency Plan, Mr. Cummings, you reference, that protocol is different. The protocol in this place puts the State Fish and Game, respectfully, the Coast Guard, and "the responsible party," in control of that organized effort, not the State OES and not the local agencies that exercise on just this type of protocol day in and day out.

A consequence of that, we enjoyed a disorganized effort. We were in a liaison position, and let me say candidly, were not particularly embraced as liaison to this incident, nor were the other agencies

around the Bay, local agencies, and we experienced an enormous amount of frustration in that first 24 hours, say, actually, first 48 hours. These protocols must be addressed. They are 20 years old. You've got protocols in place for every kind of all hazard, but with oil all of a sudden all bets are off. Imagine if this was WMD, combined with oil, you've got chaos. We are just blessed, and oil is, you know, shouldn't be change the protocol just because oil is being used as a weapon here, and I think that absolutely must be addressed immediately. It's not a year, two, three years from now, that Area Contingency Plan needs to change immediately. You can work on the Oil Pollution Act later, but we've got to fix this Area Contingency Plan.

A third area is volunteer management. This is a City that prides itself on volunteer initiative. They were completely left out in the cold. We, again, have protocols in place for earthquakes. We have protocols in place for all these other emergencies with regard to volunteering. In this case, we do not, and I know that Rear Admiral Bone will talk a little bit more about that, they have acknowledged both the notification questions and the issue of volunteer management. We now, though, proudly have 1,450 certified volunteers that have gone through protocol and process, which has been established. We are working with the Coast Guard, but these things, again, as part of the Area Contingency Plan, need to be adopted and improved.

The issue of navigational safety procedures and vessel controls, you know, it's remarkable, Congressman Miller, I was listening to you on the radio this morning talking about these larger vessels. These vessels are larger because they are doing these wing fuel tanks, and they are not double hulled, and we've got to get these things, I don't care if it's bunker fuel or oil, no mammal on the Bay, no one who runs on the beach, could care less if it's oil or bunker fuel. These double hulls need to be addressed, and these ships that are faster and, obviously, are more prevalent in our Bay, are, potentially, more problematic because of these new strategies with these wing tanks.

We recognize as well that the traffic control systems, the more accurate damage assessment protocols need to be advanced as well. We appreciate the investigation on weather, and language, and all the rest, these clearly are important.

Clean-up, again, in the interest of time, very briefly, we just hope you are around a year, two, three, five years from now. It's what lies beneath the surface that I'm most concerned about. Yes, we are concerned about high tide coming in, but it's the plant life underneath. This is a migratory—one of the critical migratory areas, the Pacific Flyway, this is arguably the most extraordinary and complex urban estuary anywhere in the United States, again, 7 plus million people in this region, it's an extraordinary natural resource, and we need to make sure that our shell fish, our mammals, all our underwater plants, marshes, wetlands, estuaries and the like, are absolutely cleaned up.

And finally, I do think it's appropriate to talk about the issue of issue energy and dependence. It is only going to get worse before it gets better. We'll be back ten years with another potential problem if we don't aggressively address this, this Congress is doing it,

you haven't gotten the credit you deserve, keep doing it. We are ready to work with you. We are proud of our environmental stewardship, including a big tidal program right at the mouth of the Bay., We want to do more.

The more we do, the more others can do, and the less likely we have to see an incident similar to this in the future.

Again, that's in very broad strokes, very short strokes, what we've experienced, again, not dissimilar to what's been reported, frustration, finger pointing, sure, but we also believe moving from who is to blame to what to do, and I want to just underscore one point as it relates to moving away from who is to blame to what to do, when Rear Admiral Bone came in to San Francisco we were able to move away from who is to blame, and we began to focus on what to do. And, if there's anyone who deserves an enormous amount of credit, sure, tough questions, and he's get them, he's gotten them from us, it's Rear Admiral Bone, who has done an outstanding job, but again, we need to do a better job of advancing protocols, we need to make sure the State of California is front and center on this, we haven't heard enough focus on that, and better coordination with that area plan, and I think a review of that Oil Pollution Act 1990, because I believe that it is outdated and no longer relevant to the new realities post 9/11 and post Katrina.

Thank you.

Mr. CUMMINGS. Mayor, thank you, thank you very much, and I understand there will be no questions. But, you have assured us that you were going to stick around, just in case the panel members may have some questions for you off the floor.

Mayor NEWSOM. Absolutely.

Mr. CUMMINGS. Thank you very much.

Mayor NEWSOM. Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you.

Mr. CUMMINGS. We'll now hear from our first panel. We welcome Rear Admiral Craig Bone, the Commander of the Coast Guard's Eleventh District, Ms. Deborah Hersman, Member, National Transportation Safety Board, Mr. William G. Conner, Dr. William G. Conner, Chief of HAZMAT Emergency Response Division with the National Oceanic and Atmospheric Administration, and Mr. Mike Chrisman, Secretary of the California Resources Agency.

Thank you all for being with us. We would ask that you adhere to a strict five-minute rule. We ask that you summarize your testimony. We do have your written statements, and they will be made a part of the record.

Rear Admiral Bone, thank you.

TESTIMONY OF REAR ADMIRAL CRAIG E. BONE, COMMANDER, ELEVENTH COAST GUARD DISTRICT; DEBORAH HERSMAN, MEMBER, NATIONAL TRANSPORTATION SAFETY BOARD; WILLIAM G. CONNER, Ph.D., CHIEF, HAZMAT EMERGENCY RESPONSE DIVISION, NOAA OFFICE OF RESPONSE AND RESTORATION; MIKE CHRISMAN, SECRETARY, CALIFORNIA RESOURCES AGENCY

Admiral BONE. Good morning, Madam Speaker, Chairman Cummings, and distinguished Members of Congress.

On November 7, 2007, the Hong Kong flag motor vessel COSCO BUSAN was outbound departing the Port of Oakland in very heavy fog, under the guidance and direction of a California State Licensed Pilot, Captain John Joseph Cota, and the control of the COSCO BUSAN's master, with 23 crew members.

State Pilotage and participation in the Coast Guard San Francisco Vessel Traffic System, is mandatory for this transit. The Coast Guard has no record of communication from Captain Cota or the ship's master prior to departure reporting any unsafe, inoperable propulsion, steering, communications or navigation systems.

Early in the transit, the State Pilot, Captain Cota, communicated to Coast Guard VTS San Francisco his intent to pass through the delta echo span of the Bay Bridge, which is one of the easiest spans to pass through because it's over 2,000 feet wide.

The VTS operators are neither pilots nor masters. Thus, they do not control, give commands, give courses to steer, or give speeds to travel. They are trained to question a pilot when it appears the communicated intentions are not what, in fact, they had stated before, and to do so early enough so that a pilot or a master, if they need to, can take appropriate action. They are also trained not to distract the pilot with interruptions during any critical maneuver.

Approximately, two and a half minutes prior to the COSCO BUSAN's allision with the Bay Bridge, the VTS operator provided Captain Cota his observed course of the ship, and questioned if the pilot still intended to pass through the delta echo span of the bridge.

The VTS operator did not give the pilot or the master rudder commands, courses to steer, nor did he tell them to turn the ship into the bridge.

The allision of the motor vessel COSCO BUSAN, with the support structure of the bridge, actually hit the fendering system and knocked away about a 50-foot section of that fendering system, sending debris into the water, causing a gash, which we now know to be well over 200 feet long, the damaged area may be as high as 270 feet long. And, as you said, Mr. Chairman, 12 foot by 3 foot section. That means 12 foot wide, 3 feet deep into the vessel's hull.

Also, it resulted in between 53,000 and 58,000 gallons of fuel, which is intermediate fuel oil No. 380, which is commonly known as bunker sea fuel.

The forward ship's allision with the Bay Bridge marks the first recording of an ocean-going ship striking this bridge that we have on record.

We'll continue to work closely with the NTSB to determine what went so tragically wrong, as this ship is equipped with the most advanced systems, a ship with a licensed master, a State Licensed Pilot, charged by the State of California to safely navigate this vessel, and with a licensed foreign crew. Their failure to navigate and make safe transit through any of the four spans, any of the four spans of the Bay Bridge, resulted in extreme damage to this pristine environment and wildlife.

It resulted in unnecessary risk and health to the Bay Area citizens, leaving no options but to mount a unified response made up of Federal, state and local emergency responders, as well as oil pollution professionals. It compelled an unprecedented on the water response in now very hazardous conditions, due to floating debris, the potential of containers coming off of this vessel with hazardous material in them, that aren't going to float, by the way, up high, but maybe below, oil in the water, coupled with heavy fog, visibility only as far as 300 feet, and we had no air support until late that afternoon.

The selfless action, I'd offer, and dedication, and preparedness and training of those individuals resulted in one of the most successful clean-ups that I've ever seen in my 30 years, actual clean-up operations, and you'll have a chance to see why, and there's more than 1,400 responders that are actually responding right now.

Madam Speaker, Mr. Chairman, no one enjoys going under the microscope, but I know there's many lessons to learn, many lessons that we've learned from this, many to be learned, and there's improvements that need to be made. I also have to tell you that we have to congratulate the volunteers, it's unprecedented to see the number of volunteers, especially—this is the first time in my career I ever had people that wanted to pick up hazardous material off the water, I mean, off the beach. HAZMAT cancerous material, these people in this community have an unbelievable spirit of volunteerism, and, actually, inspired our crews. They were out on scene.

And, the men and women of the Coast Guard, we live in this community, the same as you, and we love this environment, and it kills us also when something like this happens. And so, I just tell you, we'll do whatever we can to keep from having it again, investigating why it happened, joining NTSB to prevent it, and we'll respond the same way as we did this time with regard to the actual on-site response.

Madam Speaker, Chairman Cummings, and distinguished Members of Congress, I greatly respect the responsibilities of this full and Subcommittee and I'm prepared to answer any questions you may have.

Mr. CUMMINGS. Ms. Hersman.

Ms. HERSMAN. Good morning, Chairman Cummings, Speaker Pelosi, and Members of Congress. Thank you for allowing me the opportunity to testify on behalf of the National Transportation Safety Board, regarding the containership accident here in San Francisco Bay.

The Safety Board, as you know, is an independent agency charged with investigating all civil aviation accidents, as well as accidents in other modes of transportation, including marine.

Our responsibility is to determine probable cause and issue safety recommendations to prevent such an accident from reoccurring.

The Safety Board seldom rules out any potential causes of an accident during the initial stages of an investigation. Although we have gathered a tremendous amount of information in the last week, there is still considerable work remaining for our investigators, including conducting additional witness interviews, analysis of the voyage data recorder, and verification of the documentation we have received from the Coast Guard and other parties.

After the allision, we monitored the events in San Francisco. On the morning of November 10th, it became clear that the incident was a catastrophe, and we launched a six-person team from our Washington office. I accompanied the team as the Board's spokesperson. Our team was in San Francisco that day, and we began our formal investigation on that Sunday.

Since then, the Board has sent three additional investigators to augment our team. Our investigative groups address specific areas, such as engineering, deck operations, human performance and emergency response. Other teams, such as the Voyage Data Recorder Team, will be formed as needed.

Our investigation is focusing on the safety aspects of this accident and the initial response. The issues we have identified so far and are investigating include, probable cause of the ship's allision with the bridge, damages sustained by the ship and the bridge, notification of the accident, and action taken immediately after the accident to limit and contain the spill.

This accident poses some challenges for our investigators. VDRs, or voyage data recorders, are relatively new. In fact, the COSCO BUSAN was not required to have a voyage data recorder. The technology is new, however, and there are a number of proprietary systems. Although we have been able to audition the voyage data recorder audio recordings, and see periodic radar screen shots, we have not been able to analyze the vessel's performance, such as engine speed, rudder movements, heading and speed, because we lack the necessary software.

We just obtained that playback software from the German manufacturer last Friday. We'll be convening our group to download all of that information next week.

Since the crew is entirely Chinese, all recorded conversations among the crew members are in Chinese. We will have a Chinese interpreter with our VDR group to make sure that all of the information is accurately transcribed.

The communications between the pilot and the ship's personnel was in English. We are reluctant to characterize what was said until we know the substance of all of the bridge communications.

Fortunately, accidents like this are rare. The Safety Board has not investigated the pollution aspects of a major marine accident since 1990. There are some new issues for us, and we will address those issues with the same objectivity and independence as we do all of our investigations.

We are fortunate in that we have other experts from other modes of transportation within the NTSB to assist us with the investigation; experts from HAZMAT and from Recorders.

The Board is presently in the initial phases of this investigation and there is still much work to be done. The investigation and final report could take as long as a year to complete. As new and significant developments occur, we will be sure to keep the Committee, Members of Congress and the community of San Francisco informed.

The Safety Board investigators are still on scene. We will be having our wrap up meeting this evening with respect to our on scene investigation and will be taking all of the information that we have obtained here back to headquarters to perform our analysis.

I do expect that our investigators will need to return to San Francisco to conduct some follow up work. Many agencies and groups have assisted the NTSB with this accident and responded to the accident that occurred. We would like to express our gratitude to the community and all of the groups who have assisted us.

This concludes my testimony, and I stand ready to answer any questions.

Mr. CUMMINGS. Thank you very much, Ms. Hersman.

Dr. Conner.

Mr. CONNER. Good morning, Madam Speaker, Chairman Cummings, distinguished Members. I'm glad to be here from my hometown of Mount Airy, Maryland to talk to you today about what NOAA has been doing in response to the COSCO BUSAN

I have got a little frog in my throat. Thank you.

My name is William Conner, I'm the Chief of the Emergency Response Division, Office of Response and Restoration, National Oceanic and Atmospheric Administration. Joining me today are Lisa Simmons from the National Marine Sanctuary Program and Jordon Stout, my scientific support coordinator for the San Francisco area. And, both of these individuals have been involved in the response to the spill here.

NOAA is a science agency. We bring science to response, to improve the response decisions that are made in an emergency situation like this, and we focus on hazardous materials and oil.

I want to talk about three things that NOAA does during a response like this, our three jobs. The most important ones are, to provide scientific support to the Coast Guard, to provide information that helps us protect national marine sanctuary resources that have been set aside because they are very special, and also to restore natural resources that are harmed by hazardous spills.

The Scientific Support Coordinator for NOAA is a key player in this whole package, and they are supported from Seattle by what we call the NOAA Home Team, a special group of scientists that do pollution modeling, injury assessment, and that sort of thing. Our Scientific Support Coordinator was contacted on November 7 by the Coast Guard, and immediately swung into action to order a trajectory analysis, and a weather prediction to aid the response.

So, shortly after noon on that first day, our first trajectory prediction was provided to the Incident Command Post that had been set up. This was based on our Physical Oceanographic Real Time System for observing ocean tides and water levels, and provided a picture of where the oil might go over the first few tidal cycles.

In your handouts, I have this handout on page four you'll see what a trajectory analysis looks like. Keep in mind that all this

blue and black here does not mean that the whole bay was covered with oil, but if you key in to the bottom there's a key that kind of gives you a hint as to what the water would look like from the air, where you'd have streaks and streamers of oil pictured down below.

In addition, we have a trajectory prediction that focuses on the very first hours of the spill, also provided in your handout, and we focused in, ground truth this with overflights, and it reveals that two hours into the spill the oil was already covering about four square miles of the Bay. We'll talk about that more later if you have interest.

We also produced overflights and pictures. On the far side there are the pictures from the initial overflight that was conducted at noon of day two, of the spill.

During the first week, NOAA delivered 14 overflight maps, 12 trajectory forecasts, 14 tidal forecasts, 17 weather updates, and five special assessments or establishment of protocols for the clean-up. We were very active.

Secondly, I'd like to talk about the Sanctuaries Program. Their role in the spill, as I said, is to provide information to protect critical resources. We have three sanctuaries in this area, Monterey Bay, Gulf of the Farallones, Cordell Bank, all three provide critical habitat to very special and endangered coastal species. They have a connection with the volunteer group called Beach Watch that was mobilized on the second day of the spill, and they've been very effective providing three to four people every day to the Incident Command since that time, as well as a couple of dozen volunteers every day.

Thirdly, I wanted to talk about restoration of natural resources. Under the Oil Pollution Act, the responsible parties responsible for restoring natural resources harmed by the spill. In order to do this, you have to do a restoration planning exercise, present a restoration plan to the public, and then the responsible party is responsible for paying to implement that plan.

I'm glad to tell you that the restoration planning has been initiated already. Several agencies from the Federal and State Government are involved, including the State of California, the National Park Service, the Fish and Wildlife Service and NOAA, and we've been working very successfully with the Responsible Party to get this expedited.

So, to wrap up, again, the theme here for NOAA is science, smarter decisions for response. We bring a package that starts with basic observations about the ocean, currents, tides, weather, place-based expertise in natural resources, combined with hazardous material expertise, to model, predict and observe while the incident is occurring.

Thank you very much for this chance to be with you.

Mr. CUMMINGS. Thank you very much.

Mr. Chrisman?

Mr. CHRISMAN. Thank you. Madam Speaker, Mr. Chairman, Members of the Committee, thank you for this opportunity to be here today, and to testify as a representative of the State Governor's Office.

As you all know, we have taken this incident very seriously, and I look forward to sharing some of our thoughts about this, about this tragedy.

Back in 1990, the Office of Spill Prevention and Response, we call OSPR here in California, was created by State statute, within the Department of Fish and Game, which is part of the California Resources Agency, and as Agency Secretary I sit also as a member of the Governor's Cabinet.

Joining me this morning behind me is John McCamman, the Acting Director of the Department of Fish and Game, and Greg Herner, Senior Advisor to the Director in the Department.

OSPR operates both as a prevention and response organization, and is one of the few State agencies that, in the Nation, has both major pollution response authority and public trust authority for wildlife and habitat. In this role, OSPR has a number of responsibilities, and they are developing with others a detailed Area Contingency Plan to prepare for and respond to oil spills, conducting natural resource damage assessment of these pollution events, implementing the requirement that vessels provide certification of financial responsibility or insurance prior to entering State waters, responding, investigating and enforcing pollution violations and operating a spill dispatch function 24 hours a day, and finally, focusing on spill prevention, guiding responses, and operating the field across the State.

Together, all of these add up to our Nation's most effective spill preparation and response agency.

Part of these efforts, of course, are the plans, the contingency plans that you've heard referred to in previous testimony and comments. OSPR prepares and rates three types of contingency plans here in California for all spill incidents, and consider this requirement an essential function of its overall mission.

Quickly, I won't go into them individually, but there are three of them. One is a Vessel Contingency Plan, developed by the shippers and reviewed by OSPR. Other is the Area Contingency Plan. You've heard that referred to in previous testimony prepared by OSPR, together with the Coast Guard. I have with me here on the table our Area Contingency Plan for this area. They, generally, contain important site information and response strategies for events like this. And, of course, the other contingency plan is the Oil Spill Response Organization Contingency Plans, that are developed and are part of every incident such as this.

Collectively, each of these plans work together to ensure that appropriate measures can be carried out during a spill and reduce the impact to the environment and public health.

You've heard a description of the incident itself. I won't go into that, the numbers of folks. Just know that OSPR was on the scene at the Coast Guard Station at Yerba Buena Island when the notification was made and immediately began to investigate the evidence of the spill.

What has the Governor been doing? What have we in California been doing since the spill? Since the oil spill, the Governor has inspected the spill area on two separate occasions, has taken three very significant actions as a result of his authority.

First, he declared a state of emergency in the City and County of San Francisco and six other counties directly affected by the spill. Secondly, he issued an Executive Order which closed recreational and commercial fisheries in the area impacted by the oil spill. And thirdly, he called for a comprehensive State investigation in the oil spill incident.

The Governor's Executive Orders direct the Department of Fish and Game, in consultation with OSPR, to identify the area impacted by the spill in this area.

Essentially, and when he closed the fisheries, this decision was not taken lightly, but was taken in an abundance of caution, recognizing the potential, and only potential, for public health at this time.

It is likely that this action will have consequences to the fisheries and the fish businesses here in San Francisco and the Bay, and we have, and will continue to work with those businesses to be sure these impacts are minimized to the extent possible.

As to the comprehensive State investigation, the Government has asked the Department of Fish and Game, OSPR, and the Governor's Office Emergency Service, to conduct a very aggressive coordinated investigation into the causes and responses of this oil spill.

Although we must wait for the investigations to be completed, we do not believe it's too late to start looking forward in what else that we can do to take every step to assure that public safety, health and the environment are, indeed, safeguarded, and we also support the investigations, we've been participating in the investigations being conducted by our Federal partners.

It's already been alluded to in some of the previous testimony here today, but before I close let me also join some of my colleagues here in expressing our thanks to the residents here in the Bay area and elsewhere, who have contacted us to volunteer. The response has been absolutely extraordinary.

The Governor requested that the California volunteers help coordinate the volunteer response, and certainly we have not been able to utilize everyone who wants to volunteer. It's critical that we, indeed, operate in a manner that we can protect the public health and safety of volunteers, and that means not placing them in a hazardous situation, especially, without appropriate training.

This is only a summary, we've got a big job ahead of us, and we look forward to working with all of you, Members of Congress, and our Federal partners, to get to the bottom of this, and deal with it in a proactive sort of way.

Mr. Chairman, Madam Speaker, thank you very much for this opportunity.

Mr. CUMMINGS. Thank you very much.

I want to thank all of you for being here this morning, and, Admiral, I want to start off with you. We're going to each have five minutes, and we are going to adhere to those five minutes very strictly, by the way.

Admiral Bone, at 9:25 a.m., a small boat from the station in San Francisco followed an oil slick reported to be three feet wide to Anchor 7, where the vessel was located. A slick three feet wide from the point of the allision of the COSCO BUSAN with the Bay Bridge

to Anchor 7 would indicate, even to the untrained eye, that a substantial amount of oil had likely been released from the ship, yet it was not until 4:49 p.m., that the Office of Oil Spill Prevention reported 58,000 gallons had been released.

How do you explain for us, because I think this is so crucial, this long delay in understanding that there was a significant amount of oil in the water.

Admiral BONE. Thank you, Mr. Chairman.

First off, we don't respond to a reported amount. That's a reported amount of oil in the water, that is not what you respond to. And, I'd offer that actually if you look at the handouts that we actually provided, you'll see the response equipment against what the standards actually are, you'll see that the response that actually went on scene far exceeded, ten-fold exceeded. So, we respond to what the potential is.

This ship, potentially, carried 1.8 million gallons of fuel oil. The response was not based on 145 or the ten barrels that we received later on.

Mr. CUMMINGS. How much did it carry?

Admiral BONE. It carries 1.8 million gallons on the ship, sir.

Mr. CUMMINGS. Okay.

Admiral BONE. So, what we had was what's reported to us, in this case by someone on the vessel. We had another report of ten barrels reported.

We sent a team on, while one team goes on immediately to ascertain the bridge first, then they go down to the vessel with an investigator on board, within an hour we are on scene and on board the ship, and we are trying to find out how much has been spilled in the water.

Meanwhile, the response is already underway, NRC, MSRC, are already mobilizing to move their equipment and mobilize it to put it on the water. Our boats, our small boats are operating on the water assessing the debris in the water, for those vessels that will be coming down, whether or not there's containers in the water, you lose containers overboard in heavy seas. We had no idea. We were in fog that's 300 feet that you could only see as you are out in this environment with an oil run. Our folks knew, and, actually, knew there was going to be more, they didn't know how much more, but everyone on scene, everybody, and I'm talking about all the emergency responders throughout this, got focused on the response, and they knew the more they saw, the more they had to deal with this.

And, I actually believe that what took place was, you are in a very hazardous environment, you start to get focused on people safety and getting this oil. The idea that somebody would intentionally, who dedicates their lives to, basically, protecting the public, and responding and going in harm's way, would try to keep information from somebody that they know is of value to them, sir, it just wasn't there. It was a mistake in the communications, but the response was absolutely fabulous. I'm talking about the on-site response. There was miscommunication, we acknowledge that. There's miscommunication, I think, that could be shared across the board by all of us involved in this response.

Mr. CUMMINGS. Well, let me tell you what concerns me, Admiral, and I heard what the Mayor said about you, and he was very complimentary. But, what concerns me is that, I don't want this to happen again, and from all I've read, and all I've seen so far, it seems as if it could.

Would you agree?

Admiral BONE. Well, if somebody doesn't communicate, I guess what I'm passing on to you, sir, is, this, I believe, is unique in the sense that because of visibility, and people got tunnel vision, for whatever reason, I'm talking about all responders, there's people with lots of experience that went on this, Federal, State, local folks that actually saw what they saw.

The idea of communication of that amount, people got focused, they thought when they got that team aboard they could find out very quickly, and normally you would, but the ship's side shell got smashed in, and so those sounding tubes that you normally would get a very quick reading from were not available. So then, they had figured on board, people are waiting, expecting to hear back from the ship, from the investigator on board what the amount would be.

Mr. CUMMINGS. Well, let me ask you this. You admitted that the Coast Guard was slow to realize the amount of oil spill released into the San Francisco Bay, but a November 14th press release stated that 12,745 gallons of oil has been collected. Is that right? And, that an additional estimated 4,060 gallons of oil had evaporated. How is it that you can measure so precisely the amounts of oil collected and evaporated, but it took more than 12 hours for you to estimate that 58,000 gallons of oil had been released? It's just, you know, it just doesn't make sense to me.

Admiral BONE. Mr. Chairman, again——

Mr. CUMMINGS. And then, you understand why I'm asking these questions.

Admiral BONE. Sure.

Mr. CUMMINGS. It goes to credibility, too, and people are relying on our thin blue line, and, fortunately, we deal together, work together on a daily basis, but I want to make sure that we are doing, all of our agencies are doing what they are supposed to do, particularly, the Coast Guard.

Admiral BONE. Mr. Chairman, let me just tell you, when we saw two tanks corrupted, we knew it was at least 500,000 gallons, I'm just saying anybody with experience knows that's at least 500,000 gallons. But, you don't want to go out and tell people that it's 500,000, that's what you could see.

Now below, you had to stick the other tanks, make sure you don't have water in those other tanks.

Mr. CUMMINGS. Wait a minute, you didn't tell me, you said you don't want to tell people?

Admiral BONE. No, I'm saying——

Mr. CUMMINGS. You heard what the Mayor said, he wants to know. He wants to know what's going on.

Admiral BONE. What I'm trying to do, people were trying to get an assessment of how much. They knew they were responding to it. They were trying to find out how much was there, so that they could accurately inform.

I'm not going to make an excuse for not telling the Mayor and the citizens that they didn't get an amount to say this have could put people in harm's way if they went down to the beaches. I'm not going to make that excuse to you, or any Member here.

I do believe that should have been passed, but I'm only trying to explain to you what transpired in the minds of the people that collectively responded, the people that are serving this public every day, and will respond and go in harm's way tomorrow if called upon.

Mr. CUMMINGS. My last question to Ms. Hersman, before we move to Congressman Miller.

Ms. Hersman, are you getting, the NTSB getting maximum cooperation from the Coast Guard, because your report is going to be very, very significant, to trying to prevent these kinds of things from happening again, and for helping us to figure out how this Congress can work to make sure that we use our power to do what we have to do.

Ms. HERSMAN. Mr. Chairman, our investigators did have some initial trouble when we first arrived on scene, I think, with the hand off of the investigation. But, through conversations with Rear Admiral Bone, Admiral Allen and others, I think that that helped free up the flow of information.

We now are, I think, getting very good cooperation from the Coast Guard, and we hope that continues through the course of our investigation.

Mr. CUMMINGS. Thank you very much.

Congressman George Miller.

Mr. MILLER OF CALIFORNIA. Thank you very much, Mr. Chairman, and thank you so much for coming out and joining us and having this hearing.

Admiral Bone, the Vessel Traffic System, is it state of the art?

Admiral BONE. Yes, it is.

Mr. MILLER OF CALIFORNIA. So that, the question of whether or not the right equipment was in place or not in place is not open to question?

Admiral BONE. No, and let me explain why.

Mr. MILLER OF CALIFORNIA. I don't want a long explanation, if it's state of the art I'll take your word for it.

Admiral BONE. It is.

Mr. MILLER OF CALIFORNIA. Okay. But, you point out that they are not masters, they are not captains, and so they are simply there as an advisory role.

Admiral BONE. Yes, sir.

Mr. MILLER OF CALIFORNIA. Should that be changed?

Admiral BONE. That's one of the things that I think that this—that Congress and we should all take a look at, for, particularly, high-risk, high-threat environments.

Mr. MILLER OF CALIFORNIA. Air traffic controllers are not pilots, but they tell pilots what to do in emergency situations, as I understand it.

Admiral BONE. Yes, sir, and they also have flight plans that are listed out.

Mr. MILLER OF CALIFORNIA. The question of the spill, Dr. Conner testified that within two hours it was probably covering about four

square miles. That's the problem you have when you have the tides of San Francisco Bay and oil on those waters.

Which party is given the authority to contact the Oil Response Team?

Admiral BONE. The owners of the vessel have the responsibility, and the master normally executes that on behalf of the owners, to contact the Responsible Party, it's right in their Vessel Response Plan.

Mr. MILLER OF CALIFORNIA. What happened in this case? Did the master or the pilot?

Admiral BONE. I think both, actually, made contact separately, but the reality for this is, some of the responders actually responded before the qualified individual even called them.

Mr. MILLER OF CALIFORNIA. So, how did they do that?

Admiral BONE. They heard about the incident.

Mr. MILLER OF CALIFORNIA. How did they hear about the incident?

Admiral BONE. On the radio is my guess, but the reality is some of these people were actually mobilized before they got contacted.

Mr. MILLER OF CALIFORNIA. Which people?

Admiral BONE. The National—NRC, National Response Corporation, was actually mobilized before——

Mr. MILLER OF CALIFORNIA. In your testimony you state that the pilot at 9:18 called and told them and said that the leak had been secured, that there were ten barrels and the leak had been secured.

Admiral BONE. The second pilot had actually passed that information.

Mr. MILLER OF CALIFORNIA. The second pilot.

Admiral BONE. Not the first pilot. The second pilot came aboard, he received additional information that there was ten barrels and that it had been secured.

Mr. MILLER OF CALIFORNIA. There is, I don't want to say there's testimony, but there's information in the record to suggest that when the relief pilot came aboard that oil was still leaking from the ship in a rather considerable amount.

Admiral BONE. I think you'd have to ask the pilots, but I've heard testimony——

Mr. MILLER OF CALIFORNIA. Have you received any evidence——

Admiral BONE. —I can only——

Mr. MILLER OF CALIFORNIA. —that that's so?

Admiral BONE. —we have heard that, although I haven't spoken directly with him, I have heard that. I can—I know that by 9:25, when our boat got on scene, all you had was a trickle, basically, or a dribble, you know, coming down the side about an inch wide.

Mr. MILLER OF CALIFORNIA. By the time the Coast Guard boat got on the scene.

Admiral BONE. Right, and——

Mr. MILLER OF CALIFORNIA. But, the pilot boat was there prior to that.

Admiral BONE. —and they said, and I think the pilots will be coming up, Pilots Association, and the people that actually saw the amount, but I don't think we are talking about a very large flow at that time.

Mr. MILLER OF CALIFORNIA. The Oil Response Corporation, that's located in the Inner Harbor of Richmond, is that correct?

Admiral BONE. Actually, they are located at various locations around the whole Bay, so that they can respond within the time constraints throughout the whole Bay.

Mr. MILLER OF CALIFORNIA. So, they responded, they responded with what equipment and what time frame?

Admiral BONE. Again, what I'd offer is, in here we've got a presentation that actually shows within the first six hours, but I know that there was two skimmers on scene within an hour of their initial notification. There was four skimmers on scene within two hours, and there was eight skimmers on scene within six hours, and this represents the six hours.

What I note is, this is what the plan calls for, 2,500. The reasonable—that's for maximum——

Mr. MILLER OF CALIFORNIA. I got that.

Admiral BONE. Yes, sir.

Mr. MILLER OF CALIFORNIA. Is the plan adequate?

Admiral BONE. I think that we need to take a look at the plan——

Mr. MILLER OF CALIFORNIA. Two hours, according to NOAA, and the trajectory model, and I remember when we put this trajectory model, we were so proud of it when it was brought to the Bay years ago, is this plan now adequate, two skimmers in four square miles?

Admiral BONE. Sir, I will tell you that there's a national standard that's put in place, if we are going to revisit the national standard, and say we want more cleaned up than that within a certain amount of time, but within an hour, I'm just trying to be reasonable, our rescue, for search and rescue, we have to get underway within 30 minutes.

Mr. MILLER OF CALIFORNIA. I understand, but in this particular situation, the Bay was, essentially, calm, was it not, I mean, it was foggy so there couldn't have been a lot of wind.

Admiral BONE. Well, the currents is what the issue is.

Mr. MILLER OF CALIFORNIA. No, I understand that, I understand that, but so we weren't cleaning this up in treacherous water, so to speak.

Admiral BONE. Well, other than——

Mr. MILLER OF CALIFORNIA. The question is, again, when you look at the trajectory model, it redefines San Francisco Bay, because it immediately, you know, it went out to the Golden Gate and went up and down the coast. the question is whether or not the response that is in place is adequate or not.

Admiral BONE. Again, I think we need to look at, we need to look at what the plan calls for, we need to look at what the expectations are, and decide on a Federal standard. I'm not going to make a judgment on that, sir.

I can tell you that 27 percent, almost 27 percent of this oil was picked up, and on average we get between 5 and 20, and that, not in conditions in fog, not in an open estuary like this where it flows through, you don't normally get 20 percent.

So, if you are going to go to this high end, I'm just going to say on every spill that's something for, I think——

Mr. MILLER OF CALIFORNIA. So, 20 percent is the high end.

Admiral BONE. —if you ask the science folks, they'll tell you what it is.

Mr. MILLER OF CALIFORNIA. No, I understand, I mean——

Admiral BONE. I've been on spills, Congressman, where 38,000 gallons have been released from a vessel, and zero has been recovered.

Mr. MILLER OF CALIFORNIA. Yes, well, we——

Admiral BONE. I'm just trying to give you——

Mr. MILLER OF CALIFORNIA. I understand.

Admiral BONE. —some perspective.

Mr. MILLER OF CALIFORNIA. I understand. The perspective is in the Bay and this accident at this moment.

Admiral BONE. I know, no one——

Mr. MILLER OF CALIFORNIA. That's the perspective.

Admiral BONE. Yes, sir.

Mr. MILLER OF CALIFORNIA. In the long run, we'll all be dead, but in the short term it's about the pollution of the Bay.

Let me just, if I might, and I don't know who at the table is responsible for this, but there's been discussions of personnel in the clean-up of this oil spill, with the corporation and response teams, the suggestion that there's been retaliation if they speak out on this, and I just hope that somebody will convey to the Response Corporation that they are interfering with the Federal investigation, and that's a violation of Federal law, because that testimony, whatever it is, I don't want to prejudge it, needs to be preserved and needs to be preserved in the right form. So, I hope that whether it's you, or whether it's the Justice Department, or the Safety Board, the people understand that, that this is a full-blown Federal investigation.

Thank you.

Mr. CUMMINGS. Thank you very much, Mr. Miller.

Let me just emphasize what Congressman Miller just said, and we've said this in this Subcommittee before, Admiral, that we will not stand for any type of retaliation of anybody, for coming and cooperating with this Congress or Federal agencies. I want to be real, real clear on that.

You've heard me say that many times.

Admiral BONE. And, Mr. Chairman, I can tell you that the Coast Guard, to my knowledge, has not told anyone to not say anything.

Mr. CUMMINGS. Or anybody else.

Admiral BONE. I mean, just because you directed it to me.

Mr. CUMMINGS. All right, I just want to make that very clear.

We'll now move on to Ms. Tauscher, and again, I want to publicly thank you for all your help in making all of this happen. Thank you.

Ms. Tauscher.

Ms. TAUSCHER. Thank you very much, Mr. Chairman, and it all goes to the Speaker's leadership to make sure that we could all be here today.

Admiral Bone, I want to follow up on a question that Chairman Miller asked about the VTS system. I understand that other VTS centers in the country, specifically, Houston and New Orleans, have an upgraded system, a new software and new monitors that we don't have here in the Bay area. Is that because of resources,

or because we are in a chain of getting new equipment that we haven't got yet? What exactly is that? And, would it be characterized that we don't have a state-of-the-art system right now?

Admiral BONE. Thank you, Congresswoman.

First, what was being done was, there was an older VTS, the VTS system that was in place, they created this new system that Lockheed Martin had put in place, that was an improved system, technical system.

Northrup-Grumman produced the first VPS system. When they saw that——

Ms. TAUSCHER. Is that the 1995 software?

Admiral BONE. —these are the earlier ones. When Northrup-Grumman found out that Lockheed Martin was going to get all the money for the new systems, they said, they contacted our C2 center and said, hey, we can provide that same capacity at a cheaper price. So, we are going to give you the same technology, you are just going to get a different view, but the same technology is being provided. You won't have to retrain your people on this new system, because they are already trained on this system.

And so, you have equivalent technology on both systems, and equivalent capacity and abilities on both systems. One just happens to be provided by one company, and another by another. That's the case.

Ms. TAUSCHER. All right. I'd like to go to this issue of the bunker fuel, because, apparently, this is pretty nasty stuff, and what's clear to me is that we need a lot more information about ships coming into our Bay that are going to be burning this kind of fuel, and, especially, if they don't have double hulls.

As many people know, the International Convention for the Prevention of Pollution from Ships requires double hulls on bunker tanks fuel, starting in August of 2010. Clearly, that doesn't help us right now.

My questions are, should we amend that requirement to say that older ships should be retrofitted? And, we are all aware of the financial requirements to do that, and how prohibitive that may be, but it seems to me that we need to know a lot more about the kind of fuel that these ships coming into our Bay are burning, that it's one thing to be coming in with a lighter load, but when you are going out, and you are fully—well, your tanks are full, it seems to me that the requirements of us knowing that, number one, you are burning bunker fuel, number two, you don't have a double hulled fuel tank, number three, we've got to know where you are, because you are insidious if you have a spill, as opposed to just being bad and damaging.

Can you kind of illuminate us as to what you think the most safe way for us to get that information, and should we have it before these ships are in the harbor?

Admiral BONE. First, I just want to make sure you are aware that it isn't that they are all actually required to have double hulls under the new standard, there's actually an alternative flow outflow that could be done by a ship owner. So, that's not lock solid that everybody would have to go to double hulls.

Ms. TAUSCHER. Okay.

Admiral BONE. I'm not a person that could say this is exactly what we should have with regard to double hulls. I actually think our emphasis and effort has to be placed on preventing the incident, not allowing things to hit things. Steel hitting concrete will lose every time, and that's what took place here. And so, we can't let — we can't afford—rocks will win over steel every time, too, and you can't control the sea state once a ship goes aground, it will work on it until it breaks it up.

So, we have to find a way to prevent these accidents from happening. We have to establish whatever control mechanisms and management, and we have to make sure we have the very best people operating them.

If we are going to bring in, we are bringing in ships now that can carry fuel as large as tankers back in the '70s, when most of these plans were first thought up. So, times have changed, we do need to look at this. We have to make adjustments in our safety system, and I look forward to working with Congress to do that.

Ms. TAUSCHER. Well, Admiral, let me clarify this. Are you saying that because a ship is burning bunker fuel it shouldn't be treated differently? Isn't bunker fuel the worst case scenario?

Admiral BONE. No, actually, there's other fuels that may have, or other cargos, and I'm not sure about bunker fuel, but there's other types of cargos of fuels that may actually be worse.

I mean, some people suggest gasoline or diesel, reality there is if you have a spill you have a huge flammable environment as well, and you have a very big safety standard if they hit something.

Ms. TAUSCHER. Would you have acted differently if you had known that the COSCO BUSAN was burning bunker fuel?

Admiral BONE. No.

Ms. TAUSCHER. Is that information valuable to you when you are attempting to deal with this kind of accident?x

Admiral BONE. Yes, it is, because if the specific gravity is greater than one it's likely to sink, or be suspended at least. Fortunately, when we tested this it was .93 to .95, both from warmer temperatures to colder temperatures, so we had a higher — we had higher assurance that it was going to be on the surface more than sinking when we were doing the initial response, and that's what really drove us to get out there early before it gets into the water column.

Ms. TAUSCHER. For all of the ships that are in our Bay, and going over to Oakland, do you have information all the time as to what kind of fuel that they are carrying?

Admiral BONE. I wouldn't say the specific fuel, but I would expect it's bunker, some type of bunker fuel that they operating on. It's usually the degree of sulfur that most people are talking about, and that has more to do with air emissions than the real fuel-specific gravity.

Ms. TAUSCHER. Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much.

Let me just ask you this quick question. Was there a senior investigating officer assigned to this?

Admiral BONE. Yes, there was.

Mr. CUMMINGS. And, who was that?

Admiral BONE. It's the senior investigating officer on — over all this is Captain Ross Wheatley, who has been assisting with the NTSB and been sitting in their investigation.

Mr. CUMMINGS. I'm just curious about that, I'll come back to that.

Mr. Lantos, Congressman Lantos.

Mr. LANTOS. Thank you, Mr. Chairman.

Ms. Hersman, representing the National Transportation Safety Board, you very properly say that it will take you a year to draw some conclusions. But, to the naked eye it seems that what we are witnessing is a cascading cavalcade of preventable mistakes.

There is zero surprise in this whole tragedy. There is a ship, there is a bridge, there is some fog. And, I find it incomprehensible that in the post 9/11 climate we should be sitting here as if this would be a new phenomenon. There is not one iota of surprise or new development in all that I have listened to and all that I have read about. Every single one of the items would have been projected, forecast and prevented.

The thing which is so disturbing to those of us who live here, and who feel a responsibility for this area, that all the agencies are really side stepping their responsibility. There are events which are surprise events. Some of these events are acts of nature, like the nightmare which is unfolding in Bangladesh as we are sitting here today. Some of these are terrorist acts. This was a routine movement of a ship in a well-controlled area. And, here we are facing an unspeakable tragedy and disaster.

I would like to ask you, Ms. Hersman, and then the Admiral if he's willing, what is your explanation to the fact that a totally preventable, several mistakes, has given us this cavalcade of calamities.

Ms. HERSMAN. Unfortunately, the Safety Board is in the business of investigating accidents. There are always a chain of events that could have been prevented, and that's why the Congress created us, so that we can make recommendations so they don't happen again.

We are looking at the man, the machine and the environment, as we do in every situation, to make recommendations so that either equipment can be improved, training, or checklists, or response can be improved, or if there are any anomalies with the equipment or the vessel, that those would be addressed.

You are right, it could be, it could be prevented.

Mr. LANTOS. It should have been prevented. Let me just take one small corner of this, linguistic competence. Are you satisfied, is the National Transportation Safety Board satisfied, that all the relevant crew members are qualified to function in English when they enter San Francisco Bay?

Ms. HERSMAN. That will be part of our investigation. We have—

Mr. LANTOS. But, it's not a new phenomenon.

Ms. HERSMAN. —not been able, we have not yet been able to interview the crew members.

Mr. LANTOS. But, do you think that the existing regulations and requirements are adequate with respect to linguistic competence?

Ms. HERSMAN. There are requirements that exist, that there be a language, a common language, aboard the vessel for safety purposes. We will be looking to see if that existed in this situation.

Mr. LANTOS. Do you think that the existing linguistic requirement is adequate, because there are plenty of reports concerning this episode that there was confusion in communications. In your own testimony, you said all of the conversation was in Chinese, and this will have to be translated.

Ms. HERSMAN. The Safety Board has looked at this issue in the past, and I know Members have raised the issue in aviation. Marine is no different, there are going to be interactions from crews from all around the world, whether they are airplane crews or marine crews. It's not unusual to have people come in to a port or an airport that don't speak that language.

But, what is important is that people who are communicating about safety essential functions can communicate with each other and be understood. In the past, the Board has made recommendations with respect to communications and language issues, common phraseology in the aviation arena. If there are issues here, we will look at those as well.

Admiral BONE. I really would never have expected this event to occur, because of the spans, and how wide they are, and the fact that this is one of the few ports that I've been to in the Bay area where you have deep water across the entire Bay.

I can't begin to tell you how or why this should have ever occurred. There's absolutely no basis in my mind's eye for this to have ever occurred. Something on board that ship had to go terribly wrong. I'm talking amongst people that have been deemed competent to carry out their mission, both by the State and by an international body.

I cannot stress that enough, I don't——

Mr. LANTOS. So, you agree with me that it was totally preventable.

Admiral BONE. —it was totally preventable, totally.

Mr. LANTOS. Yet, it happened.

Admiral BONE. Yes.

Mr. LANTOS. Is there any of the explanation in the regulations concerning fog? I mean, we have fog here all the time.

Admiral BONE. Yes, there are regulations, in fact, in the Inland Rules regarding steering and speed, with regard to fog, and there's caution that's, basically, placed within it, to both masters and pilots, as they navigate vessels.

Yes, visibility is included.

Mr. LANTOS. And, the regulations are adequate as far as you are concerned?

Admiral BONE. If they had been followed, and they had carried out their responsibilities promptly, we wouldn't be where we are today, sitting right here.

Mr. LANTOS. Thank you, Mr. Chairman.

Mr. CUMMINGS. Admiral Bone, let me thank you very much. Admiral Bone, I must follow up on something that—an answer that you just gave Mr. Lantos.

You said something, and I don't want to take the words out of your mouth, but something awfully wrong went on on that boat. Is that what you said?

Admiral BONE. Yes, well, I said something tragic must have taken place on board the ship, on board for people that have expe-

rience, that are there, for this event to have occurred. That's my opinion.

Mr. CUMMINGS. Well, you know, when I heard you say that, I couldn't help but think about the question of how do you explain the failure of the Coast Guard personnel to ensure that the drug and alcohol tests were completed in the time period required by your regulations, and why wasn't the ship's captain, who was directly involved in this incident, tested within the required period, instead of days after the incident?

You caused me to think about that, because I'm thinking about what can go wrong.

Admiral BONE. Yes, sir.

Mr. CUMMINGS. And, you just threw that one right at me.

Admiral BONE. Well, Mr. Chairman, I just want to, I'm not trying to throw anything back, but I want to make sure it's understood that the master, and the crew, and the pilot, were all tested for alcohol within the time constraints.

The master and the pilot were also tested within the time constraints for drugs, and all proved negative, for both alcohol, 0.0, also for drugs.

The remaining crew that's in the navigation portion of the crew are the people, not the master, not the pilot, both of those were tested within the time constraints, the additional people in the crew, which by the way is not the responsibility of the Coast Guard to ensure its tested, it's the responsibility of the employer, which in this case is the owner, to ensure they are tested by law.

The Coast Guard is not the one who goes out and administers this test, Mr. Chairman. We discovered that they didn't test the five additional crew. We caught it, we caught them, we made them get them tested. We received those results, and those, too, are negative.

Mr. CUMMINGS. Okay, who is the owner?

Admiral BONE. Regal Stone.

Mr. CUMMINGS. All right. I'm just going to briefly go to Mr. Miller for one question. Very well.

Mr. MILLER OF CALIFORNIA. No, I'm just, in one of the documents it suggested at one point that this ship was moving parallel to the bridge. That would be something terribly wrong, if it's going to——

Admiral BONE. Actually, Congressman, because of the way you come out from that particular area——

Mr. MILLER OF CALIFORNIA. Right.

Admiral BONE. —you will run parallel, and sometimes you will dip south in order to set yourself up——

Mr. MILLER OF CALIFORNIA. Right, when you are coming out of the Inner Harbor.

Admiral BONE. —for that bridge, so you maybe come out, and then normally you may set yourself south, and then make your approach, or you could come parallel and turn in.

Again, this span is twice the length of that——

Mr. MILLER OF CALIFORNIA. No, I understand, so you are saying it was parallel at the time it came out of the Inner Harbor of Oakland, and was moving toward the opening.

Admiral BONE. Well, I'm not going to put anymore words, NTSB has the investigation. What I wanted to make clear, though, Con-

gressman, is this vessel was not in imminent danger when that VTS operator called in. This vessel was not running into the bridge abutment. That's what everybody thinks from the information that's been passed out, it's false, and it's almost an indictment on the individual, who actually tried, you know, who made a notification.

And, let me explain why they called them and asked them that, if I could. The reason they are calling and asking their intentions is because they are going—they are telling them where they are going to pass. Well, there's a lot of other vessels in the system, and one of the main reasons for that Vessel Traffic System is to let them know, hey, this vessel is going to be coming through this span, so if you are coming don't go through that same span, choose the other span, or choose one of these others, so that they can anticipate, because these ships are large masses that will move, and stopping them, it isn't like on a car where you can just stop them, it takes sometimes almost a mile to stop a ship, depending on, in this case it was 1.3 miles from where it hit, and it something to the anchorage area, Anchorage 7.

Mr. CUMMINGS. Ms. Lofgren.

Ms. LOFGREN. The concern I have about this is very strong. You know, I was born and raised in the San Francisco Bay area, and to explain how we feel about the Bay, those of us who have lived here all our lives, I really can't.

I remember as a young staffer for my predecessor, Congressman Don Edwards, working for almost ten years to help establish what is now called the Don Edwards Wildlife Refuge, and then again in local government, serving on the Bay Conservation and Development Commission with our colleague, Anna Eshoo, who was not able to be here today, drilling the plans that we would have if there were ever an incident such as this over and over again, and now serving on the House Homeland Security Committee, the Border and Port Security Subcommittee.

And, I'll just say, my constituents are not impressed with what happened here, number one, they don't understand how an accident like this could be allowed to happen. I mean, as Mr. Lantos has said, fog is routine, it's not an out of the ordinary. So, it's prevention, but it's also response. And, we are not impressed by the response.

I mean, I've heard that from my constituents from beginning to end, and so I don't want to just complain, I want to see how can we do this better. How can we make sure if something like this happens again, we do a better job?

And, I was struck, Dr. Conner, by your testimony on what you were told about how many gallons had been released on November 7th, 420 gallons, and you did your mapping, and from all I can tell you performed appropriately under the plans as we had hoped, except that the amount that you were given was not correct.

Would your response have been different had the actual magnitude been told to NOAA at 10:00 a.m.?

Mr. CONNER. Thank you for asking that question, it's a really interesting one, and, basically, the answer is no, it wouldn't have changed.

The way the model works is that, basically, you throw a bunch of oil parcels into the Bay, and then move them around according to the currents and such, and the number of parcels doesn't change with the volume of the water, I'm sorry, the volume of the oil in the model, it's just that the amount of oil associated with each parcel changes.

So, the answer is no, in regard to the modeling. There wouldn't have been any significant difference.

Secondly, with regard to our response, we, basically, are very experienced. We get about 100 to 120 calls a year on spills like this. And, it is very normal for the early reports of the estimated volume to jump around until they finally settle out one or two days later.

So, basically, when we get a notification of a release into a critical and dynamic habitat like San Francisco Bay, we are full-bore responding, until we know for sure that it was a small release.

Our SSC was at a Regional Response Team meeting at the time of the spill in Las Vegas, and he was notified by cell phone, and immediately did his notifications and came back to San Francisco and reported to the Incident Command by dinnertime that evening.

And, we also stood up our Home Team in Seattle, and started our modeling, our weather forecasting, and our toxicity assessments, and so we were full-bore responding.

Ms. LOFGREN. Let me ask you this. One of the other comments I've heard from people in the Bay area, and maybe it's because the Committee I serve on is, you know, what if this had been some other kind of incident, not an oil spill, bad as that is, but a homeland security type of event. People didn't feel that the response was that on point.

Are you satisfied with the interagency response to this event, Dr. Conner?

Mr. CONNER. I think the safe answer to that is, we'll wait and see what the Coast Guard's investigation shows. We are going to participate in that investigation by providing a Scientific Support Coordinator from another region, who was not involved in this response. And, Admiral Allen has promised to have some kind of an initial reading within 90 days.

But, I have not seen anything, or seen anything reported, that would cause me to have concerns about the interagency coordination of the response.

Ms. LOFGREN. Let me just ask a final question, as my time is almost through.

A year ago, there was a large exercise, a major field exercise, according to your testimony, of the NOAA Safe Seas 2006, and part of that was to train volunteers to respond.

One of the complaints I have received, and I'm sure my colleagues have, is that people who were trained, who wanted to come, and this is the Bay area, people volunteer, people care about their environment, they came to help, I understand if people weren't trained that's one thing, but people that were trained were not utilized.

And, in your judgment, did that exercise yield the kind of effort that you wanted? I mean, the people we trained couldn't be used.

Mr. CONNER. Yes, I think the exercise was effective in raising the capability of volunteers to contribute to a response. It's really dif-

ficult, the first day of the response, setting up the Unified Command, developing the first Incident Action Plan for the subsequent day. I'm going to go out on a limb here and assume that getting volunteers involved is something that the Command tried to do in day two and day three. So, the volunteers may have been frustrated that they couldn't be——

Ms. LOFGREN. Well, they were, I'll tell you that.

Mr. CONNER. —involved.

Yes, ma'am, they couldn't become involved more quickly, but——

Ms. LOFGREN. I'd just like to ask you to think about this, if we've trained people, I know the City had trained people as well, shouldn't we, in advance, do some identification system, have that as part of our play. So, if there are people who are trained and they want to be there hour two, we are able to utilize them if we know and can certify that we've already trained them, instead of this situation, which was just infuriating to people.

Mr. CONNER. Well, one of the things that I mentioned in my testimony was that the Beach Watch volunteers that are associated with the Marine Sanctuaries Program, and were part of the Safe Seas exercise, were actually used starting the morning of the second day. And, I think the Admiral wants to say something about some of the other volunteers, if you would allow that.

Admiral BONE. Actually, all I was going to do is, that's what I was going to echo, that that training in Safe Seas 2006 was dominantly to help identify spotters and people that could identify wildlife, so that people could get there more quickly, and actually assist better with the clean-up, and move the skimmers who are response people, and that was, in fact, exercised.

We didn't, I don't think anybody anticipated, again, that people were going to want, that civilians were going to come in droves to actually handle hazardous material and clean it off the beaches. It just hasn't happened.

But again, we thank the community for doing it. It required us to adjust on the fly and get some training and put that together.

You are right, it should be in the plan, we are committed to putting it in the plan, and it's something that the Mayor and I have already talked about.

Ms. LOFGREN. Mr. Chairman, my time has expired, but I'll just say, you could have asked any one of us and we would have told you that our constituents would want to help.

Thank you.

Mr. CUMMINGS. Before we get to—thank you very much, Ms. Lofgren—before we get to Mr. McNerney, let me ask you this. You said something that was so critical just a moment ago. You said something had to happen on the ship, is that what you said?

Admiral BONE. I believe, yes, sir.

Mr. CUMMINGS. And so, while you are cooperating with NTSB, and you've got Ms. Hersman sitting right next to you, what would you tell them they need to look at first? You must have some idea, you must have, if you've zeroed it down to that ship. I mean, what do you think happened? What do you think went wrong?

Admiral BONE. Congressman, I think, I can't tell you all the things that went wrong.

Mr. CUMMINGS. But, I want you to tell——

Admiral BONE. Listen, I think, to be honest and fair to individuals, you know, the individuals on board the ship, to target one thing or another to be a causal factor, the causal or primary or secondary, like Ms. Hersman said, there's usually a chain of events, and there's a series of things that cause it to happen. And, having been a marine investigator, what may appear, just like it appeared to most people when they heard that the operator, you know, asked him if he still intended to go through, everybody jumped and thought, that vessel was targeting that pier and he should have warned him away, if I provide some other little bit of information everybody will jump on it and say, ah-ha, that's the causal factor.

I think that, as NTSB develops the full set of situation circumstances on this we'll know it. We would have done, we would do the same thing, as part of our investigation we had completed preliminary investigation, when we passed, we weren't complete in our investigation, and our investigation is ongoing parallel with NTSB's, while we are supporting them.

And, we'll come to the conclusions that we come to at the end of the day.

I'm not going to suppose, in fairness to the individuals, I'm not going to do that, sir.

Mr. CUMMINGS. I just asked you to follow up on something that you said, okay?

Admiral BONE. Yes, sir.

Mr. CUMMINGS. I understand.

Ms. Hersman, just one quick comment. The NTSB investigations are so thorough, and so, I mean, because they are supposed to be, and you do a great job, but it takes a while, doesn't it?

Ms. HERSMAN. Yes, sir, unfortunately, it takes a lot longer than everybody would like it to.

Mr. CUMMINGS. And, the average investigation takes about how long, I mean, if you just add a guess, year, two years?

Ms. HERSMAN. I would say a year, yes, sir.

Mr. CUMMINGS. My concern is, I think going to some of the things that the Mayor said, we want to make sure that these things don't happen again, I mean, like next month. And so, I just, I'm hoping that we can, as a Congress, can try to find ways, and we know you—we want you to do your investigation, we want it to be thorough, but we've got to make sure that we do some things in the meantime, I'm just saying this to our panel, that we need to deal with.

And, Admiral Bone, I want you to stay on for the next panel, stay around for the next panel. Will you do that?

Admiral BONE. Yes.

Mr. CUMMINGS. All right.

Mr. McNerney.

Mr. MCNERNEY. Thank you, Mr. Chairman.

I certainly want to commend you for your leadership on this issue, and the Speaker for helping to organize this this morning.

Mr.Cummings, or Secretary Cummings, we met a few weeks ago proactively to discuss delta water usage in the valley. And, this morning we are meeting reactively to discuss action that happened a few weeks later in related waterways.

Your agency is responsible for providing resources to deal with these sorts of issues. Do you believe that the State Resources Agency has sufficient resources for training and response in this sort of situation?

Mr. CHRISMAN. Thank you for asking that question, a good question, and one of the early questions that, of course, we asked at the State level, do we really?

And, quite frankly, at this stage of the game we think we do, but, quite frankly, what we are going to do through the investigation, through the joint investigation that we are going to do on this incident, we are going to ask those very, very tough questions. We are going to be very hard on ourselves, as a part of this overall investigation, we will have an answer for that.

But, insofar as available resources to respond pursuant to State statute, in concert with our Coast Guard partners and others, yes, we did.

Mr. MCNERNEY. Well, in that case, let's go ahead and make sure that that's a public process.

Mr. CHRISMAN. Absolutely, sir.

Mr. MCNERNEY. And, not behind some kind of closed doors.

What specific recommendations do you have this morning regarding improvements in the system that we have right now, that failed us on November 7th?

Mr. CHRISMAN. One, we just heard a conversation about that.

Mr. MCNERNEY. Especially in light of the Mayor's recommendations about the hulls and coordination.

Mr. CHRISMAN. Absolutely. From where we sit, and we just heard a conversation about the volunteers, the unbelievable number of volunteers that we had here in the Bay area. It, essentially, was, obviously, gratifying, but we weren't prepared, quite frankly, for the large numbers that came. We need to take a close look at that. We need to assess that. We need to make sure that, you know, that we can utilize all them.

All of the trained volunteers that we had, that had trained prior to this event, actually did respond, and were used.

Mr. MCNERNEY. So, you see that as your biggest weakness, managing volunteers?

Mr. CHRISMAN. As I sit from where I sit in this stage of the game, we need to take a close look at that, we need to do a—we do a very good job of that here in California, in terms of involving stakeholders in our natural resources, management programs, and all that. It's a part of the way we operate. We just need to do a better job.

Mr. MCNERNEY. Well, speaking from the Fish and Wildlife perspective, how serious is the damage out there, and how long is it going to take for us to recover?

Mr. CHRISMAN. We are just assessing that right now. As I indicated in my comments, the Governor, in an abundance of caution, closed the dungeness crab season, and, in fact, closed all fisheries in the affected areas laid out in the Executive Order.

We are in the process now of testing herring, surf perch, dungeness crab, rock crab and mussels. They are being tested now, and what the Governor has asked us to do is to make sure to have those tests, those testings done, the results of that testing done,

and then to work between our Office of Emergency Health Hazard Assessment, and our Department of Public Health, and the Department of Fish and Game, have those assessments done by December 1st, so we can, again, hopefully, there is no public health hazard, there has not been one, not been one at all identified up to this point in time, and we hope that that continues to be the case, and we can get these seasons open quickly.

Mr. MCNERNEY. Other than volunteers that are getting themselves out there without preparation.

Mr. CHRISMAN. That's right.

Mr. MCNERNEY. A member of your office was on board when the 146 gallon estimate was given.

Mr. CHRISMAN. Yes.

Mr. MCNERNEY. Does he or she agree with that, and if not, why didn't they make that information available?

Mr. CHRISMAN. You know, Congressman, I don't know the answer to that. That, again, we are going to have to get to the bottom of that, in terms of our assessment.

The person was on board, again, as you indicated and you heard in the testimony, quite a period of time between the time that that initial 140 gallons, I think it was 140 barrels, 140 whatever it was, was released, and then the final assessment of the total amount given the assessment that had to get done.

So, I'm not sure that that person on board could at that point in time have been able to assess the total gallons that actually were leaked. But, those are those things——

Mr. MCNERNEY. I mean, if you look overboard and you——

Mr. CHRISMAN. —that we are really going to take a look at.

Mr. MCNERNEY. —see a trail miles long, it's, obviously, more than 140 gallons.

Mr. CHRISMAN. Well, again, as I said in my testimony, we had our people at the Incident Command, at the Coast Guard Center, and within 30 minutes our people were actually responding to the event, and were beginning to assess what was going on, and were beginning to deploy——

Mr. MCNERNEY. Well, this gets back to the resource question.

Mr. CHRISMAN. Exactly.

Mr. MCNERNEY. The people need training that are going to be taking those positions.

Mr. CHRISMAN. That's right.

Mr. MCNERNEY. With that, I'll yield back.

Mr. CUMMINGS. Thank you very much, Mr. McNerney.

Ms. Lee?

All right, Mr. Miller.

Mr. MILLER OF CALIFORNIA. Admiral Bone, you suggested that 20 percent, this is really good, and I don't mean you passed judgment or value on that, but as oil spills go.

Admiral BONE. As oil spills go, 20 percent is considered good. Between 5 and 20 is what you see in oil spills, and I can tell you that——

Mr. MILLER OF CALIFORNIA. I think if most Members of Congress knew that we would probably recalibrate what we think the margin of prevention should be, because if you told your constituents

80 percent of the oil is going to just be out there in the environment.

Admiral BONE. Congressman, just again, just as you heard Bill mention, within an hour it spanned four square miles, and then it moves with the tide, and it's like being in a washing machine here, it goes in, and it comes out.

Even if you had everything right there, I'm just—oil moves.

Mr. MILLER OF CALIFORNIA. But, that goes to the question, we have a plan of disbursal of assets to clean up the oil that may not comport with the threat that exists today.

Admiral BONE. Exactly.

Mr. MILLER OF CALIFORNIA. Because those decisions were made in 1990 and in those early years, and even earlier, after the Oregon and the Arizona ran into one another, and we haven't repositioned, apparently, we've run some exercises, but I don't know if that's changed or not, and I'll leave that open for the record.

But, if you look at the NOAA charts here, in hour one you had a fair shot at doing something with the concentration, and hour two you had a fair shot of doing something with the concentration, and probably even in hour six, given that there was calm seas, that there were calm seas. But, when the tide changed, the game was all over, in terms of picking up any volume of oil.

Admiral BONE. I'd say, sir, within the first ten hours is really all you are going to have to get the volume of oil, because once it went to darkness you can't see oil in the water.

Mr. MILLER OF CALIFORNIA. No, I understand.

Admiral BONE. So, you really only had ten hours to get what you are going to get.

Mr. MILLER OF CALIFORNIA. But again, I think this raises the question, if the threshold now is that in San Francisco Bay we have an oil spill that we can expect under today's conditions, and technology, and what we are doing with it, that about 80 percent will probably remain in the environment.

Admiral BONE. Yes.

Mr. MILLER OF CALIFORNIA. You get some—I mean, even evaporated.

Admiral BONE. Yes, sir. I think, again, I think you are right——

Mr. MILLER OF CALIFORNIA. That's just not going to work. That's just not going to work.

Admiral BONE. —well, I know, but what I tell you is, and although I didn't even put it on here, the capacity, the maximum capacity required by law for a tanker is somewhere around 23,500 barrels per day capacity. I'm just talking about skimming capacity.

So, if we said this was your largest tank ship that came in to here, they exceeded that almost three-fold in the actual response.

What I was trying to tell Members was that, what they went out with was everything they had, very quickly, they brought more on, they were sending stuff up from Los Angeles area immediately on this spill, even though it was only reported what was reported.

And, I was trying to explain to folks, they were responding to the worst case or a large case event, not to the most probable, all the things that are in the planning functions.

I actually think that the performance by the contractor in this case far exceeded what our standard was, and that's why when

people said we aren't driving them hard enough, you had a Government Federal on-scene coordinator, along with a State on-scene coordinator, and if they weren't doing their job, we would take it over and we would direct the operation.

Mr. MILLER OF CALIFORNIA. But, again, looking at the NOAA data, Dr. Conner, you are welcome to join in here, but when I was at the Exxon Valdez, you know, we were skimming for months. We were just engaged in public relations, that game was over, you know, within a day or so, given the body of water there.

And, the same thing is going on here, we can keep talking about how many skimmers we were applying after hour six, seven and eight, that's interesting, but they are not picking up much.

Admiral BONE. Right.

Mr. MILLER OF CALIFORNIA. But, they look good out there.

Admiral BONE. Well, they are getting, they are doing what they can to keep the rest of the water, I mean——

Mr. MILLER OF CALIFORNIA. Yes, I understand.

Admiral BONE. Yes, sir, there was another 8,000, if you look at it, I mean, there was, in fact, the first day there was 8,000, the fact that you had another 8,000 that didn't get into the wildlife areas, didn't, you know, injure more birds and mammals, I think was still worthwhile pursuing.

Mr. MILLER OF CALIFORNIA. I'd just like to raise one other point, and I'm sorry to use your time.

Admiral BONE. Yes, sir.

Mr. MILLER OF CALIFORNIA. Mr. Lantos made a very specific point, we've known for many, many years where the Bay Bridge is. We have another hazard sitting there in the Bay rocks, and everybody knows where they are.

Admiral BONE. Yes.

Mr. MILLER OF CALIFORNIA. But, they could rip the bottom out of any one of these ships at any given time, given the deviation that took place here in margins of safety, you are talking about 2,000 feet. I just want to raise that, because we don't have time to go into it.

My colleagues have questions.

Admiral BONE. I wouldn't argue that.

Mr. MILLER OF CALIFORNIA. Thank you.

Mr. CUMMINGS. Thank you very much, Mr. Miller.

Let me just ask you this one last thing, and then we'll yield to the Speaker.

And, this is something that has concerned me and you know this. You know, in the recent reorganization of the Coast Guard, the Service established sectors, is that right?

Admiral BONE. Yes.

Mr. CUMMINGS. Which merged entities previously known as groups that were primarily responsible for Search and Rescue and Marine Safety Offices, which were primarily responsible for vessel inspection and compliance, environmental protection, and response to environmental situations. Marine Safety Offices included a Port Operations Department that specialized in pollution response.

This specialty no longer exists as a specialty within the newly created sectors.

I've said it before, and I'll say it again. I think post 9/11 what we did was, we stretched the responsibilities of the Coast Guard, and I'm wondering do you believe that we now—and while we stretched the responsibilities we didn't necessarily bring along the expertise, didn't necessarily bring along the finances that were necessary to take on all those responsibilities.

Do you think the Coast Guard has what it needs to do this kind of work?

Admiral BONE. Let me first answer your question, I mean, respond to your statement about we no longer have the expertise. The reality is, we do have the expertise, we demonstrated it. We brought together people that did search and rescue, along with people who do oil spill response, collectively.

Just like this case, you have a safety incident, at the same time you have a pollution incident. The pollution responder had seven years experience that came on scene. The marine inspector who went on scene to assess the damage had 17 years marine safety experience. The petty officers that were assisting had three years experience, another one seven years experience in marine safety. We have the expertise, sir.

And, in fact, you know, post 9/11 the assets that Congress gave us, the MSST boats, that's how we got, we had two MSST boats, one of them actually brought the marine inspectors and the investigation team over. The other one went and immediately started looking at, where's the oil, to help find out. We didn't have those before.

I used—I'm a marine safety guy, I'm a prevention guy, and I do response. The reality is, years ago when it was a group and an MSO, if I called up and I said, I need a boat to go do an oil spill response, they'd say, wait a minute, this is a SAR boat. We don't do that.

In today's environment, it's all under one head. You still have pollution response, and you have search and rescue, collectively. What you've done is, you've given synergy, this Congress has provided us more resources to actually make sure that we can go and respond to all threats, all hazards.

The issue of marine safety that you are actually talking about is a capacity issue. What we did was, during this time frame, of this build up of security, we received more assets for the security portion of that job.

At the same time, the industry grew almost 100 percent, the marine industry, and what we didn't do was keep pace with the resource base so that we could provide the services that the marine industry had come to expect, meaning within the time frames and within the level that they expect.

The expertise, I'll just give another example.

Mr. CUMMINGS. Okay, I got that, we are running out of time.

Admiral BONE. Yes, sir.

Mr. CUMMINGS. I guess I—you've been excellent in explaining to me all of the wonderful, the expertise we have. Then, what do we need to do? Just tell us that.

Admiral BONE. You need, just exactly what the Commandant has provided you sir, we need the additional resources in marine safety, not that we don't have technical capacity, we need the additional

resources within that so we can grow it to provide the services commensurate with the growth in the marine industry, especially, following Katrina, where the towing industry and the growth that the Gulf has seen is huge.

The Port of Los Angeles Long Beach has almost doubled, but we haven't provided the number of marine inspectors, the number of marine investigators, to actually carry out that function with the service delivery that actually industry needs for efficient and safe operation.

Mr. CUMMINGS. So, in the meantime, we have a problem then.

Admiral BONE. Well, what we have is an industry that's unhappy because they are not—they are getting delays. We aren't going to let the ship in until it's safe, but now we are telling them, wait offshore until we can get someone there.

Mr. CUMMINGS. Right. You are going to be on for the next panel.

Admiral BONE. Sure.

Mr. CUMMINGS. Madam Speaker.

Speaker PELOSI. Thank you, Mr. Chairman. I had not intended to speak again, just to take in the established facts that you are allowing us to do today, but I can't resist having heard the presentation of this panel. First I want to thank them for their presentation, and I thank you, Mr. Chairman, for giving us this opportunity to establish the fact, to recognize the needs, to see how this happened and how it can never happen again.

At the opening of our hearing, the Mayor put forth some questions on the table that I had hoped would be asked by this panel. It's about time, time makes a difference in the response, as the Chairman, Chairman of his Education and Labor Committee, our distinguished Chairman, showed you, the time made all the difference in the world in the response.

I still haven't heard anything from this panel that responds to the challenges put forth, or the questions put forth, by the Mayor of San Francisco and, therefore, the people of San Francisco.

I'm very pleased that the official family, Aran Peskin was here earlier, so many members of the official family are here, speaking eloquently to the concerns that we have, because it happened right here. But, it spread to all of the districts that you see here, and again, this is a national resource.

Admiral Bone, you know the respect that I have for the Coast Guard, we've been together on a number of occasions here in the Bay area, and I take great pride in commissioning the Pike and display that memorabilia in my office with great pride. And so, I am more willing to give the Coast Guard the benefit of every doubt in this.

When the Commandant, Admiral Allen, called my office on Friday, a couple days after the spill, and told me that he was doing an investigation of how this happened, I said, Admiral, with all due respect, your credibility is greatly diminished in this, you cannot do a credible investigation of yourself, when so many of the questions that are arising from this are why didn't the people of this Bay area know, when that spill presented a health hazard to people who work there, recreate there, and the rest.

So, I told him at the time that we would be calling for an independent investigation, and the NTSB, we've heard from Ms.

Hersman, what I'm discouraged about, though, is that it will take a year, as Mr. Lantos indicated. that's just too long. It's just too long, especially, since this could happen again and nobody knows why anybody didn't call somebody and say this happened. It's ridiculous.

So, I want you to know that in addition to what we are hearing here, I will be asking the Homeland Security Committee, which has jurisdiction in this matter as well, in the Appropriations Bill, Mr. Chairman, you and I have discussed this, to call for an Inspector General's investigation of how this happened as well.

One way or another, sooner or later, and, hopefully, sooner, we will get to the bottom of this.

Again, these Members up here have made this Bay a priority and their life's work, and their political careers as well.

One of our former associates, Speaker Leo McCarthy, was instrumental when he was Speaker, he made this plan possible for the Bay, that we would protect it, and it just seemed to have—accidents do happen, we want to know why it was preventable, but the fact that all that time could go by, all that opportunity lost, is something that I don't understand, having listened for days and weeks now, and I think our—the people we represent deserve better answers than we are receiving.

Again, I say that, as you know, with a special fondness for the Coast Guard, so it makes me sad. I was glad that Admiral Allen came out last week, a week ago, many of us who are gathered here walked the shore with him, to take a measure of what had happened in that week. We can do that every Monday, but the fact is, we need the answers, and we need them very, very soon.

And so, before this panel was adjourned, I wanted you to know that with all due respect for all that you did present, this time gap is something that has had an impact, and we have to know why.

Mr. Chairman, I want to thank you again for the attention you have paid to this, as soon as you knew what the gravity of the situation was, and I wish you had known that sooner. But, we didn't have that available to us.

Thank you.

Mr. CUMMINGS. Thank you very much, Madam Speaker, and I think you can summarize what the Speaker just said by saying we can do better, we can do much better. The people of this great State and our country deserve it.

We'll move on to our next panel, but thank you all very much for being with us. Admiral Bone, you can sit right where you are.

Mr. CUMMINGS. We'll now call up the next panel, panel three, Mr. David Lewis, the Executive Director of Save the Bay, Mr. Zeke Grader, Executive Director of Pacific Coast Federation of Fisherman's Associations, Captain Thomas Hand, Bar Pilot, San Francisco Bar Pilots Association.

As I said a little bit earlier, we would hope that you would try to stay within your five-minute time period, and let me just make a suggestion that you are very fortunate to have Admiral Bone sitting right next to you. So, if there are some issues that you want to raise, this is the perfect time to do it, okay?

Mr. David Lewis

TESTIMONY OF DAVID LEWIS, EXECUTIVE DIRECTOR, SAVE THE BAY; ZEKE GRADER, EXECUTIVE DIRECTOR, PACIFIC COAST FEDERATION OF FISHERMAN'S ASSOCIATIONS; CAPTAIN THOMAS HAND, BAR PILOT, SAN FRANCISCO BAR PILOTS ASSOCIATION

Mr. LEWIS. Thank you, Mr. Chairman, Madam Speaker, and Members of Congress.

I am David Lewis. I'm the Executive Director of Save the Bay, and I'm grateful for the opportunity to add my brief testimony here. I hope my full statement can be made a part of the record.

Mr. CUMMINGS. So ordered.

Mr. LEWIS. Save the Bay, and our 10,000 members, as many of you know, have been working for almost 50 years to protect and restore San Francisco Bay, and we are just one of many organizations of volunteers and professionals who have worked in the last ten days or so to respond to this crisis.

I have to acknowledge to you that our initial response was frustration, because of the outpouring of support from people who wanted to help, and not much opportunity to direct them usefully to do that. That quickly became anger, as we saw the extent of the spill, and I have to say as a Bay area native, and in my current capacity, that really my overwhelming emotion is embarrassment at the level of preparation and its clear inadequacies, for what Congressman Lantos underscored as a clearly foreseeable accident.

I want to say that you are asking all of the right questions about this incident, and its cause, and its impact. The answers are really crucial for improving collision and oil spill prevention, and improving integrated planning for coordinated response between the State, Federal Government, local cities and counties, and volunteers, that over the long term can reduce the damage that future oil spills cause, because they are going to happen here in the Bay, and other parts of our marine environment, as long as we rely on oil.

We do appreciate the heroic efforts the key agencies have made, including the Coast Guard, not just professional personnel, but also volunteers in the last ten days, but it's hard to conclude that the reaction and response was adequate. It was clearly too little, too late.

Just commenting on some of the previous testimony, the issue of notification, and of publicity about the extent of the spill. The importance is really beyond, I think, the Coast Guard's official requirements in the plan, because it delayed the deployment of local resources, including volunteer resources. I think the plans need to account for that better in the future, but even in this incident, if we tell people we think this might be a worst case scenario, among the things that could be done would be the greater deployment of containment booms, not just around the actual ship and where the oil was spilling, but in these remote areas around the Bay where the tides, wind and currents are transporting this oil. There's no reason that we can't have plans that include every marina and local creek advocacy group to have these kinds of containment booms to prevent oil from getting into the more sensitive environ-

ments that are spread all around this Bay. So, I think that is definitely something worthy of your attention.

Short term, as these clean-up efforts continue, I think it's very important that NOAA and the other State and Federal agencies have sufficient manpower and equipment, not just to work on the clean-up, but to do the damage assessment. They are, basically, collecting evidence that can be used against the responsible parties to make sure that we get all the restitution for the Bay and all the restoration resources that we should as a result of this.

I think next and also important is the midterm planning. You know, we have the Environmental Protection Agency and other agencies that have experience with oil spills. When you leave, and the glare of the lights goes off, there's important work to be done in months two through six, and I've already encouraged the Resources Secretary, State Resources Secretary, to try to convene those agencies to look a little beyond the horizon and get that planning started.

I'd rather focus my remaining time on how this is really a wake-up call, not just on the Bay's vulnerability to oil spills, but to the Bay's overall fragility and the urgent and overdue work that is needed to protect and restore this Bay. And, I have some specific suggestions in my testimony.

It's really time to accelerate the restoration of tens of thousands of acres of shoreline habitat that's already in State and Federal ownership waiting to be restored to tidal marsh and related habitats. The Bay needs it, the scientists have told us the Bay needs it. The property, most of the property is already bought, but we need the resources to do that restoration work.

Secondly, you have the largest urban wildlife refuge in the Nation, which Ms. Lofgren and her then boss, Don Edwards, helped to create years ago, and it's under funded. It's doubled or more in size in the last few years, and it doesn't have more resources just to protect and manage what is there, and it's a great resource for everybody in the Nation.

We need to tighten restrictions on trash and other pollution that are getting into our Bay every day. Fifty-eight thousand gallons is a lot of bunker oil, but millions of gallons of untreated stormwater discharge are going into our Bay every day, and they are poisoning fish and wildlife and other marine habitat.

And finally, we need to step up enforcement of Federal and State clean water laws and pollution laws, which, frankly, in the last decade have not gone enforced as tightly as they should have, against polluters, including sewage treatment plants, industrial facilities and other violators.

I know that your jurisdiction is the Coast Guard, but with the Bay delegation Members of Congress here, I feel it's crucial to underscore those ongoing needs for the Bay.

The Bay needs these actions to restore it to health, even more urgently after the devastating oil spill that we are suffering now, and the Bay area's quality of life and economy depend on a healthy and vibrant Bay, and we depend on your leadership to make that reality.

So, if this Bay is a priority for all of you, as I know it is, those are some of the things we need to do in the coming year, and years, and we look forward to working with you to help to do that.

Thanks for your support and concern, and for coming here today so quickly.

Mr. CUMMINGS. Thank you very much, Mr. Lewis.

Mr. Zeke Grader.

Mr. GRADER. Yes, thank you, Speaker Pelosi and Chairman Cummings and Members. I really appreciate the fact that you have responded promptly to this oil spill by coming out here, and also appreciate the fact that you are cutting into your Thanksgiving holidays to be here with us to understand what happened.

My organization represents working men and women in our West Coast commercial fishing fleet, and as you know fishermen, or commercial fishermen in particular, are probably those most impacted economically when one of these events happens. They are affected immediately as we've seen with the closure on the crab fishery, and I should say this is largely a de facto closure that the fishermen have put in, not the State.

I also want to point out too, because they are not fishing right now, I also want to point out too that there's long-term damage assessment with these type of spills. Fishermen, for example, in Prince William Sound, as a result of the Exxon Valdez, is still feeling the impacts there, particularly, to their herring fishery, and that was 18 years ago. So, this has both immediate impacts, as far as contaminating fish life, and making it unsuitable for consumption, but also has long-term impacts as far as the health and viability of these fish populations.

I want to thank, particularly, this group that's sitting here, because our West Coast Delegation, as the Mayor said, from the standpoint of the fishing industry, we really appreciate you. This group here, along with Congressman Mike Thompson, did a real job in trying to keep our fishermen alive, because as you know we've suffered now for at least three years of bad salmon seasons, much of them caused by this current Administration in their administration of water, both in the climate basin, as well as the Bay Delta, and I really want to thank you for getting that assistance to these fishermen, and I know how difficult it was.

Turning now to the next disaster we have faced on our hands, is this what's happened now with this oil spill in the Bay. Let me just discuss two aspects of it with you.

First of all, the fisherman's involvement in oil spill containment and clean-up can second some recommendations. Following Exxon Valdez, the passage of OPA-90, and here in the State of California the passage of Lempert-Keene-Seastrand, the private companies, as well as some of the agencies, contacted the fishermen about being involved in oil spill clean-up, and after all this made a lot of sense, they had the type of boats that they represented almost like volunteer fire departments, of resources out there that could be called in to place when an oil spill happened.

We did see extensive training of much of the fleet during the 1990s. However, towards the end of the 1990s we began seeing a fall off of that. The oil response companies, the private companies, told the fishermen, well, there's simply no more money. Nobody

said to them at any point that their performance was unsatisfactory, but up until that time there had been training, including deployment of containment booms, there had been certification, they had participated in drills.

We then brought that, and had brought that repeatedly, up when we were talking with the Coast Guard, with Cal Fish and Games, OSPR, which heads up California's oil spill response, and also with NOAA. In fact, we brought that specifically to NOAA's attention, and I know that at least three of their sanctuary people, when they had their big drill out here in 2006, said why aren't you using the fishermen, particularly, since they were shut down at that time because of what happened with the climate. We got no satisfactory answer, absolutely nothing.

So, in turn, when this hit, many of the people were in port, in fact, we had a large fleet sitting in port waiting to put their crab gear on, ready to go, no one was contacted, not by the Coast Guard, not by OSPR, not by the private contractor. On Thursday, the head of the Crab Boat Owners Association, which represents the local fishermen, contacted the Coast Guard. He was told, well, we don't need your help. If you want to help at all, you can volunteer to clean birds.

Finally on Saturday, the Port of San Francisco took it upon themselves, with their existing funds, and contracted with 20 fishermen. They were then put out in the water and worked until at least Tuesday, and they were effective out there. They put HAZWOPER people on board, and they were effective. Had they been called in within hours of the spill, we might have contained much more of this, but, basically, they were simply ignored.

Also occurring at that time too is that we had asked for the closure on our fishery, the spill happened Wednesday, the following Wednesday we finally did get a response, and that was pretty anemic or lame, I would say, because only a very small part of the area was closed. Fortunately, most fishermen were refusing to go until we could get testing to make sure the crab are going to be safe, and we hope to have those tests in fairly soon.

But, let me talk specifically about six recommendations we would have for you to take and consider. First of all, we need to have a provision, not just leaving it up to the private contractors, but mandate that we utilize local fishermen, this could also be charter fishing boat operators, the tugboat operators, and others, in our oil spill contingency plans. You can't leave that up to the volunteers, we have to tell them to do it.

Second, I think within the Unified Command you have to make sure that the local agencies are part of it, not outside the door with a liaison running back and forth. I think we could have done lots better had groups such as the Port of San Francisco, the National Park Service, the Sanctuary, involved in that room, not shunted outside.

Third, I think we have to do a better job of finding out how to utilize local knowledge, not just here, but everywhere. That was one of the important lessons that's come out of the oil spills in Alaska, particularly, the one that occurred in 2006.

Fourth, I think we need to have better oversight of these private clean-up companies. If we are, basically, going to establish what I

would call private fire departments, then we better damn sure make sure that we have some public oversight, and we haven't seen that for the past six or seven years, at least not effective oversight.

Fifth, we need to have funding, and Mr. Lewis has already mentioned that, to make sure that the long-term damage assessments get done, that once this subsides and all the cameras have gone away, that we not forget about it, because as we know in the case of Exxon Valdez, that impact is still there.

And finally, I think, and, perhaps, this has been answered by Speaker Pelosi's suggestion, but we had thought that, perhaps, an independent commission, similar to what we had after Exxon Valdez, is needed, not because this is an oil spill of that magnitude, but simply we better be prepared when we do have an oil spill of that magnitude or some other worse event, and we certainly weren't prepared for this one.

Finally, if I can, Mr. Chairman, I do want to commend two groups that we really thought really came through, when most every other agency botched it. One is the Port of San Francisco. They were absolutely magnificent in all this. Second, I want to point out, specifically, the Beach Watch Volunteers of the Gulf of Farallones. They weren't trained out of Seattle or Washington, this is a program they've had ongoing here for 25 years, and it existed primarily because of members of this panel right now who made sure that they had the funding to keep that going, and they really did a yeoman's job. And, I also want to commend members of my own fleet, who I thought did a great job in the little bit of oil spill clean-up that they got to do.

Thank you again, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Mr. Grader.

Captain Thomas Hand.

Captain HAND. I guess it's good afternoon, Madam Speaker, Mr. Chairman, and Members of the Committee.

I am Captain Thomas Hand, a San Francisco Bar Pilot. Thank you for inviting a San Francisco Bar Pilot to speak today, at least I hope I can say that at the end of this session.

I hold a U.S. Coast Guard Unlimited Master's License. I have been a professional mariner for 45 years, including 18 years as a Panama Canal pilot, and 17 years as a San Francisco Bar Pilot.

The San Francisco Bar Pilots have navigated vessels in San Francisco Bay and tributaries for over 155 years. We service an area that includes the entire San Francisco Bay, and the Ports of Stockton, Sacramento and Monterey Bay.

The waters of the San Francisco, Monterey, San Pablos and Suisun Bays, from the Gulf of Farallones to the Sacramento Delta, include nine bridges, 11 ports, 200 miles of shipping lanes, and countless hidden dangers.

It is the job of the San Francisco Bar Pilots to know every fathom and every nautical mile. By California law, every vessel in excess of 300 gross tons, moving within waters under the jurisdiction of the Board of Pilot Commissioners, is required to use the services of a San Francisco Bar Pilot.

Last year, the San Francisco Bar Pilots handled approximately 10,000, I repeat that, 10,000 vessel transits. Since 1986, a com-

prehensive training program, lasting approximately two years, geared specifically to the exceptional demands of barrier waterways has been a condition to becoming a San Francisco Bar Pilot.

After apprenticeship and licensing, every pilot continues professional training to stay current in all vital areas.

An applicant for the training program must be, at minimum, hold a valid U.S. Coast Guard Master's License, with a radar endorsement. He or she must have at least two years command or piloting experience, and a Federal pilotage endorsement.

As a State licensed San Francisco Bar Pilot, I am subject to the oversight, including disciplinary oversight, of the Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun.

The Board selects among applicants for available pilot positions, establishes and administers the training requirements, both initial and continuing, for the pilots, issues licenses, oversees the operation of the Bar Pilots, investigates incidents on the vessels piloted by Bar Pilots, and takes remedial and punitive action against pilots when appropriate.

This is a thorough, comprehensive and active regulatory system.

The pilots take their professional responsibilities to vessel owners they serve and the communities in which they work very seriously. We are proud of our long history of safe navigation.

Up to last week, the last major accident on the Bay was when two tankers collided near the Golden Gate Bridge in 1971. Neither vessel in that incident had a San Francisco Bar Pilot.

I am here to answer your questions about pilots, piloting and the pilotage system in San Francisco Bay and its tributaries.

Thank you.

Mr. CUMMINGS. Thank you, thank you all very, very much.

I think what I want to do is go straight to Ms. Lee, and I'll defer my questions until after my other colleagues have asked theirs.

Ms. Lee.

Ms. LEE. Thank you very much, Mr. Chairman. Let me thank you and our Speaker for your leadership and for these field hearings today. This is a very important moment for the entire Bay area, the State, and our country.

As you know, the vessel actually departed from the Port of Oakland, which is located in my congressional district, and I wanted to mention that the Port of Oakland has gone on record to declare a local emergency in the port area of Oakland and is proceeding expeditiously with response activities.

Also, on Saturday I had the opportunity to be with many of the volunteers in Berkeley, and I must say, and I want to join with all of my colleagues in commending the volunteers, because in spite of their outrage at what had happened they were moving forward with the clean-up under very treacherous circumstances. And so, I just want to also commend and thank the volunteers for this.

Mr. Lewis, let me first of all thank Save the Bay and all of our environmental organizations. Save the Bay, of course, is again located in my congressional district in Oakland, and want to just say that the volunteers, as you see this, and as you mentioned, were in many ways, and again, Congresswoman Lofgren said that it doesn't surprise any of us that we had many, many people willing

to volunteer, because of the treasure that we all have attempted to preserve over the years with regard to the Bay. But, I know, because I heard this over and over again, that there were many offers of assistance, but many of these offers were refused.

And, I want to get, from your perspective, Mr. Lewis, what exactly occurred from Save the Bay's point of view that prevented volunteers from moving forward? Was it only training? Was it lack of communication? Was it delay time? Or, what were the reasons?

Mr. LEWIS. I think in the middle of a crisis is a bad time to try to put together a plan, and sometimes that's necessary. So, I've seen the stacks of binders, loose-leaf binders, and plans from the State, and Federal agencies, it's pretty clear that they did not anticipate using, not just volunteers who hadn't been trained for technical skills, but the enormous number of personnel here in the Bay area from cities and counties who have appropriate training to do this work.

And, I received calls from San Francisco City officials over the weekend after the spill as frustrated, that they had trained personnel, firefighters, others with HAZMAT training, who could have been deployed, and I'm sure that's true for other cities and counties around the region.

So again, instead of focusing on finger pointing, I think one big take away is that, and this is not true everywhere, you know, there are less populated areas of the Coast and open ocean where a spill like this couldn't benefit from that, but we have 7 million people here, nine counties, over 100 cities, and that's a lot of trained personnel.

So moving forward, obviously, you have to have Incident Command and key agencies at the center of a response, but the next concentric circle should include the cities and counties that have these resources, and then a third circle of volunteers, maybe some of them have training and are already at the ready or on call, others who can be trained on short notice to do important work.

Ms. LEE. Thank you very much.

And, my second question is, in terms of just our entire ecosystem, and the wildlife, do you think we need to take our ecosystem in better consideration as we develop future plans, or do you believe they are, primarily, the mechanisms now are in place for the actions and for the protection of the ecosystem?

Mr. LEWIS. I think there needs to be better emphasis on preventing these kinds of accidents, but an awareness that accidents are going to happen, and that the next one will not be the one that we've prepared for the last time.

What that means is that, this ecosystem, which is so important to the State and the Nation, and, really, of international significance, is so stressed because we've treated it poorly for a very long time. And so, an incident like this, which is a small spill, a devastating spill, but a small spill, has more of an impact on the ecosystem because it's so stressed, because it's so fragile.

The fisheries, the wetlands, the birds, some of these are endangered species, some of them are just threatened species, all of them are at risk. So, yes, we need more of a commitment to strengthen the ecosystem at the same time that we try to prevent accidents like this from occurring in the future.

Ms. LEE. Okay, thank you very much.

And, Mr. Chairman, I hope, as we move forward, some of the recommendations which Mr. Lewis mentioned earlier will be a priority on the list of recommendations that the Committee comes forward with, because I think it's very important that the funding be there, and all of the other issues that Save the Bay and other environmental organizations have presented, be part of the record.

Mr. CUMMINGS. Yes. I can tell you, we are very fortunate to have the Speaker right here, and she has a lot of passion with regard to this issue. So, enough said.

Ms. Woolsey.

Ms. WOOLSEY. Thank you very much, Mr. Chairman, and thank you, Madam Speaker, for today's hearing, and thank you, Zeke Grader, for being here.

It might be apparent to everybody, we each got to pick our own person to talk to, and ask questions of, and, Zeke, I'm not going to call you Mr. Grader because nobody knows Mr. Grader, we all know Zeke Grader, I picked you, because I wanted to, before I asked you questions, I wanted to acknowledge once again how important the role of the fishing industry, your fishing fleet, and the fisheries are in proving your stewardship about our waterways, and how important your voice is, and has been, and continues to be, and following a very poor, well, salmon seasons, and now a threatened crab season, how it is so clear that the safety of the consumers, the value of our fisheries and our fish, are so much more valuable than threatening it with any kind of fishing that wouldn't be appropriate.

I just appreciate you, and I want all of us to appreciate you, because you make such a difference.

Now, speaking of experienced volunteers, your fishing fleet couldn't be more experienced, trained, ready, and you told us the hard time you had getting out there. So, would you tell us now, on top of that, lay out for us the resources that fishermen can bring quickly to a spill, when you are invited in.

Mr. GRADER. Thank you, Ms. Woolsey.

As I mentioned, here in the Bay we had, because of the beginning of the crab season, we had had probably a couple hundred, maybe a hundred anyway, I should say 200 to 300 in this immediate area, within the Gulf of the Farallones, fishing vessels that were getting ready to go crab fishing. These boats could have all been utilized.

Many of these boats are small, they can get into areas where some of the larger container vessels and clean-up vessels cannot, so they are important. They can get out and span out on the Bay, or in the case of the ocean, both I know the Half Moon Bay Association had attempted to participate in some of the ocean clean-up here, the Bodega Bay fishermen, both cases we have both large and small vessels that are capable of getting out and really, at least augmenting this oil spill so we could clean it up quicker and clean up more of it, I think, and it's just a shame not to be able to utilize these vessels the same way it was a shame we didn't better utilize the volunteers we have here around the Bay area in helping do the beach clean-ups and help with the wildlife.

So, I mean, it's there, and we could not, did not know why, you know, they canceled these contracts in the '90s, after people had been trained, nor why the agencies, and I say at least two of the agencies, three of the agencies, actually, two, both NOAA, and the Coast Guard, and Cal Fish and Game, did not act to try and make sure that those vessels were at the ready, nor did the private responder.

Ms. WOOLSEY. So, would you have the absorbant booms with, I mean, how would you get your fleet, get a hold of those booms, to do the work?

Mr. GRADER. What had happened in the past is, we had the equipment, booms, other clean-up materials, placed in strategic locations around the Bay or along the coast, where they could go to get them. It's sort of like, you know, again, a volunteer fire department. First you put out the call to bring all the firemen there, then they go to the fire house, they get their gear, they get their trucks, whatever, and go out. It's the same sort of concept here. It's not really new, we've been doing it for about 200 years in this country, and we could have been doing the same thing here, utilizing, better utilizing them, and they simply chose not to.

I don't know if it was complacency or the fact that these agencies had other things that they felt were more pressing, but, you know, like I said, we have taken a relatively minor spill and turned it into a major mishap.

Ms. WOOLSEY. And, are there appropriate containment booms for different areas of the Bay, based on tide and winds, that we should have in place?

Mr. GRADER. I think this would be part of an overall oversight of this. I think we need to have oversight of what our capabilities are. I think that's long overdue, and that's the reason I think an independent look at all of this, whether it be the IG's recommendation or an independent commission like we had after Exxon Valdez, you know, either one, just so we get the job done, because we really do need to have the oversight and determine what it is we need and have it in place.

Ms. WOOLSEY. Thank you, and, Mr. Chairman, this is the voice of a non-bureaucrat, who is an experienced and trained volunteer.

Mr. CUMMINGS. Believe me, I can feel his passion up here, I really—and I really mean that, and I want to thank you, I feel all of your passions.

Ms. Richardson.

Ms. RICHARDSON. Thank you, Mr. Chairman.

First of all, I'd like to applaud Speaker Pelosi for her leadership on this issue. Although this is in her own backyard, we would be really doing a disservice to all Americans to not realize that this 110th Congress has had priorities set before it, and one of them absolutely has to do with the environment and our responses, and our responsibility, as Members of Congress.

So, Speaker Pelosi, Members of the Northern California Delegation, and Chairman Cummings, thank you for bringing us forward so quickly.

Before I go into my very brief questions, I just wanted to say as a recap of some of the comments, particularly, Admiral Bone, that I'm concerned with, that I heard you discuss. You said of our Coast

Guard, there are people who serve the public, you didn't believe information was withheld intentionally, that reasonable actions were taken, national standards exist, and we didn't anticipate volunteers.

Let me say, first of all, just because we serve the public doesn't mean we are immune to not responding appropriately. When we talk about responsible actions, this was an incident that required extraordinary actions. So, reasonable is not acceptable, when we have tragedies we need people to go to the next level.

And, when you speak about national standards, we have to, as regions, adjust, just because we have national standards doesn't mean that they are appropriate.

In my area, 45 percent of the Nation's cargo goes through my area. So, if my area is only basing itself on national standards of other areas that may be only take up 5 percent, it's not going to be adequate.

So, let me go to my questions, which are for Captain Hand that we have with us.

Is it standard for a pilot to continue if radar is deemed inoperable?

Captain HAND. I would think it would depend on where the vessel is at the time that you have to make that decision.

Ms. RICHARDSON. Well, according to the National Transportation Safety Board, the pilot said he had concerns about the radar on the ship. According to one report, it conked out twice, once before departure from the port, and once after the vessel was underway.

So, my question is, in that instance would it be standard for a pilot to continue?

Captain HAND. In all due respect, not having been in that situation, I can deal with the hypothetical, obviously, if I was in a position myself, and I boarded a ship, and the equipment that I was counting on to get from A to B is not functioning properly, then I would not go.

In fact, I think if one of your radars does go out, it's supposed to be reported to the Coast Guard.

But, as I say, I wasn't in this, I don't know all the details. It could have been that the radar just wasn't tuned properly, I mean, I don't know the details.

Ms. RICHARDSON. My second question is, are pilots required to be familiar with electronic chart systems?

Captain HAND. We are trained in electronic chart systems. We are constantly, we are constantly being trained, and now more and more pilots are beginning to use their own laptops, but they are not recognized by the IMO, I mean, so the ships that have the electronic charts, yes.

You have to understand that pilots go on many different types of ships, face many different types of equipment, and so there's an educational process, and the more experience you have, the more you learn.

Ms. RICHARDSON. Well, in this case, I believe the pilot had experience of 26 years in this particular area, and stated that he was not familiar with the electronic charts.

My third question is, is it possible for radar and electronic equipment to work intermittently, meaning, be on, be off, going back and forth?

Captain HAND. It is possible.

Ms. RICHARDSON. Okay. My final question is, the records indicate that the pilot had been involved in four ship handling incidences in the past 14 years, and had been reprimanded the last year for errors in judgment for running a ship aground.

Should an individual with these types of instances, the history and their background, have been piloting this type of vessel? And, if so, what steps does your organization take to ensure that your pilots are able to better perform their duty?

Captain HAND. As to whether he should be piloting, that's in the hands of the State Board. We, as a group, do not control that. I mean, it's the State Board of Pilot Commissioners, and, obviously, whatever rulings they made it was in their decision to allow him to continue piloting.

So, I don't know how else to answer that, and I don't know, quite honestly, all the details of those incidents.

Ms. RICHARDSON. Well, according to an L.A. Times article that was stated, the Board of Commissioners, Board of Pilot Commissioners, Captain Patrick Maloney, had stated that this particular pilot was slightly below the average of the 61 Master Mariners in this particular area.

So, are there any other suggestions you could give us as your association of how we could ensure these pilots can respond?

Captain HAND. Again, with all due respect, I think that question should be posed of Captain Maloney, and to me, I don't believe everything that I read in the newspapers.

Ms. RICHARDSON. You sound like a politician.

As I close here, I just want to say that this has done tremendous damage, not only to the residents, to the environment, to the businesses, and industries, but what I want to stress is that although we are here in the Bay area, and this happened in the Bay area, this is, unfortunately, a perfect example of the fact that this Nation still fails to be properly prepared to respond to a disaster, and that's alarming to all of us.

Thank you very much.

Mr. CUMMINGS. Thank you.

Mr. Lewis, let me just ask you, you had in your prepared remarks you said the Coast Guard's preparation and performance before, and during, and after this accident, you said that there were shortcomings. Do you recall that?

Mr. LEWIS. Yes.

Mr. CUMMINGS. And, what did you deem those shortcomings to be?

Mr. LEWIS. Well, I think that the investigations will reveal that in full, but at minimum there are shortcomings in planning. I am in no position to fault the execution of particular individuals in the Coast Guard, I have a deep respect for the Uniformed Services, and, actually, worked in the United States Senate on Armed Services issues for many years. So, I think that's why you do investigations, and that's why you take an independent look at what happened, so we can see if there were actually failures of execution.

But, I think at minimum what we've seen is that there needs to be more and better planning, and at the Coast Guard level, again, at minimum, that would include a broader approach to Incident Command that includes other capabilities, resources, and agencies, at an appropriate level.

Mr. CUMMINGS. Admiral Bone, I just keep going back to this time period, you know, the 140 gallons, and then the 58,000 gallons, and I've got to tell you, it's troubling. I mean, I've listened to all the testimony, and the only thing I guess I can conclude is that we—and then when I heard the testimony with regard to the average amount of oil recovered it seems to me that we may have low expectations here.

And, I think that we deserve better than that. I think that we, as Americans, deserve better, and you've heard me in talking to the Admiral about the Coast Guard, I just think that we need to raise our standards a little bit higher. I think it was Mr. Miller, Congressman Miller, that was going into that line of questioning.

You know, and then I listen to Mr. Grader and talking about the fishing industry, and how, and I could feel your passion, I could feel it, I don't even know you, but, I mean, seriously, I could feel that you felt the pain, and not just for your fishermen, but for the environment.

And, as I was listening to both of you, I couldn't help but think about something that in Florida, in Disney, I guess it's Disney World, in Florida, when I took my daughter there last summer, it had, over the Animal Kingdom it has this statement, it says, "We did not inherit our environment from our foreparents, we borrowed it from our children."

And so, you know, I just—I'm wondering whether we are having these low standards, and as a result of that low standards, and being caught up in an atmosphere of mediocrity, that's what I feel, those are my words, Admiral, whether we then let our children down.

You know, it just seems to me that we can do better. This is the United States of America, this is—I mean, this is a country that sends people to the moon, and it seems as if we would be able to figure out something between 140 and 58,000. I mean, if you told me 588,000 I wouldn't feel so bad, but 58,000, with a 200 foot gash in a boat, in a ship, I mean, it just—but I'm hoping that as we go along, and, Ms. Hersman, I'm glad you are still here, I'm hoping that as the NTSB goes through its investigation that you will bring to it the feeling, the urgency of all these Members up here, because their passion is strong too. I mean, they want this thing resolved.

And, as Ms. Richardson said, this is not just about San Francisco. I mean, this kind of thing can happen in the Chesapeake Bay, where I live, and so—and it can happen all over this country. So, that would, I just hope that we can do better.

Did you want to say something, Admiral?

Admiral BONE. Yes, sir, I know we can do better, and I think we are already doing better. I think the Mayor brought up one of the most important points, and that was the inclusiveness of the City, not just in the planning, but in the exercises.

I think the reality in today's environment, in a post 9/11, is that we have to—these plans were written around just oil spill response,

and in today's environment we have to really look at all threats, all hazards.

We have, as he said, a state-of-the-art command and control and information network that was put together around emergent issues with security. We have to bring our planning processes together. We have to bring our command and control and Unified Command processes together, in order to do this better.

One of the things that actually Congress has directed us is to put integrated command centers in place, so we've yet been able to accomplish that, but it would have linked this communication gap, we would have been together. We will be together without those centers, but it surely would have provided the State, the Federal, and the local collective eyes on scene when the information came in, and disperse out, for all threats, all hazards, for security.

And, I'd offer that the Members here, and I've heard what they've said, I don't disagree at all that we could have used, and informed better, the people to boom their local areas. We can do that today. We can do that tomorrow, and we'll work towards that. We could have used emergency responders in the City of San Francisco, and I've committed to the Mayor to go forward and do that.

I'm not going to wait until NTSB comes out to say this is what you need to do. We are going to do that. And, as far as the fishing boats, it was actually on day three when I came in and I turned to the Unified Command and I said, are we using the fishing vessels? We need to find a way to use these other vessels in order to increase our capacity and capability.

And, they moved forward and the City actually stepped up and said, we will coordinate that, and we'll lead that. And, the liaison effort, exactly, in the post 9/11 environment we have to have better coordination, better use of volunteers and people, and not just what I'll call non-governmental entities, we've done all this planning with government entities, with industry. Industry brings a tremendous amount of capacity. We learned that after 9/11. Who do you think restored, and the whole business continuity issue, we have a lot—we can do better, and we are going to do better, and we will do better, and the Commandant, as you know, as you Members know, has committed to an ISPR process, which is an incidence preparedness review for this spill, which will look at those readiness issues, will look at the planning process issues, and will look at our response.

And, I can tell you that he's not—he put 90 days on this, he didn't put a year, he said 90 days I want a report, it's going to be made up of Federal, it's going to be made of State, local and industry representatives. We are not going to wait, we are going to move forward, sir, and I want to make sure all the Members here know, I'll be moving forward in deliberation and process to make sure that's done.

Mr. CUMMINGS. We are going to close down the hearing in a minute, but I want to, again, thank all of our witnesses for being here, and I want to thank—I'll tell you, one of the things that has moved me more than anything else is the fact that so many volunteers came forward. That says a lot. People that were willing to take their time, perhaps, risk their health, because they wanted to

make something, an environment better for others. That says a lot. Nobody was paying them.

And, it seems to me that if they can do that, we ought to be able to do our part, to make sure that we maintain a safe, and clean, and healthy environment.

And, Madam Speaker, I want to thank you for your leadership. The urgency and the fact that you care so much about these issues, and long with all of our Members, I thank all of you. I've done a lot of hearings across the country, but never have I seen this kind of response from the local Members to come out and to give it everything they have, and I want to thank all of you. I truly do.

And, to the people in this area, you have given us, in the Congress, the catalyst to do everything that we can to make sure that we leave a tremendously wonderful and better environment than the one we found when we were born, and we are going to work hard, and this is not the end.

A number of the reporters have asked me a little bit earlier, where do we go from here. What we were hoping to do is shine some lights here, and I think we've shined some. I can't say that I've been satisfied with all the answers. I agree with the Speaker, there are some things that I'm still unsatisfied with, but we're going to get to the bottom of it.

And, Madam Speaker, I want to thank you, too, for moving towards the IG investigation, because I think we need to shine as many lights as we possibly can, and we need to look under every single rock, and I think somebody said that they hoped that we would be around four or five years from now, so that when we look under those rocks we can see what was happening. Well, we plan to be there until this thing is completely resolved.

And so, with that, Madam Speaker, I'll yield to you.

Speaker PELOSI. Thank you very much, Mr. Chairman.

Once again, I want to commend you for your leadership immediately upon learning of this spill, and then the plans that you made to be here for this important hearing.

I join you in saluting the volunteers, that's a reflection of the appreciation we have for San Francisco Bay, in terms of its vitality, of its commercial importance, of its recreational significance and its environmental just value that we place on it.

I know I speak for all of my colleagues when I thank you for holding this hearing. You speak to their presence here, and I salute them as well. They are here because they are always here about the Bay, they, the word goes out and we are there.

As I said, many of us were with the Commandant last week when we walked the beach, but we were all there when we dedicated the Don Edwards Refuge. Every piece of it is important. You remember that the, every piece of this is very, very important to us.

And so, I am pleased especially, I know again my colleagues want us to give a special last welcome to Laura Richardson, a Member of Congress just for a few months, on this important Committee, and taking the time from coming from Southern California, a Member of this Subcommittee, to help Mr. Cummings when we go back to proceed with this.

I look forward to the ongoing work of the Subcommittee. Congresswoman Lofgren sits on the Homeland Security Committee, and it is that Homeland Security Department which her Committee oversees that we are asking the IG of that department to launch an investigation.

Something is missing in this picture. Time equaled clean-up, 20 percent may be satisfactory to you, Admiral, mediocre to the Chairman, but could it have been better, even in the interest of—even with the difference in those hours.

So, recognizing the importance of it, I'm so impressed with the turnout that we have for this hearing as well, and the very serious interest that everyone has taken in it.

I want to add to the comments of our colleagues in commending Zeke Grader, and Captain Hand, the Bar Pilots, Mr. Grader from the fishermen here, and Mr. Lewis from the Bay keepers, it is—your work, Save the Bay, excuse me, Save the Bay, your work is so important, and little did we know a month ago that we'd all be sitting here in a hearing of this kind without really the adequate answers for us to give those stakeholders and this magnificent resource that God has given us, the San Francisco Bay, and all that it flows out to.

But, answers we will get, the sooner the better, and we simply could not treasure and value it without the work and leadership that all of you provide.

So, thank you for that leadership.

And again, Mr. Chairman, I want to give you a big San Francisco applause, for our Chairman.

Mr. CUMMINGS. Thank you very much, Madam Speaker, and with that we will adjourn this hearing.

Thank you.

[The Subcommittee was adjourned at 12:50 p.m.]

SAM FARR
17TH DISTRICT, CALIFORNIA

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November 19, 2007
Rep. Farr's statement in regarding the San Francisco Bay Oil Spill

Chairman Cummings, Ranking Member LaTourette and distinguished Members of the Subcommittee, thank you for holding this hearing into the causes of the Cosco Busan oil spill and the response to this devastating event.

My district lies roughly 50 miles south of the area affected by the oil spill. Even so, the Marine Wildlife Center at the Long Marine Lab in Santa Cruz is treating birds injured by this spill, and the NOAA Weather Service in Monterey played a pivotal role in providing wind and sea forecasts necessary to predict the spill's trajectory and assist in containment. The people of the California's Central Coast pulled together to face this environmental disaster.

The Coast Guard reported that approximately 500 volunteers have been trained and are assisting the beach cleanup efforts, while 20 fishermen are working to soak up oil in the bay. But initially, these volunteers were turned away because the toxic oil poses a health threat. This begs the question: why did the Coast Guard wait *four hours* before alerting the people of the San Francisco Bay to the extent of this toxic oil spill? By withholding this information, they allowed people to unknowingly surf, fish, and play in the same toxic oil that caused the Coast Guard to refuse free help to clean it up.

This spill may be the largest spill the bay has ever seen, but it is much smaller than devastating events such as the Exxon Valdez disaster, which was 200 times larger. However, the poor response caused a relatively small spill to develop into a major disaster for San Francisco, potentially costing more than $100 million dollars.

Many now agree that the response was botched. The ship was never boomed off, the size of the spill was grossly underestimated, cleanup crews were notified hours after the spill, and when they initially responded they didn't bring cleanup equipment. The crews that provided this weak response, it's worth noting, were the same crews the state's Office of Oil Spill Prevention called outstanding during response drills in August.

The Coast Guard responded more responsibly, ignoring initial estimates (140 gallons was the first report, versus the final tally of 58,000 gallons) and responding to their "worst-case scenario." But even that response was insufficient, proving the utter inadequacy of state and federal response plans.

As with so many disasters, a string of problems ultimately led to the crash. It was foggy, the radar may have been faulty, the pilot couldn't read the electronic chart, the master misdirected him and the crew was unfamiliar with the ship and didn't speak

English. Yet they still proceeded through the bay at 11 knots. I wonder if this is another case where the pressures of commerce resulted in unnecessary risks that threatened the health and safety of the local population and the environment. If this is the case, the responsible parties must be held accountable. I support the criminal investigation and any charges that may result.

Under the Bush administration, enforcement of environmental laws has declined 36 percent. But we can't let that poor performance influence our policies. Congress must ensure that state and federal response plans are effective and send a message to companies that try to cut corners. Thank you, Chairman Cummings for opening this important process.

House Committee on Transportation and Infrastructure
Subcommittee on Coast Guard and Maritime Transportation
Honorable Elijah Cummings, Chairman

Statement of Congressman Pete Stark

Field Hearing on the San Francisco Bay Oil Spill

November 19, 2007

Thank you Mr. Chairman and Ranking Member LaTourette for coming to the Bay Area and holding this vitally important hearing. Many of us who call the Bay Area home heard the news of the oil spill and our response was shock and sadness. As information about the response and cleanup has emerged over the last two weeks this sadness has turned to disbelief and anger.

Over the last several years, we have seen a tragic pattern of failed disaster preparedness and response by the Executive Branch. I know this committee will ask the necessary questions to determine why cleanup efforts in this case were so delayed and information so hard to come by. I urge you all to foster the policy changes that are required to make sure the Coast Guard's dismal performance is not repeated. As a body, I hope the entire Congress can provide the accountability and answers to why the federal government—from Katrina to the current spill—has failed to safeguard our people and our natural resources.

The aftermath of the spill has been devastating. Nearly a thousand birds have been killed, with many more likely to perish. Twenty-seven beaches have closed and nearly the entire Bay Area fishing and crabbing fleet is shut down. The economic and environmental consequences of this disaster will be felt for many years to come. In light of these sobering realities I urge the committee to examine the following issues:

- Are tougher vessel standards and safeguards, such as double hulls or improved monitoring of ship navigation, needed?
- Does the Coast Guard have sufficient authority to police the shipping routes in the Bay and ensure safe navigation?
- Why did it take the Coast Guard over eight hours to realize the magnitude of the spill and initiate intensive containment and cleanup efforts?
- What is the chain of authority in responding to a spill and why did the Coast Guard fail to alert local authorities in a timely matter?
- What improvements in interagency communication can be made to ensure a better-coordinated response?
- Are admiralty and maritime laws sufficient to ensure that the parties responsible for the spill can be held liable for the cost of the spill?

Although there has clearly been much human and organizational failure that has exacerbated the damage of the spill, I would like to thank the many dedicated members of the Coast Guard, state and local employees, and countless volunteers that have worked to contain and cleanup the spill. All of us who love the Bay owe all of these individuals a tremendous debt of gratitude. Congress is working hard to make sure you have the resources you need.

The San Francisco Bay is a national and international treasure that is at the center of life in the Bay Area. I thank the committee for holding this hearing. Again, I look forward to working with all of you to ensure that future tragedies are prepared for, avoided, and mitigated.

Rep. Woolsey
Statement
Subcommittee on Coast Guard and Maritime Transportation Field Hearing
"San Francisco November 2007 Oil Spill Causes and Response"
November 19, 2007

Thank you Speaker Pelosi and Chairman Oberstar, for organizing this important field hearing on the oil spill. I'm pleased to join my colleagues and look forward to learning more about what happened before and after the spill and how we can do better in the future.

I also want to thank everyone from the Unified Command and the hundreds of volunteers, emergency workers, and members of the Coast Guard, NOAA, the Gulf of the Farallones Marine Sanctuary program, the California Department of Fish and Game Office of Spill Prevention and Response, state and county Offices of Emergency Services, the National Park Service, and many others who has been out here working to clean up this mess.

Our waterways are important and diverse ecosystems, but they're also very fragile. We were reminded of this when the Cosco Busan ran into the Bay Bridge and spilled 58,000 gallons of oil into the Bay. Incidents like this shouldn't happen anywhere, but I'm especially saddened about the devastation in the San Francisco Bay and throughout my District. The pristine beaches of Marin County were soiled, waters off of our federal parklands were sullied, and important restoration projects in Richardson and San Pablo Bay were threatened. Our fishermen, already hard hit by several poor salmon seasons, now may have to deal with the repercussions the spill will have on their fishing seasons.

Now that we have moved past the early days of cleaning up the spill and the skimmers are no longer actively removing oil from the water, we must ask ourselves what the future holds. Around 20,000 gallons of oil has been recovered or evaporated, but that is only a third of the oil. Two thirds of this oil has spread too far to be recovered and I am concerned about the long-term environmental damage that this will cause. We must look forward and try to mitigate as much of this damage as possible.

It's also the time to look at the reasons behind the spill and the response effort. I have many concerns and questions that I hope will be answered today or in the results of the investigations now occurring. 58,000 gallons of

oil emptied into the water, but for more than 12 hours, local officials were not made aware of the severity of the spill. What other errors in communication happened and how can it be improved? How quickly and effectively did agencies mobilize when they first learned of the spill and after they learned how bad it really was? Were there enough resources and were they used effectively? Were local government and volunteer resources fully utilized?

I have some concerns about whether today's boom technology is adequate to deal with swift flowing coastal currents. In Marin County, booms across Bolinas Lagoon and Drakes Bay failed. I also wonder if we have enough equipment to respond quickly and effectively, especially for areas somewhat distant from spill mobilization centers. Should we not have booms and trained personnel on site at these locations?

In the coming weeks and months Congress will be taking a hard look at what went wrong and how to make sure it doesn't happen again. I commit to working with my colleagues in Congress and the various local, state and federal agencies to make sure that should a spill occur in the future, we are prepared to quickly mitigate as much of the damage as possible—our lives, livelihoods, and waterways depend on it.

Thank you.

U. S. Department of Homeland Security

United States Coast Guard

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DEPARTMENT OF HOMELAND SECURITY

U. S. COAST GUARD

STATEMENT OF

ADMIRAL CRAIG E. BONE
11th DISTRICT COMMANDER

ON THE

M/V COSCO BUSAN SPILL RESPONSE

BEFORE THE

SUBCOMMITTEE ON COAST GUARD & MARITIME TRANSPORTATION

COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE

U. S. HOUSE OF REPRESENTATIVES

19 NOVEMBER 2007

Good morning Mr. Chairman. I am Rear Admiral Craig Bone, Eleventh Coast Guard District Commander, and I am here today to discuss the Coast Guard's response to the recent M/V COSCO BUSAN oil spill.

I am responsible for all Coast Guard missions in the 3.3 million square miles of coastal and offshore waters extending 1,000 nautical miles off of California, and south to the Colombian and Ecuadorian borders in South America. I provide oversight, guidance, and set policy for all marine safety, security, and operational activities within the Eleventh District's area of responsibility.

ALLISION OF THE M/V COSCO BUSAN AND RESPONSE

On November 7th, 2007, the M/V COSCO BUSAN at pier 56 departed with its crew, a required state-licensed pilot and an assist tug. As required, the pilot of the vessel was in communication with Coast Guard Sector San Francisco Vessel Traffic Service (VTS). The Vessel Traffic Service is an advisory system that assists and provides information to pilots, masters, and operators of vessels navigating within its geographic area of responsibility. The M/V COSCO BUSAN was outbound intending to pass beneath the Delta Echo span of the San Francisco/Oakland Bay Bridge. The distance between pier 56 and the bridge is approximately three miles.

At approximately 0827, the Vessel Traffic Service operator questioned the pilot's course of action regarding continued intent to pass through the Delta Echo span. Approximately three minutes later, the vessel allided along its portside with the bridge's fender system tearing away a section of the vessel, and causing a 100 ft by 12 ft long gash cutting into two fuel tanks and one ballast tank.

Within minutes, the pilot onboard the M/V COSCO BUSAN notified Sector San Francisco's Vessel Traffic Service (VTS) that he had allided with the Delta Tower of the Bay Bridge. Coast Guard Sector San Francisco VTS immediately notified CALTRANS and the Sector Command Center (SCC) of the incident. Sector San Francisco issued a safety broadcast over marine-band radio to notify other boaters in the vicinity. The pilot then took the vessel to anchorage 7 and was relieved by a replacement pilot at 0855. The weather at the time of the incident, and throughout the rest of the morning and early afternoon, was heavy patchy fog with visibility reported as low as 300 ft.

In any marine casualty; finding, verifying, and relaying information about the extent of damage to a vessel and determining the size of a spill is challenging. At 0903, Sector San Francisco dispatched a safety and pollution investigation team aboard a Coast Guard 41' small boat. After evaluating the condition of the bridge tower and supporting base, the pollution investigation team observed oil around the bridge tower and leading up to the vessel. On scene at anchorage 7, the crew observed that the discharge of oil from the ruptured fuel tanks on the COSCO BUSAN was minimal. The pollution investigator embarked the vessel to conduct the investigation.

At 0918 the pilot called the Oil Spill Response Organization (Marine Spill Response Corporation - MSRC) and reported that 10 barrels of oil spilled and the leak was secured. At 0935, MSRC responded per an existing contract with the responsible party to begin clean-up operations. At 0942 the responsible party reported the incident to California OES who notified USCG, EPA, DFG, OSPR, the Regional Water Quality Control Board, CA State Land Commission, CA Coastal Commission, Parks and Recreation, Alameda County, and the City of Oakland.

At 0945 a Unified Command was established between the Federal and State-On-Scene-Coordinators (USCG and Cal DFG) at Coast Guard Sector San Francisco. Coast Guard Headquarters, CG Pacific Area, the National Operations Center, and the Intel Coordination Center were notified of the incident.

At 1046 the sector casualty investigator and marine inspector conducted a damage assessment and investigation.

At 1200 Coast Guard pollution teams departed Sector San Francisco for a shoreline assessment. The pollution response team onboard the M/V COSCO BUSAN disembarked the vessel, and a Cal DFG investigation team and an additional pollution investigator embarked the M/V COSCO BUSAN for investigation, determination of amount spilled, and sample taking. At 1230 the shoreline teams reported oil north of the Bay Bridge along the San Francisco waterfront. The Coast Guard deployed an Aids to Navigation Team which reported all aids in the vicinity were watching properly.

At 1246 the National Oceanic and Atmospheric Administration (NOAA) provided an oil spill trajectory for the Unified Command. By mid-afternoon, response efforts continued but were slowed due to continued foggy conditions. The foggy weather specifically limited the ability of responders to ascertain and monitor the discharged oil from aircraft.

At 1348 Sector San Francisco held a conference call with the San Francisco Mayor's Office and San Francisco City and Port Stakeholders. The Coast Guard and City of San Francisco Department of Health issued a joint press release.

At 1649 CA Department of Fish and Game (DFG) investigators and pollution investigators reported that approximately 53,500 to 58,000 gallons were discharged during the incident. This revised estimate was based on fuel transfer and other data and calculations.

The Coast Guard, the Responsible Party, and the Oil Spill Response Organizations (OSRO) initiated an aggressive response based on the size and fuel carrying capacity of the vessel, directing all immediately available spill response assets to the scene. The Unified Command's initial skimming efforts resulted in over 8,000 gallons of fuel oil recovered within the first 10 hours as well as deployment of skimming boom and protection boom around environmentally-sensitive areas identified in the Area Contingency Plans (ACP).

The Coast Guard continues to lead the federal response to this effort working within the unified command and with all agencies, affected parties and volunteers. In doing so, the Coast Guard has deployed considerable resources such as pollution investigators, marine inspectors, small boats, patrol boats, helicopters, the Pacific Strike Team, and the Maritime Safety and Security Teams to assess, protect, and respond to this incident.

UNIFIED RECOVERY EFFORTS

In every major marine incident involving multiple agencies, a unified command is established under the National Incident Management System (NIMS), by which Federal, state, and local agencies that have jurisdictional responsibility collaborate to establish unified strategies and goals. The San Francisco Area Contingency Plan (ACP) provides the mechanism through which the oil spill prevention, protection, response, and recovery clean-up efforts continue to be achieved.

PREPAREDNESS

The Coast Guard and Department of Homeland Security are committed to preparing for integrated, national responses to disasters, attacks and other incidents. In the San Francisco Bay region as well as throughout the country, the Coast Guard plans and prepares for incidents such as this event through Area Committees comprised of Federal, state, and local agencies and other stakeholders.

Our current preparedness efforts are informed by lessons-learned and regulatory actions stemming from other serious incidents such as the M/V EXXON VALDEZ oil spill in 1989. Specifically, the Oil Pollution Act of 1990 (OPA 90), which was passed into law following rising public concern over the M/V EXXON VALDEZ incident, laid the groundwork for significant improvements to oil spill prevention and response preparedness. OPA 90 expanded the Federal government's ability to respond to oil spills and informed improvements in several areas including development of response plans, closer interagency cooperation, periodic exercises, spill response protocols, and area committees among others.

The San Francisco Bay Area Committee, chaired by the Coast Guard, writes and maintains the San Francisco Bay Area Contingency Plan (ACP), which is being used to manage this response operation. Recent experience with Safe Seas, Golden Guardian, and other complex exercises continues to refine and improve preparedness and coordination with responders across the Bay Area. Specifically, the Safe Seas 2006 exercise allowed the response community to establish an effective "battle rhythm" that has been of significant benefit for the M/V COSCO BUSAN response.

Safe Seas 2006 was a multi-agency effort lead by the National Oceanic and Atmospheric Administration (NOAA) in collaboration with the U.S. Coast Guard, California Office of Spill Prevention and Response, Harley Marine Services, and the Department of Interior. More than 400 people participated in training, field operations, oceanographic surveys, and incident command post activities. Vessels and aircraft from NOAA, the U.S. Coast Guard, U.S. Air Force Reserve, Marine Spill Response Corporation, Alameda County Sheriff's Department, City of San Francisco officials and Bodega Marine Laboratory participated in the exercise.

The Safe Seas 2006 exercise simulated a collision in San Francisco Bay between an inbound bulk freight cargo ship inbound to San Francisco and an outbound tug towing a tank barge. In the exercise scenario the barge sank from the collision, with oil spilling from both the barge and damaged cargo ship.

INVESTIGATIONS

Immediately after Sector San Francisco was notified of the allision, Coast Guard marine investigators were called upon to respond. The Coast Guard's preliminary investigation has found no evidence of vessel mechanical propulsion system or steering failures as causal factors in the casualty, and indicates that causal and contributing factors will include human error. The Coast Guard continues to support the NTSB, which is conducting an independent marine safety investigation of the incident. The Coast Guard also continues to conduct its own parallel marine safety investigation of this casualty. The Coast Guard is also fully supporting the Department of Justice.

INCIDENT SPECIFIC PREPAREDNESS REVIEW (ISPR)

The Coast Guard Chief of Staff has chartered an Incident Specific Preparedness Review (ISPR), comprised of representatives from Federal, state, and local agencies, the maritime industry, and

environmental groups to assess our response. The focus of the ISPR is to compare actual response activities, including notifications, with the Area Contingency Plan. The ISPR team's goal is to engage a broad group of stakeholders, evaluate the overall effectiveness of the response, and recommend areas for improvement.

The ISPR assessment will be conducted in two stages. The first stage will cover the initial two weeks of the response and a final report of findings and recommendations is required to be completed within 90 days. The second stage will cover the remainder of the response and is required to be completed by May of next year. The Commandant is personally committed to the ISPR process and will carefully consider all recommendations.

LESSONS-LEARNED

Volunteerism
The Bay Area displays a unique passion for the environment and I am inspired by the regional spirit of volunteerism. For example, we had many residents waiting in line for training and orientation programs who were committed to actively participate in response and recovery operations. It was unprecedented to have a large segment of the community willing to handle hazardous material. We learned that our ACP must incorporate State and local stakeholders as well as train and prepare volunteers in advance as feasible.

Communications
Communications are probably the most difficult aspect of any major response effort where timely notifications are critical for public safety and risk-based, prioritized deployment of resources. For example, the COSCO BUSAN Incident Unified Command found a need to better incorporate liaisons to support daily planning and execution. A robust and developed liaison program needs to be incorporated into the Area Contingency Plan. The ISPR team will carefully consider these and other issues during their process.

Thank you for the opportunity to testify. I look forward to your questions.

Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure
U.S. House of Representatives

November 19, 2007

Field Hearing

November 2007 Oil Spill Causes and Responses

Written Statement of

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Madam Speaker, Mr. Chairman and members of the Committee, thank you for this opportunity to testify as a representative of Governor Schwarzenegger. I look forward to sharing the State of California's perspective concerning the Cosco Busan incident in the San Francisco Bay.

We take this incident very seriously. As the Governor has said, "Any delays that hamper response and cleanup efforts are completely unacceptable" and the State of California is committed "to investigate the full breadth of the incident and to get all the answers."

Office of Spill Prevention and Response

In 1990, following disastrous oil spills in Alaska and Huntington Beach California, the state legislature approved and Governor Deukmejian signed the Lempert-Keene-Seastrand Act to create the Office of Spill Prevention and Response (OSPR) within the Department of Fish and Game. The Department of Fish and Game is a division of the California Resources Agency. I serve as the Agency's secretary and sit as a member of the Governor's Cabinet.

OSPR functions under the leadership of its Governor appointed Administrator, Lisa Curtis, whose position is the equivalent to a Chief Deputy Director within Fish and Game. Lisa Curtis has been on-site at the incident command post and other locations as needed since Wednesday November 7. Her presence in the field remains critical; otherwise she would be here today. Joining me this morning are John McCamman, Acting Director of the Department of Fish and Game and Greg Hurner, Senior Advisor to the Director.

OSPR operates as both a prevention and response organization and is one of the few State agencies in the nation that has both major pollution response authority and public trust authority for wildlife and habitat. In this role, OSPR has a number of responsibilities, including:

- With the US Coast Guard and other participants, OSPR developed detailed area contingency plans to prepare for and respond to oil spills along California's coast. Contingency plans include all aspects of **prevention**, **preparedness** and **response** including an incident command structure, a 'best

response' concept for each incident, mandatory drills and training.

- As part of its responsibilities, DFG is the state's trustee for fish and wildlife resources and it is in this capacity that OSPR conducts Natural Resource Damage Assessments of pollution events. The goal of this program is to examine the natural resource injuries from oil spills or other marine pollution events, to quantify the damages, to seek compensation from the responsible parties, and to both restore the injured resources and compensate the public for the lost ecological benefits and uses of these resources. This process includes data collection, injury quantification, restoration scaling, settlement with the responsible party and restoration implementation. Since 1990, OSPR has helped recover in excess of $100 million in damages, all of which is to be spent on wildlife and habitat restoration projects and projects that provide recreational benefits to the public. This process is already under way for the current incident.

- Funding for OSPR is generated by a per barrel fee on oil brought into California ports. The current annual allocation is $34 million and 234 staff positions. In addition to this funding OSPR has an emergency fund of $54 million and an additional $54 million in available credit if it should be necessary.

  OSPR is also charged with implementing the requirement that vessels provide certificates of financial responsibility (insurance) prior to entering state waters and for ensuring that recovery of response costs occurs. In this case, the Cosco Busan carried a certificate of financial responsibility in the amount of $300 million, consistent with state requirements for a non-tank vessel.

- Response, investigation and enforcement of pollution violations are coordinated through OSPR, which also operates the spill dispatch function 24 hours a day.

- OSPR's Marine Safety Branch includes a maritime safety unit that focuses on spill prevention, a readiness unit to guide

responses and field operations components in several locations.

Together, all of these add up to our nations' most effective spill preparation and response agency.

Contingency Plans

OSPR requires and rates three types of contingency plans for oil spill incidents and considers this requirement an essential function of its mission.

1. *Vessel Contingency Plans* – These are developed by the shipper and are reviewed by OSPR. They contain notification schemes and response contracts. We check all vessel arrivals to ensure they have valid plans.

2. *Area Contingency Plans* – These are prepared by OSPR, the USCG and interested parties. In fact, the planning process for Area Contingency Plans is open to all stakeholders and has involved representatives from over 50 agencies, including environmental groups, city and county planners, state agencies, the federal government, and industry. These plans generally contain important site information and response strategies. We publish these plans on a Department of Fish and Game website.

3. *Oil Spill Response Organization (OSRO) Contingency Plans* – These plans are developed by the OSRO. OSPR makes the OSRO submit to unannounced drills before we allow them to work in California. Performance standards are directly linked to the reasonable worst case scenario identified in the Area Contingency Plans. California is the only state in the nation that requires performance standards for Oil Spill Response Organizations.

Collectively, each of these plans work together to ensure that appropriate measures can be carried out during a spill event to reduce the impact to the environment and human health and safety.

Cosco Busan Incident and OSPR's role in response

At approximately 8:30 a.m. on November 7, the Cosco Busan collided with the Bay Bridge resulting in a spill of fuel into the San Francisco Bay. OSPR was on scene at the US Coast Guard Station on Yerba Buena Island when notification was made that the ship hit the bridge and immediately began investigating evidence of a spill at approximately 9:20 a.m. At the time of notification and before evidence of an oil spill was detected, OSPR deployed a full field response team consisting of a biologist, technical specialist and warden. By 9:45 a.m., the US Coast Guard and OSPR joined as a unified command consistent with established plans. Our initial evaluation of OSPR's action was that response was immediate and consistent with approved guidelines.

Oil spill clean-up efforts have now transitioned from water recovery to beach clean-up, pressure washing of seawalls and shore structures, and decontamination of some vessels and equipment used in the response.

- Approximately 27,500 feet of boom is deployed.
- Participating in spill response are approximately 1,400 individuals, 25 support vessels, one skimmer, two helicopters and 20 volunteer fishing vessels
- Twenty Department of Fish and Game (DFG) wildlife teams, each consisting of two DFG search and recovery personnel are actively collecting wildlife in affected areas.
- Seven additional game wardens have been assigned to wildlife recovery and security operations.
- Approximately 525 personnel are assigned to Shoreline Clean-up Assessment Teams that are currently in place. Shoreline Cleanup Assessment Teams are trained to evaluate what cleanup strategy and measures are necessary and are then assigned where they are needed shoreline. Sixteen teams continue beach clean up, concentrating efforts in SF and Marin County.
- Estimated wildlife impacts: 1,918 birds recovered: 888 live oiled birds have been collected and transported to the Oiled Wildlife

Care Center in Cordelia and 830 dead birds were recovered. Retrieval efforts are ongoing.

- Twenty-seven Oiled Wildlife Care Network (OWCN) staff and 162 trained volunteers are at the Cordelia bird treatment facility
- Approximately 500 volunteers have completed five 4-hour Hazardous Communications training sessions. Hazardous Communication is OSHA recognized and is the lowest level of training that allows an individual to work in a potentially hazardous environment.
- DFG in conjunction with the OWCN has utilized 400 pre-trained volunteers and has trained an additional 350 convergent volunteers (those that show up to assist at the time of an incident) from the general public. Approximately 1,500 names have been added to the list of potential volunteers and over the next few days they will continue to be trained.

Governor Schwarzenegger's Actions

Since the oil spill, the Governor has been out to inspect the spill area on two separate occasions and agrees that there was some very serious human failure. He has also committed to do everything in his power "to make sure the State asks – and gets answers to – all the hard questions we need answered to adequately protect health, marine life and our environment."

Specific to the Cosco Busan incident, Governor Schwarzenegger has taken three significant actions:

1. Declared a state of emergency in the City and County of San Francisco and in the six other counties directly affected by the spill

2. Issued an Executive Order which closed recreational and commercial fisheries in the area impacted by the oil spill that could pose a potential risk to human health that may come from human consumption of marine life;

3. Called for a comprehensive state investigation into the oil spill incident

The Governor's Executive Order directs the Department of Fish and Game, in consultation with OSPR, to identify the area impacted by the oil spill. They have reviewed incident information, weather, tide and geographic information, and enforceability considerations and have determined the outermost estimated area of impact. Based on the Executive Order and this collected information, recreational and commercial fisheries within the boundaries of Pt. Reyes Lighthouse in the north, Carquinez Bridge to the east and San Pedro Point to the south and three miles out to sea have been closed while tests are being conducted.

This decision was not taken lightly but out of an abundance of caution for the public health. It is likely that this action will have consequences to fisheries and fish businesses in San Francisco and the Bay. We have and will continue to work with those businesses to ensure that these impacts are minimized to the extent possible. Those who incurred costs or lost opportunity as a result of the spill also have the ability to file financial claims with the Responsible Party through OSPR. This process does not require the filing of lawsuits in order to obtain reimbursement.

We hope the closure is temporary, and we await reports from CalEPA's Office of Environmental Health Hazard Assessment in consultation with the California Department of Public Health. Those departments have been reviewing the science and performing sampling and other investigations to determine the extent of any human health risk. The Governor has directed those reports be prepared before December 1.

It is important to reiterate that there has been no credible testimony of any current public health risk.

As to the comprehensive state investigation, Governor Schwarzenegger has tasked DFG, OSPR and the Governor's Office of Emergency Services (OES) to conduct an aggressive coordinated investigation into the causes and responses to the oil spill. The investigation will identify civil and criminal liability, and review all relevant procedures including preparation, response, notification and cleanup. There will be a natural resource damage assessment and a

determination of the associated economic impact. Other agencies, including OES and CalTrans, have been tasked with portions of the investigation.

Although we must wait for investigations to be completed, we do not believe it is too early to start looking forward at what else we can do and to take every step to ensure public safety, health and environmental safeguard.

Before I close, let me express thanks to the residents of the Bay Area and elsewhere who have contacted us to volunteer. The response has been extraordinary and overwhelming. We have never experienced this many individuals requesting to assist in a cleanup operation. The Governor requested that California Volunteers help OSPR to coordinate the volunteer response. We have not been able to utilize everyone who wants to volunteer and we know that has caused some frustration. However, it is critical that we operate in a manner where we can protect the health and safety of volunteers and this means not placing them in a hazardous situation, especially without appropriate training. We recognize that there has been criticism surrounding the utilization of volunteers and this is an item we will address moving forward.

Thank you for the opportunity to testify today. I hope that we can continue to work together to ensure that Californians and our resources continue to be effectively protected as we have witnessed over the past weeks.

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WRITTEN TESTIMONY OF
DR. WILLIAM CONNER
CHIEF, EMERGENCY RESPONSE DIVISION
NATIONAL OCEAN SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

FIELD HEARING SAN FRANCISCO
NOVEMBER 2007 OIL SPILL CAUSES AND RESPONSE

BEFORE THE
TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES

NOVEMBER 19, 2007

My name is Dr. William Conner and I am the Chief of the Emergency Response Division, Office of Response and Restoration, National Oceanic and Atmospheric Administration (NOAA). Thank you for the opportunity to speak with you today about NOAA's role in the response to the M/V *Cosco Busan* oil spill. NOAA has several responsibilities in responding to an incident like the *Cosco Busan*. The agency's roles include:

- Providing scientific support to our federal partner, the United States Coast Guard (USCG);
- Representing the Department of Commerce on the National and Regional Response Teams;
- Working with federal and state trustees to determine whether to conduct a natural resource damage assessment; and
- Fulfilling responsibilities to protect resources when a National Marine Sanctuary is affected.

Scientific Support

NOAA's role in an incident response is to provide scientific support and expertise. Through the NOAA Scientific Support Coordinator (SSC), a full NOAA Scientific Support Team experienced in incident response science support is available to the Federal On-Scene Coordinator. The NOAA SSC is one of the special technical advisors within the Incident Command System, as specified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR § 300.145). Though often seated with the Environmental Unit of a Unified Command (UC) to support and liaison with the overall response effort, the NOAA SSC has a primary responsibility to serve the Federal On-Scene Coordinator directly as a member of their staff.

The NOAA SSC is the key player in the NOAA effort to provide scientific support to an oil spill response. Ten SSCs are located around the country to respond on a 24/7 basis to all kinds of emergencies involving the release of oil or hazardous materials into the oceans or atmosphere. The SSC is supported from Seattle by the "Home Team," a diverse group of scientists who are experienced in dealing with spill response.

On November 7, 2007, at approximately 10:00 a.m. (all times Pacific Standard Time), USCG Sector San Francisco informed the NOAA SSC of the *Cosco Busan* incident involving an estimated release of 10 barrels (about 420 gallons) of IFO 380, a heavy fuel oil. At the time of notification, the California SSC was participating in a Regional Response Team meeting in Las Vegas, making plans for responding to incidents like this one. The SSC notified NOAA Seattle and requested immediate fate and transport predictions and a weather forecast. He also confirmed that the NOAA National Marine Sanctuary Program had been notified and then made arrangements to return to San Francisco to support the spill response.

Shortly after 12:00 p.m. PST NOAA provided to the Incident Command Post the first prediction for the trajectory of the spilled oil. This first trajectory was a text description of where the spilled oil would probably move over the next few tidal cycles based on the local tidal height observations and forecasts from the NOAA Physical Oceanographic Real Time System (PORTS®), and wind predictions from NOAA's National Weather Service. The NOAA report also described the physical properties of the oil, including density (to evaluate tendency for sinking), the potential for evaporation to reduce the volume in the water, and whether the oil might form a water/oil mousse, which would affect cleanup approaches. At approximately 7:00 p.m. additional information concerning the amount and distribution of oil resulted in NOAA providing an updated trajectory prediction that warned of additional shoreline oiling on Angel Island, Alcatraz Island, Treasure Island, and Yerba Buena Island that could occur by midnight. Trajectory predictions are useful in making decisions about where to place boom to contain the spill, and where to send beach survey teams to evaluate levels of oiling.

While this was going on, the NOAA SSC arrived at the Incident Command Post, and three additional NOAA staff from Seattle were staged for deployment to San Francisco early on November 8: one for overflight support, one for shoreline cleanup assessment, and one to focus on information management. These individuals would help execute the Incident Action Plan that the UC had approved for November 8, Day 2 of the spill.

On November 8, 2007, at approximately 12:00 p.m., NOAA provided to the UC a map showing the most likely areas for oiling in the Bay area. Then, at approximately 12:45 p.m., the first NOAA overflight was conducted, and an overflight map reporting oil observations, accompanied by photos, was provided to the UC. Overflights are essential in determining not only where the oil is, but also to identify areas where oil may converge and evaluate whether it may be effectively recovered by a skimmer. Overflight results are also used to fine tune trajectory models used for the next prediction cycle.

On Day 2, NOAA also provided the first graphical trajectory forecast. This forecast incorporated real time current observations and analysis from High Frequency Radar data generated by the Central and Northern California Ocean Observing System (CenCOOS) as well as real time tides, meteorological observations, and tidal current predictions from NOAA's National Water Level Observation Network and National Current Observation Program.

NOAA also assisted with assessment of shoreline oiling in several areas. Shoreline assessment information is used to determine priorities in planning shoreline cleanup activities for the subsequent day. In addition, on Day 2, NOAA prepared an assessment of fishery issues in consultation with the Pacific Coast Federation of Fishermen's Associations, provided updated weather information, and coordinated sampling and analysis of material that was initially suspected to be oil collected from the Farallon Islands.

During the first week of the response, NOAA's Office of Response and Restoration sustained 3 to 5 response specialists on-scene to support the Incident Command in evaluating environmental issues and planning response activities for the next operational period. In addition, the agency stood up a Home Team to support the response from Seattle comprised of 4 scientific experts working 10 hours a day, seven days a week. During the first week, the following basic scientific support products were provided to the UC:

Overflight Reports/Maps/Photos	14
Trajectory Forecasts	12
Tidal Forecasts/Assessments	14
Weather Updates	17
Special Assessments and Response Protocols	5

NOAA will continue to assist as needed until shoreline cleanup is completed and the response is demobilized. The USCG has requested NOAA participate in the Incident Specific Preparedness Review for the *Cosco Busan* response, and we will be bringing in an experienced SSC from another region to participate in this review.

National Marine Sanctuaries Mobilization

NOAA's National Marine Sanctuary Program (NMSP) is responsible for protecting sanctuary resources including ecological, historical, and cultural resources. The San Francisco area is home to three of the nation's thirteen national marine sanctuaries (Monterey Bay, Gulf of the Farallones, and Cordell Bank). All three sites are critical habitat for a number of important marine and coastal species including: blue and humpback whales, local and migratory seabirds such as Cassin's Auklets, Common Murres, Albatross, and Shearwaters.

Since the first week of the spill the NMSP has maintained 3 to 4 personnel in the Incident Command Center, and about 30 staff and volunteers each day supporting response and resource assessment. The role of NMSP in a response is to provide information on the critical resources that need protection to mitigate impacts. NMSP personnel provide this information to the SSC, who leads NOAA's response efforts and supports the Environmental Unit of the UC. Having established coordination procedures and a direct line of communication with the SSC is a vital component of NOAA's response efforts. It allows for quick and effective identification of preventative measures the Environmental Unit can take to minimize to the extent possible environmental impacts in protected areas.

NOAA NMSP staff and Beach Watch volunteers are currently participating in wildlife surveys both north and south of the Golden Gate in an effort to assess the spill's impacts on the area's marine and bird life as well as rescue any oiled animals if necessary. Beach Watch volunteers were mobilized to conduct surveys at first light on Day 2 of the spill. Beach Watch is a long-term volunteer monitoring program that is designed to create a long-term data set of the bird and mammal resources and to help in the early detection of natural or human-caused disturbances such as oil spills. The evidence gathered by Beach Watch volunteers helps document the damage to wildlife and habitat from oil spills. The NMSP West Coast Region Maritime Heritage Coordinator provided data on historical/cultural resources to National Park Service personnel, and coordinated efforts to identify and protect these non-renewable resources.

Natural Resource Restoration

Because of its significant role as a trustee for marine resources, NOAA is mandated by the *Oil Pollution Act* (*OPA*) to restore ocean and coastal resources that are harmed by an oil spill like the *Cosco Busan*. Restoration is accomplished through the Natural Resource Damage Assessment process — by assessing injury, developing a restoration plan that is subject to public review, and presenting a claim for restoration costs to the responsible party. If the responsible party does not pay the claim, the trustees may litigate or file a claim for restoration costs with the Oil Spill Liability Trust Fund. Natural resource trustees typically work together as a coordinated group, often with representatives of the responsible party in a cooperative process.

After learning of the *Cosco Busan* spill, the NOAA SSC notified the NOAA damage assessment and restoration program of the incident around 11:00 a.m. on November 7. At that point, the reported spill size was small, but the natural resource trustees started to organize by phone in case the spill developed into a larger incident. Later that same day, the natural resource trustees learned of the increase in spill size and started to evaluate the potential for a natural resource damage assessment in earnest.

At this point, the State of California, National Park Service, Fish and Wildlife Service, NMSP, and NOAA Damage Assessment, Restoration and Remediation Program are working with representatives of the responsible party to evaluate the need for restoration

planning. Technical work groups have been established to evaluate injury and restoration potential in a number of areas including:

- Fish/invertebrates
- Marine mammals
- Sandy beach
- Rocky intertidal
- Salt marsh/mudflats
- Artificial habitats
- Water column
- Eelgrass
- Recreational use
- Historical/cultural uses

The trustees have set up a Natural Resource Damage Assessment command post at the Gulf of the Farallones National Marine Sanctuary Office, and NOAA is on-scene working hard to promote trustee coordination during the early phases of the assessment, as well as coordination with the spill response operations. The responsible party has agreed to fund the injury assessment, and the trustees are also preparing a request for initiation funding that will be submitted to the National Pollution Fund Center for a disbursement to cover pre-assessment costs if needed. If the trustees decide to proceed with restoration planning, they will quantify injury and develop a restoration plan aimed at restoring injured resources and compensating the public for lost use while the natural resources are being restored. Once the restoration plan passes public review, under the provisions of *OPA* the responsible party is required to pay for implementation of the planned restoration activities.

The Value of Readiness and Observations

The *Cosco Busan* spill is a stark reminder that accidents still occur in coastal waters, even though the overall number of spills has declined since the passage of *OPA*. Spills are a byproduct of using oil to fuel our marine transportation system and meet our energy needs. Although the best remedy is to prevent oil spills, once oil is released into the marine environment, the best that we can do is to mitigate and restore any harmful effects.

NOAA pledges to continue to support the cleanup of oil from the *Cosco Busan* and to follow through on developing and implementing a natural resource restoration plan if this is determined to be appropriate.

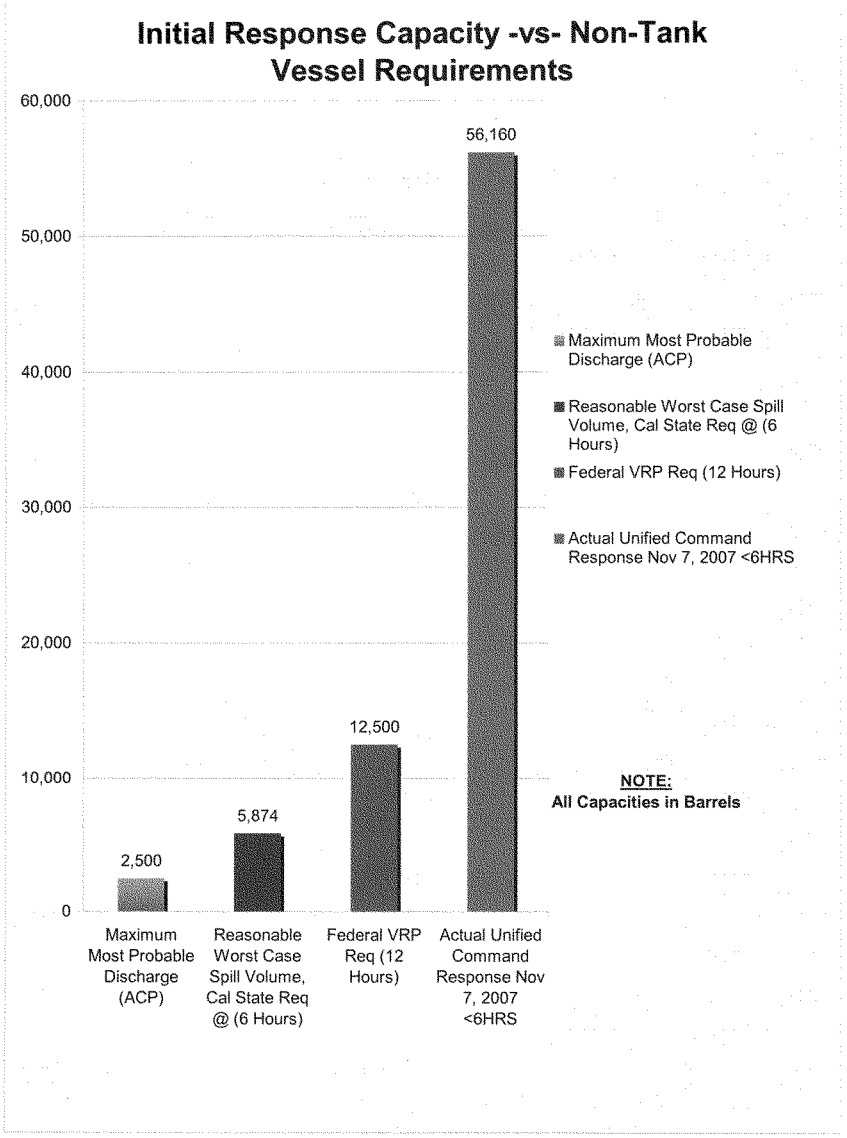
To mitigate environmental effects of future spills, however, responders must have all the capabilities that will be needed, plus sufficient capacity to address the challenge. Response training and exercises are essential to maintaining capabilities. NOAA was aided in its response to this spill by a major field exercise called NOAA Safe Seas 2006, which we conducted with USCG, State of California, and Department of the Interior in

the San Francisco Bay area about a year ago. The Safe Seas 2006 exercise allowed us to train hundreds of regional staff and Beach Watch volunteers in various aspects of oil spill response and to test the response protocols that would be used for a real spill. Continuous training, improvement of our capabilities, maintenance of our capacity, and investments in high priority, response-related research and development efforts ensure that the Nation's response to an incident like this one is effective.

As has been noted, during these events NOAA is counted on to provide detailed information and reliable projections related to an oil spill's location and trajectory. The agency's ability to observe the ocean environment and obtain timely information on tides, currents, and related oceanic conditions is directly related to the accuracy of the information and forecasts that are provided to incident responders. Our readiness is therefore in no small way affected by the presence and reliability of ocean observing assets, which are critically important for the collection and integration of this data.

Conclusion

NOAA serves a key role in providing scientific support in emergency response incidents. NOAA's suite of scientific products and services and the expertise of our personnel are critical in mitigating harm, providing information for allocation of response assets, restoring adverse effects on natural resources, and informing overall response decision-making. Thank you for allowing me to testify on NOAA's response efforts.


Initial Response Capacity -vs- Non-Tank Vessel Requirements
60,000
50,000
40,000
30,000
20,000
10,000
0
2,500
5,874
12,500
56,160
Maximum Most Probable Discharge (ACP)
Reasonable Worst Case Spill Volume, Cal State Req @ (6 Hours)
Federal VRP Req (12 Hours)
Actual Unified Command Response Nov 7, 2007 <6HRS
Maximum Most Probable Discharge (ACP)
Reasonable Worst Case Spill Volume, Cal State Req @ (6 Hours)
Federal VRP Req (12 Hours)
Actual Unified Command Response Nov 7, 2007 <6HRS
NOTE:
All Capacities in Barrels

Boom Available at Incident Location
Feet of Boom
25000
20000
15000
10000
5000
0
1
2
6
6
Time in Hours
CA Requirement
for
Shoreline Protection

NOAA RESPONSE: Products and Services

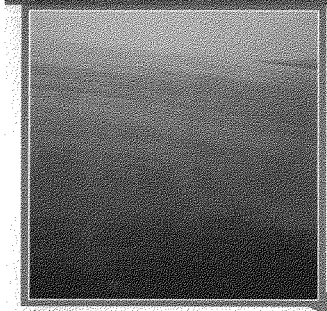
M/V COSCO BUSAN OIL SPILL · SAN FRANCISCO CA

- Training and Coordination
  - *Safe Seas 2006 Drill*
- Environmental Unit of Unified Command
  - *Scientific Support Coordinator*
- Oil Spill Trajectory Models
  - *Real-time Oceanographic Observations (tides and currents)*
  - *Spot weather forecasts*
- Overflights and Oil Characterization
- Environmental Sensitivity Index (ESI) Maps
- Shoreline Cleanup and Assessments (beach closure and SCAT maps)
- Marine Mammal Response/ Beach Watch
- Evaluation and monitoring impacts to natural resources
  - *NRDA and DARRP*

National Oceanic & Atmospheric Administration

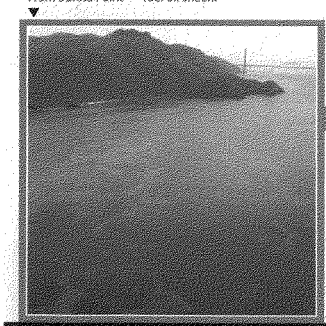
NOAA RESPONSE: Helicopter Overflight, 11/08/07

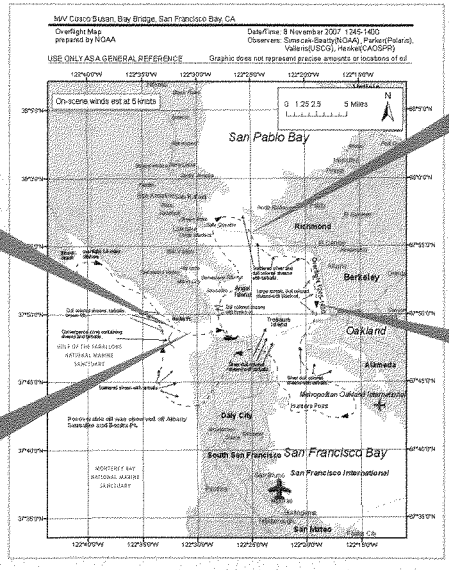
M/V COSCO BUSAN OIL SPILL - SAN FRANCISCO, CA

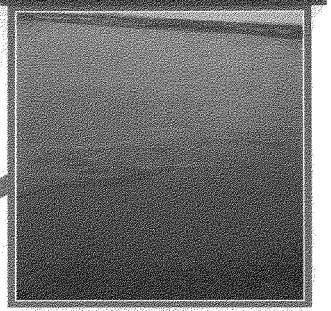


1.5 to 2 miles offshore San Francisco Bay — lighter colored patches of fuel oil.

From Bonita Point — fuel oil sheen.

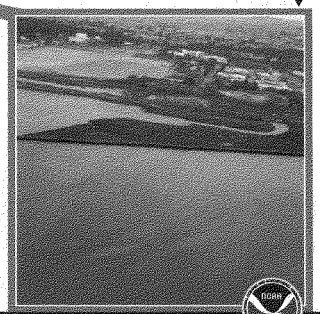






Toward Richmond's Inner Harbor — thick layer of oil and slick.

Adjacent to Albany Marsh — patches of fuel oil.



National Oceanic & Atmospheric Administration

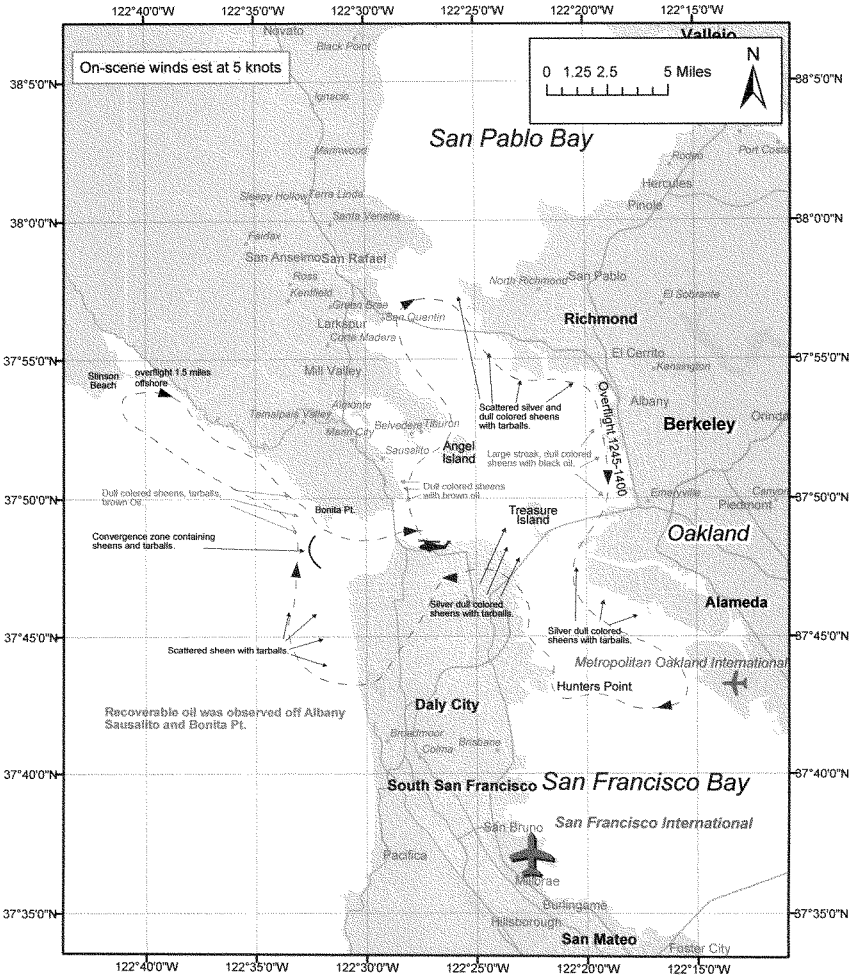
M/V Cosco Busan, Bay Bridge, San Francisco Bay, CA

Overflight Map
prepared by NOAA

Date/Time: 8 November 2007 1245-1400
Observers: Simecek-Beatty(NOAA), Parker(Polaris), Valleris(USCG), Henkel(CAOSPR)

USE ONLY AS A GENERAL REFERENCE

Graphic does not represent precise amounts or locations of oil

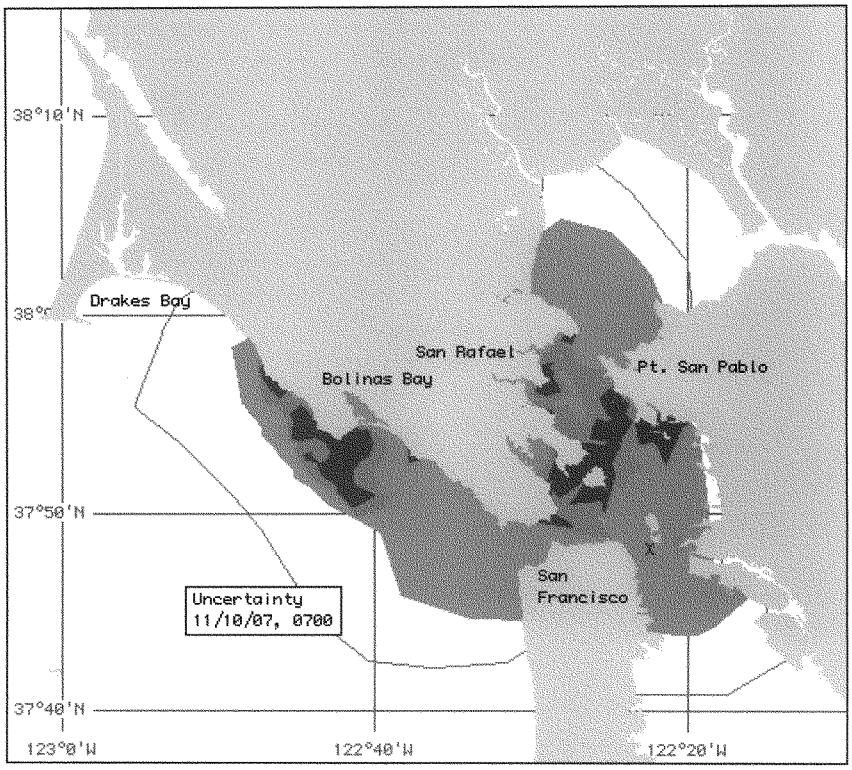


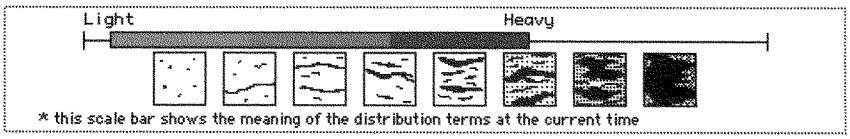
M/V Cosco Busan **HAZMAT Trajectory Analysis**

Estimate for: 0700, 11/10/07

Prepared: 1427, 11/9/07 NOAA/HAZMAT (206) 526-4911

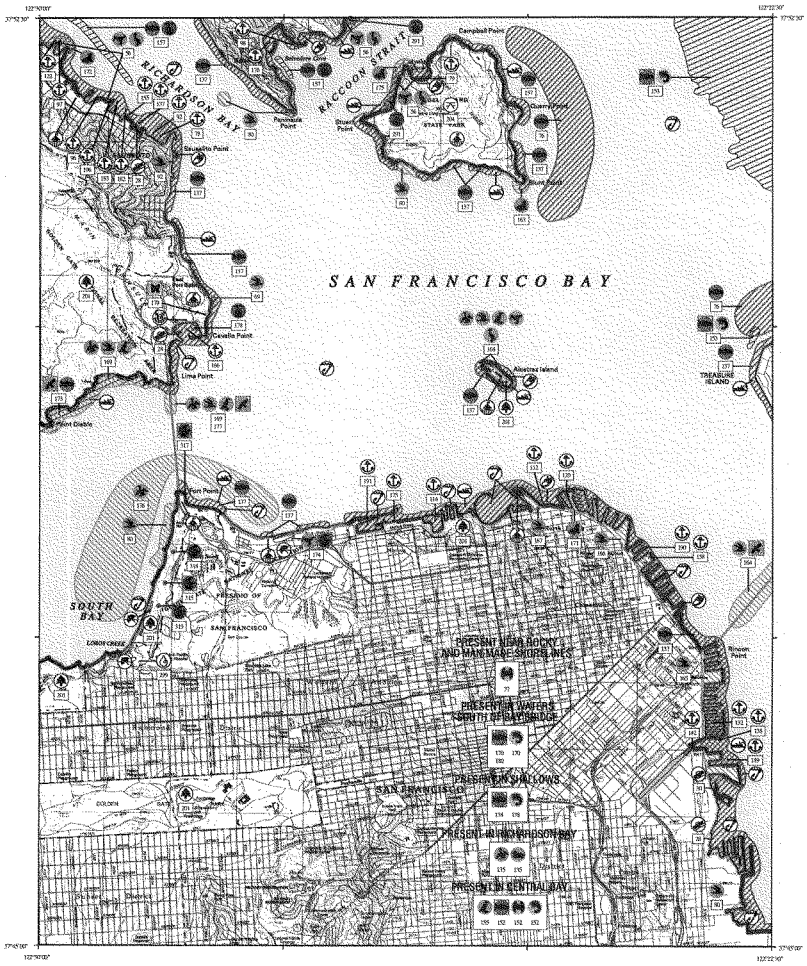
These estimates are based on the latest available information. Please refer to the trajectory analysis briefing and your Scientific Support Coordinator (SSC) for more complete information. This output shows estimated distributions of heavy, light, and medium concentrations as well as an outer confidence line. The confidence line is based on potential errors in the pollutant transport processes.





* this scale bar shows the meaning of the distribution terms at the current time

ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS

- 1A EXPOSED ROCKY SHORES
- 1B EXPOSED, SOLID MAN - MADE STRUCTURES
- 2A EXPOSED WAVE - CUT PLATFORMS IN BEDROCK
- 3A FINE - TO MEDIUM - GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE - GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES
- 8B SHELTERED, SOLID MAN - MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B VEGETATED LOW RIVERINE BANKS
- 10A SALT - AND BRACKISH - WATER MARSHES
- TIDAL MARSHES
- MUTED TIDAL MARSHES
- MANAGED MARSHES
- DIKED MARSHES
- SALT PONDS

SCALE 1:45000

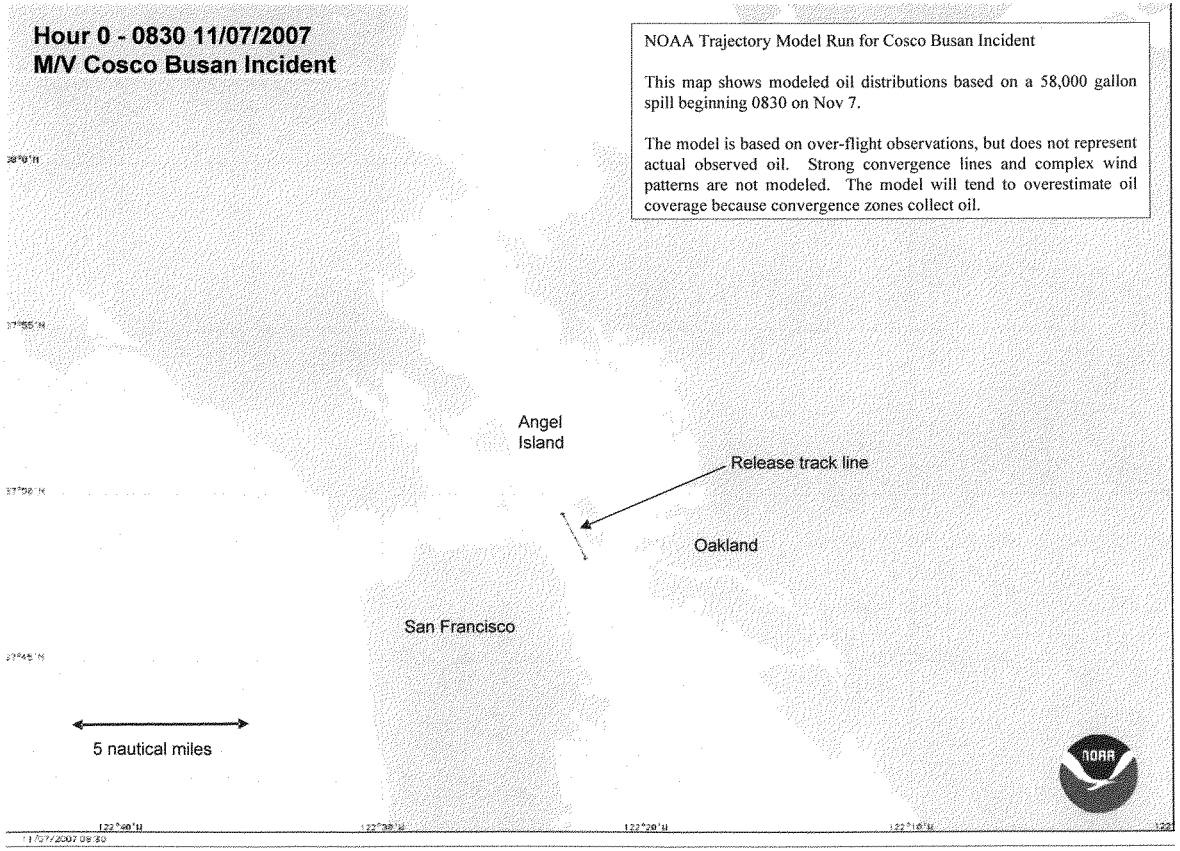
1 KILOMETER

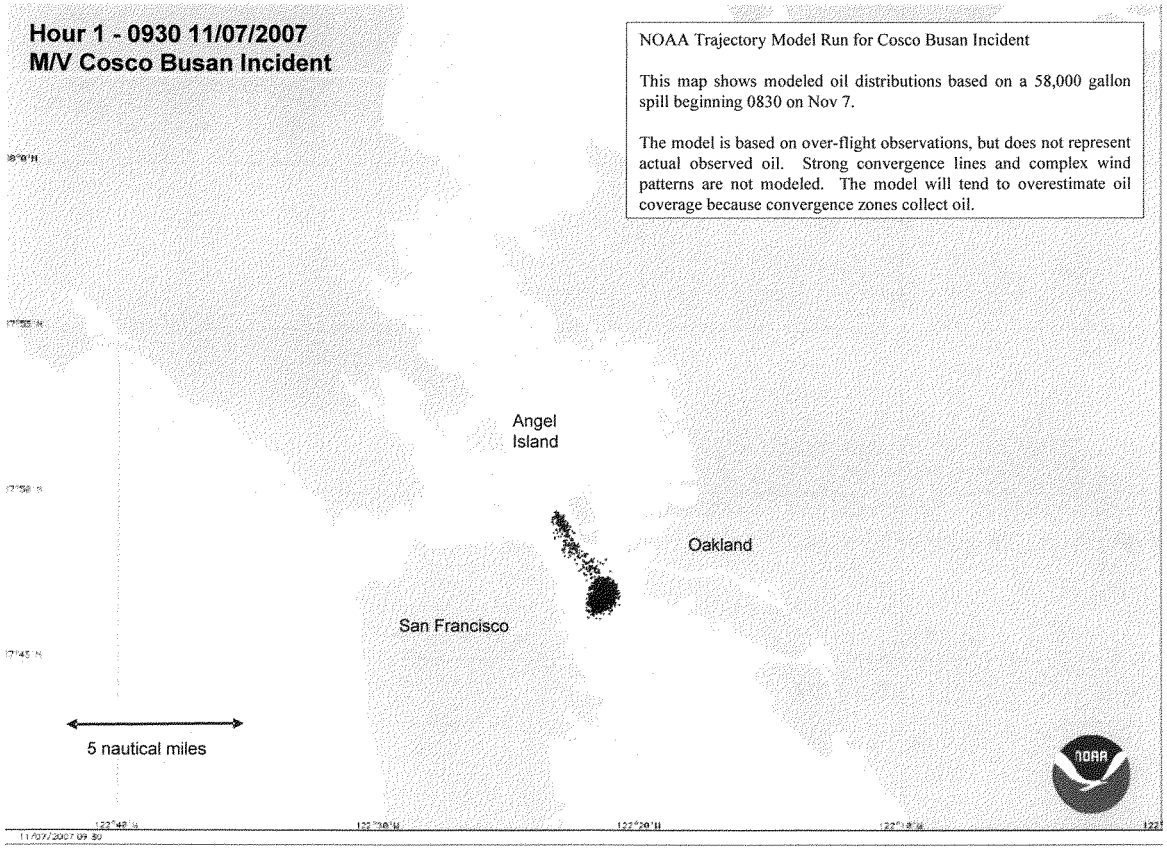
1 MILE

Not For Navigation
Published: December 1998

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

SAN FRANCISCO NORTH, CA. (1993) SF-16


Hour 0 - 0830 11/07/2007
M/V Cosco Busan Incident
NOAA Trajectory Model Run for Cosco Busan Incident
This map shows modeled oil distributions based on a 58,000 gallon spill beginning 0830 on Nov 7.
The model is based on over-flight observations, but does not represent actual observed oil. Strong convergence lines and complex wind patterns are not modeled. The model will tend to overestimate oil coverage because convergence zones collect oil.
Angel Island
Release track line
Oakland
San Francisco
5 nautical miles
NOAA


Hour 1 - 0930 11/07/2007
M/V Cosco Busan Incident
NOAA Trajectory Model Run for Cosco Busan Incident
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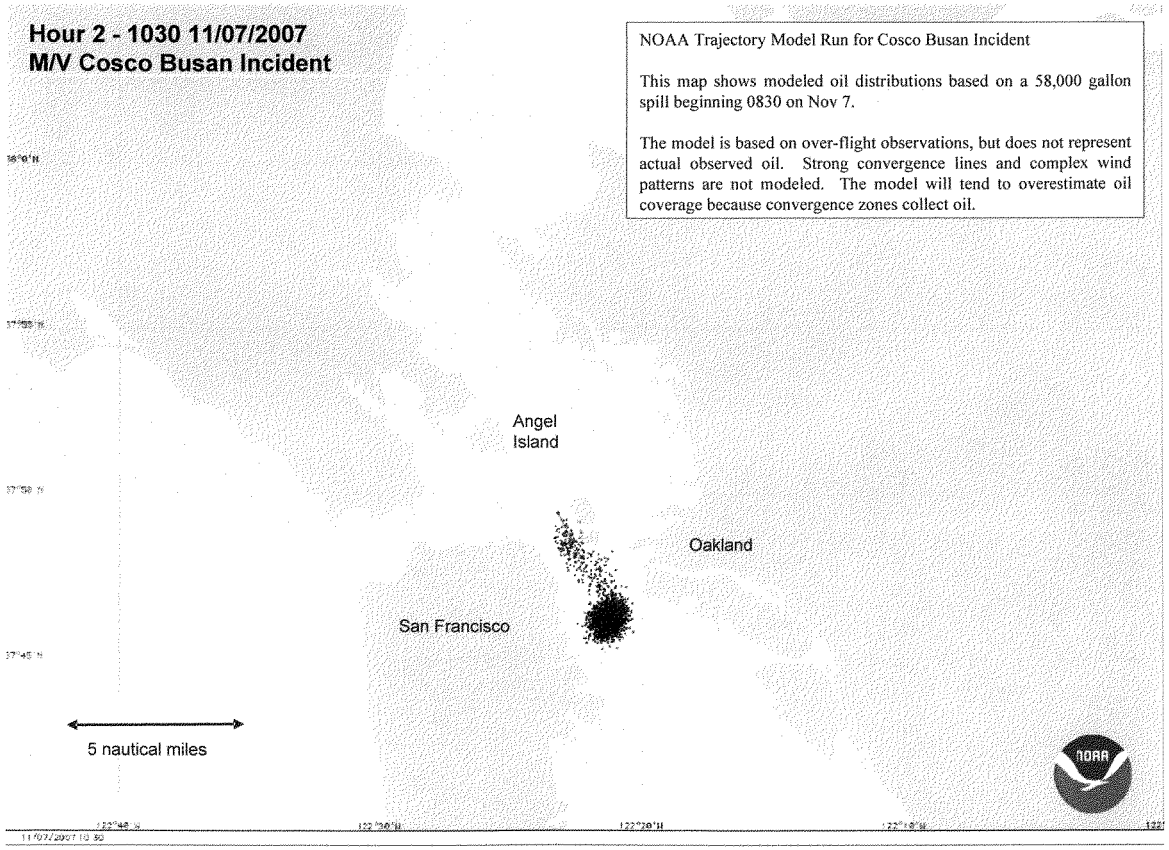
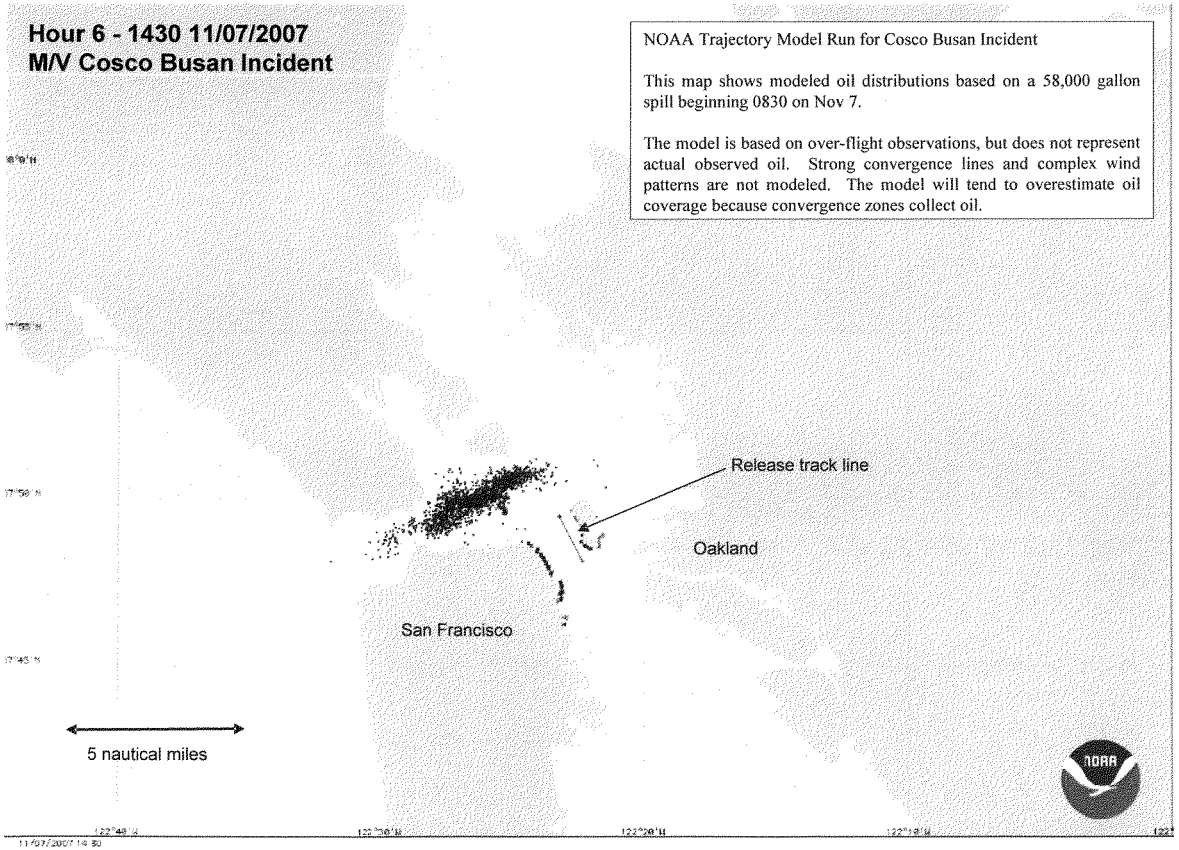
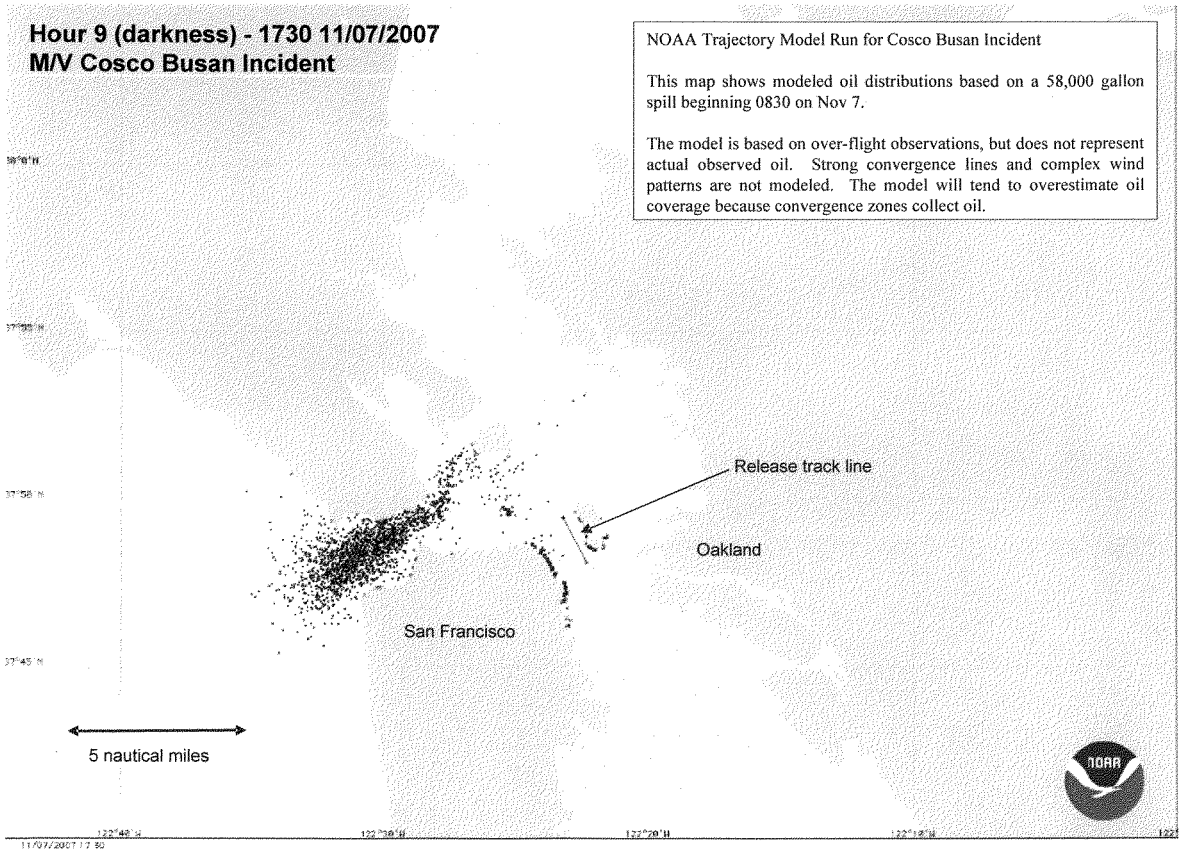
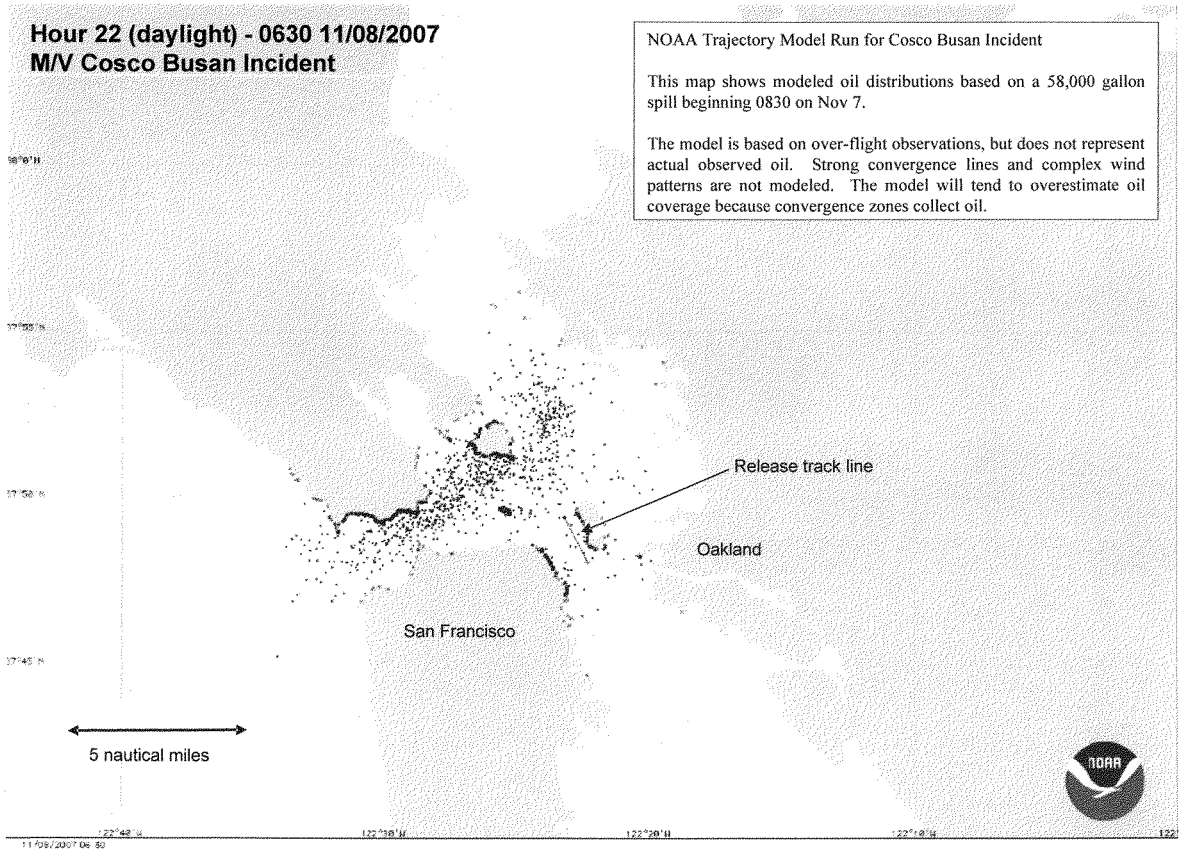
Angel Island
Oakland
San Francisco
5 nautical miles
NOAA


Hour 2 - 1030 11/07/2007
M/V Cosco Busan Incident
NOAA Trajectory Model Run for Cosco Busan Incident
This map shows modeled oil distributions based on a 58,000 gallon spill beginning 0830 on Nov 7.
The model is based on over-flight observations, but does not represent actual observed oil. Strong convergence lines and complex wind patterns are not modeled. The model will tend to overestimate oil coverage because convergence zones collect oil.
Angel Island
Oakland
San Francisco
5 nautical miles
NOAA


Hour 6 - 1430 11/07/2007
M/V Cosco Busan Incident
NOAA Trajectory Model Run for Cosco Busan Incident
This map shows modeled oil distributions based on a 58,000 gallon spill beginning 0830 on Nov 7.
The model is based on over-flight observations, but does not represent actual observed oil. Strong convergence lines and complex wind patterns are not modeled. The model will tend to overestimate oil coverage because convergence zones collect oil.
Release track line
Oakland
San Francisco
5 nautical miles
NOAA


Hour 9 (darkness) - 1730 11/07/2007
M/V Cosco Busan Incident
NOAA Trajectory Model Run for Cosco Busan Incident
This map shows modeled oil distributions based on a 58,000 gallon spill beginning 0830 on Nov 7.
The model is based on over-flight observations, but does not represent actual observed oil. Strong convergence lines and complex wind patterns are not modeled. The model will tend to overestimate oil coverage because convergence zones collect oil.
Release track line
Oakland
San Francisco
5 nautical miles
NOAA


Hour 22 (daylight) - 0630 11/08/2007
M/V Cosco Busan Incident
NOAA Trajectory Model Run for Cosco Busan Incident
This map shows modeled oil distributions based on a 58,000 gallon spill beginning 0830 on Nov 7.
The model is based on over-flight observations, but does not represent actual observed oil. Strong convergence lines and complex wind patterns are not modeled. The model will tend to overestimate oil coverage because convergence zones collect oil.
Release track line
Oakland
San Francisco
5 nautical miles
NOAA

Statement of

W.F. "Zeke" Grader, Jr., Executive Director
Pacific Coast Federation of Fishermen's Associations

991 Marine Drive, The Presidio
P.O. Box 29370
San Francisco, CA 94129-0370
Tel: (415) 561-5080

To the

U.S. House of Representatives
Subcommittee on Coast Guard & Marine Transportation

Regarding the Cosco Busan Oil Spill
Causes and Responses

San Francisco, California
19 November 2007

Good Morning. Chairman Cummings and members of the Subcommittee, my name is Zeke Grader and I am the Executive Director of the Pacific Coast Federation of Fishermen's Associations (PCFFA). This is a position I have held since 1976. Through its 14 member organizations, PCFFA represents working men and women in the U.S. West Coast commercial fishing fleet. I wish to thank the Subcommittee for the opportunity to provide brief comments today on what the fishing fleet has observed regarding the 7 November fuel oil spill by the container ship *Cosco Busan* in San Francisco Bay - the response and the impacts to date.

The Importance of San Francisco Bay and the Gulf of the Farallones

Before discussing the observations and concerns that have been raised by fishermen regarding this latest oil spill, for context it's critical to recognize the biological and economic importance of San Francisco Bay and the waters out into the Gulf of the Farallones. The importance of the Bay and the waters offshore the Golden Gate goes far beyond their use for merchant shipping

San Francisco Bay is the single most important estuary along the West Coast of North and South America. This estuary if fed by the freshwater inflow from the snowpack and watershed of the Sierra mixing with the ocean waters of the Pacific in the Bay and Delta creating a biologically rich null zone. It flows into the Gulf of the Farallones where the waters, north to Point Arena, are nourished by one of the strongest upwellings in North America.

San Francisco Bay provides one of the largest nursery grounds for Dungeness crab along the Pacific Coast. It is the juvenile crab utilizing this Bay as a nursery that are harvested as adults in the Gulf of the Farallones. And, it is the Dungeness crab that is the symbol of San Francisco's Fisherman's Wharf and whose season opening we would have been celebrating Thursday had it not been for this recent spill.

San Francisco Bay supports a large run of Pacific herring which begin spawning in the Bay about this time, continuing until March. This run, in turn, supports the largest herring fishery south of British Columbia. Indeed, the San Francisco Bay herring fishery is the nation's last urban commercial fishery - following the closure of much of the shad fishery of the Hudson River because of PCB pollution.

San Francisco Bay and the Sacramento-San Joaquin Delta is the passage way from the Pacific to the Sierra streams for the second largest chinook salmon run in the lower 48 states. The Central Valley fall-run chinook, in recent years, have accounted for more than 90 percent of California's salmon catch and upwards of 60 percent of the chinook salmon harvested offshore Oregon and Washington. The Delta and Bay are where young salmon grow and build strength before heading to sea. The health of the Delta and Bay have a direct bearing on salmon populations.

San Francisco Bay is home to important recreational fisheries for native sturgeon and non-native Striped Bass. It provides habitat for such marine species as California halibut and English sole, and before World War II and industrialization supported large oyster and shrimp fisheries as well. Moreover, the fish of the Bay support subsistence fishing, which provides an important food source for low income ethnic and communities of color.

It is because of its regional importance for fish and wildlife that special care is needed for San Francisco Bay's protection. This is why prevention of oil spills coupled with prompt response and quick and effective clean-up, when spills do occur, is critical. You have seen from the newspaper reports the huge public outpouring of offers to help responding to this spill. The local community has a strong sense of stewardship for the Bay and Gulf of the Farallones. Fishermen, too, share that sense of stewardship, depending as they do on the productivity of this Bay and the waters off the Golden Gate for their livelihood. That is why our coastwide organization has focused so much of its attention for the past 30 years on the protection of San Francisco Bay - whether it has been fighting for better water quality, fighting for the freshwater inflows critical for maintaining estuarine function and fighting against further upstream diversion of the essential inflow, or working to prevent the introduction of, as well as control and eradicate, invasive species.

Fishermen and Oil Spills

Our members, however, are not alone among fishermen in their sense of stewardship for the waters that support their livelihoods. In 1989 we witnessed the tremendous outpouring of fishermen responding to the *Exxon Valdez* spill in Alaska's Prince William Sound. The commercial fishing community there played a crucial role in the effort to clean-up that massive oil spill.

Following the Exxon Valdez spill and the subsequent passage of the Oil Pollution Act of 1990 ("OPA 90") and California's passage of its Lempert-Keene-Seastrand Oil Spill Prevention & Response Act, the private clean-up cooperatives, established by the shipping companies and oil industry, began contacting members of the fishing fleet along the coast to train and certify the captains and their vessels as a kind of auxiliary to the companies own personnel and equipment for oil spill containment and clean-up. Fishermen had, without training, already demonstrated their competence in this work in Prince William Sound. The reasoning was, why not provide them formal training, certify them, and place oil spill containment and clean-up equipment in strategic locations for their use in the event of a spill.

This made a lot of sense, at least at the time to the private clean-up companies and seemed to enjoy the support as well of the responsible federal (i.e., Coast Guard) and, here in California, state (i.e., California Department of Fish & Game's Oil Spill Prevention & Response unit) agencies. Utilizing commercial fishermen and their vessels would cut down on the number of response vessels and personnel the private companies would require on a permanent basis -- that would remain largely idle until there was a spill. The fishermen posses expertise of local waters and their vessels were workboats, mostly with large decks that could handle and deploy oil spill equipment. There was, after all, a wide range in size of vessels, including large trawl and seine vessels that could be utilized in open ocean waters to the smaller, high speed, shallow draft craft, such as herring "bowpickers" that could be used near shore in coves and small opening to boom or retrieve oil. Lines of communication would be established with the fleet to contact and deploy them in the event of any major spill.

During the 1990's fishermen along the Pacific Coast were contracted by the private oil response firms. They were trained, including in the deployment of booms and clean-up equipment, they were certified, they participated in drills and, we assumed were listed in contingency plans for containment and clean-up. Contacts between the companies and the fleet were established for responding quickly to a spill.

I don't have a number or even an estimate of the actual number of fishermen who were trained. However, it may, with a little research be possible to ascertain an accurate figure. My estimate, based on the information I was receiving from my members at the time, is that between one-third and, perhaps, as high as half of the fleet went through training and certification. From all of the information I had received the companies and the responsible agencies were satisfied with the capabilities of the fishing fleet and considered them a part of any clean-up operation.

I was surprised then that by 1999 and 2000, fishermen were reporting to me that the training, and consequently the certification and participation in drills, had stopped. I asked whether it was because the companies or agencies were not satisfied. All the fishermen knew is they were told there was no more money. Thus, for this decade there has been no training I am aware of, much less certification or participation in oil spill drills by members of our fleet.

I raised this issue verbally at various times with Coast Guard, California Fish & Game and NOAA personnel and was told either this was an issue between the fishermen and the private companies or the question was ignored altogether. I raised this question numerous times with NOAA personnel during a major oil spill drill/press event that was held during the summer of

2006 and still did not receive any answer. In retrospect, we should have made a formal written request of the responsible agencies asking why this training of fishermen had ceased and whether fishermen and their vessels were being included in any of the oil spill containment and clean-up contingency plans. That was our failure. But certainly proper oversight of the private clean-up companies by the responsible federal and state agencies should have detected this flaw.

Fishermen and the Cosco Busan Spill

Following the accident and resultant spill from the Cosco Busan's encounter with the San Francisco Bay Bridge on Wednesday, the 7th, the president of the Crab Boat Owners Association (representing San Francisco Bay commercial fishermen), who himself had gone through oil spill training in the 1990's, contacted the Coast Guard Thursday morning. He had not heard anything from the Coast Guard, Fish & Game's OSPR or the private clean-up company, following the accident. He told the Coast Guard he had 30 boats in his association that were trained (during the 1990's) and prepared to assist in the clean up. He was then told by the Coast Guard that they had it under control, his boats were not needed and "if any fisherman wanted to help they could volunteer to clean birds." I subsequently called the Coast Guard Thursday telling them who I was and that there were fishing boats available to help with the clean-up. I did not get quite as flip an answer; they took my name and I was contacted the following Sunday by someone in the agency wondering what size boat I had.

On Saturday, the 10th, not having gotten any response from the Coast Guard, Fish & Game or the private company, the Port of San Francisco took it upon itself and hired 20 fishing boats from Fisherman's Wharf to engage in the clean-up. Since none of the boats had recent training or up-to-date certificates they were required to each carry two clean-up personnel hired by the private company. During the few days those boats were on the Bay, they contributed significantly to the clean-up effort, often able to get in close to shore where the larger vessels of the private operator could not. It also helped that these fishermen had local knowledge, particularly of San Francisco Bay's treacherous tides and currents.

The Port of San Francisco's funds ran out Wednesday for the fishermen clean-up effort. At no time prior to that was the fleet contacted by either the Coast Guard or OSPR to engage in clean-up, although our Fish & Game Department told us the "fishermen's OSPR contracts would be ending Wednesday because most of the oil had been cleaned-up in the Bay." We found that strange since OPPR did not have any fishing boats under contract, but then there were far more significant foibles and break-downs in communication during this oil spill than that Fish & Game misstatement. Two fishing boats, I should note, were hired after Wednesday by the private company to continue in the clean-up.

In response to what was happening, it became apparent by Friday, the 9th, that there was a good chance the oil would be getting out the Gate. We had already learned that some oil picked up from the Bay had contaminated at least one fish processor's live tank at the Wharf. A meeting was called on Saturday, the 10th among crab fishermen planning on fishing the 15 November opener to decide what to do. By a unanimous vote they called on the Governor to use his emergency authority to close the crab season, despite the immediate economic impact on these fishermen losing their Thanksgiving market, until the oil was cleaned-up and the crab

could be tested to assure none was contaminated by the oil. The reason for wanting a closure was simple. Fishermen, and processors, felt they could not risk the chance of any oil-contaminated crab reaching the market, whether it made anyone ill, or simply didn't taste good, one bad crab could ruin the market for years.

The Governor subsequently issued an order Tuesday calling for a closure. Unfortunately the boundaries for the area to be closed were botched by our Department of Fish & Game, but that is a state issue not of interest to this Subcommittee. Needless to say there will be direct economic losses to the crab and herring fleets from this oil spill. More ominous, is what long-term affects this oil may have on the survival of juvenile crab in the Bay, herring spawning and migrating salmon. Financial support will be needed for the long-term monitoring of fish and wildlife impacts from this spill. As we learned from Prince William Sound, oil spill impacts can last for decades.

One of the tragedies surrounding this relatively minor spill (compared to Prince William Sound or the Black Sea) becoming a major mishap, is that only a fraction of the boats waiting in the three ports to go crabbing have been used in this containment and clean-up effort. Much more of the oil would have been removed from the water by now had the training and certification of fishermen continued along with their contracts to engage in oil spill clean-up. The private company is at fault here, but so too are the responsible federal and state agencies for failed oversight.

From what has been seen, not only was there a failure to continue the training of the fishing fleet as responders to an oil spill or to engage them when the spill happened, but there seems to have been a real break-down in command as far as utilizing local expertise in this incident.

In previous spills, the personnel from the LOCAL trustees, such as the Gulf of the Farallones National Marine Sanctuary, were always on the inside of the Unified Command with the Coast Guard and Fish & Game, advising and answering questions as an integral partner of the Unified Command. This has been very important t the success of all spill response, for the five significant oil spill in the San Francis Bay Area, since OPA 90.

This spill, however, saw the personnel of local trustee placed outside the Unified Command; instead, connected to the Unified Command via an agency liaison, assigned by the agencies' headquarters. This arrangement is presently the agency approved format for interaction with the Unified Command. It is clear that the previous configuration used in the San Francisco Bay Area made the Partnership, with the Unified Command more efficient, less bureaucratic, and better served the environment as well as leading to smoother operation than the agency approved arrangement that has been used for this spill.

In the past 25 years, the National Park Service and the National Marine Sanctuary have encouraged the public to become volunteers and citizen stewards of San Francisco Bay's natural resources. Likewise, as an organization, we have encouraged our members to be activists in the efforts to protect the Bay, including participating in training for oil spill clean-up. To believe that these citizens, including fishermen, should not want to be involved with protecting our natural resources, fish and wildlife, during a disaster, like an oil spill, is not realistic. When

thousands of volunteers want to help, the Unified Command can either put them to work – including fishermen in on the water clean-up – in meaningful, safe and productive tasks, or simply cordon off all the beaches and wharves with police. We suggest the former be the preferred course – to fully utilize local knowledge and stewardship.

What Happened?

In the fishing fleet, no one is quite sure why there was the break-down in responding to this *Cosco Busan* spill and its clean-up. There is the perception among our members that agencies became complacent after the last major spill with the impression that everything was in place for the next major event. Oversight became lax. They have noted much less interaction with the Coast Guard and the fishing fleet (e.g., vessel safety liaison) since 9/11 and the agency's new focus with the war on terrorism. Within the state agency – the Department of Fish & Game, there have been a series of budget meltdowns in the last decade. Funds that were designated for oil spill prevention and clean-up had been misappropriated, positions within OSPR have gone unfilled (even though there were funds for those positions) and lately Fish & Game's fixation with establishing Marine Protected Areas – that are nothing more than no-fishing zones – has diverted attention from the more important task of oil spill prevention. Bear in mind, MPAs are totally worthless in protecting against oil spills, or any pollution for that matter, pointing to the need to develop meaningful conservation measures that protect all bay and ocean waters.

Some Bright Spots

While there were many blunders that occurred during this spill, there are some bright spots to report on. As I mentioned, the 20 fishing boats during the short time they were on the water collected a significant amount of oil (unfortunately it's impossible to document the exact amounts because the oil they recovered was mixed with that of other responders).

The Port of San Francisco is to be commended for its efforts in this incident, stepping up and taking leadership when the responsible agencies failed – most notably with their hiring from port funds the fishermen to engage in clean-up. The Gulf of the Farallones Marine Sanctuary and its support organization, the Farallones Marine Sanctuary Association, also should be commended for effectively deploying their Beach Watch volunteers out along the coast to monitor and document the oil and assist with the coordination of some of the volunteer clean-up efforts. They did this smoothly, effectively and will little fanfare.

A Few Suggestions

In their paper "Community Responses to Oil Spills" (from The *Selendan Ayu* Oil Soill: Lessons Learned, Alaska Sea Grant, 2006), researchers Duane Gill and Liesel Ritchie found (pp.90-91):

> The old adage that "an ounce of prevention is worth a pound of cure" underscores its importance in emergency management. In the aftermath of the *Selendang Ayu* incident, several preventive measures have been suggested.....An understanding of risks provides a foundation for establishing prevention measures. Risks need to be articulated and

> recognized before informed and effective prevention measures can be developed and implemented.... A sociological lesson to remember is to encourage civic engagement and invest social capital in this process. Like most leaders in rural Alaska communities similar in size, Dutch Harbor/Unalaska leaders are adept at using social capital and encouraging civic engagement in community affairs. However, it is not uncommon to find disenfranchised groups in these communities . A key component in socially assessing risks is striving to include varying and sometimes competing risk perceptions throughout this process. As Waugh and Hy (1990) not for disaster planning and management, "[there is a] need for strong cooperation and coordination among public, nonprofit, and private sectors:
>
> Preparedness involves activities that enhance community capacity to respond to an emergency, as well as plans to mitigate effects. There is overlap where prevention ends and preparedness begins. One level of preparedness focuses on common hazards and threats experienced by the community. A second level anticipates "worse case scenarios" (Clarke 2005). In either case it is important to prepare for likely social and community effects.....

Better Utilization of Local Knowledge. Our first recommendation is to look at ways to direct the Coast Guard to better utilize local knowledge – whether it be to more fully consult and engage with local agencies, local volunteer groups (such as those organized by marine sanctuary programs), along with fishermen, local mariners and the various non-profit river, bay and coast keeper organizations who constantly monitor many of our waterways and ocean waters.

Mandate Use of Fishermen/Fishing Vessels in Public and Private Oil Spill Contingency Planning. Following the failure for the past seven or eight years to train, certify and utilize our single largest groups of individual and vessels – who incidentally have the most to lose from any oil spill or other insult to the marine environment – the commercial fishing fleet, we believe Congress needs to mandate their participation in all future oil spill prevention, containment and clean-up programs. We should not overlook the valuable contribution fishing men and women can make to keeping our marine environment clean and safe, as happened with this latest spill. They should be given the opportunity to train and participate in helping protect the environment that sustains them.

Appointment of an Independent Commission to Investigate. As you know, following the *Exxon Valdez* spill, an independent commission was established – the Alaska Oil Spill Commission – to investigate what went wrong. Rather than the responsible agencies investigating themselves – investigations that are seldom extensive or critical – we believe a special commission should be established to report back to Congress, and perhaps Governor Schwarzenegger, on what went wrong, why, and what should be done to fix it. While in the grand scheme, *Cosco Busan* was a relatively small spill, the fact that it could not even be successfully dealt with indicates clearly that we need to fix things now, before there is a major spill.

I have attached a copy of the testimony provided by the California Coastkeeper Alliance to the California Assembly's Committee on Natural Resources on Friday and would also

recommend the Subcommittee review the testimony provided that hearing by the San Francisco Baykeeper. Both testimonies, I believe, provide information that should be useful to state legislators and member of Congress alike.

Thank you again, Mr. Chairman, for this opportunity to provide these brief comments. I'll be happy to answer any questions members may have or provide any follow-up information that I can provide for you, members and staff.

I am Captain Thomas Hand, a San Francisco Bar Pilot. Thank you for inviting a San Francisco Bar Pilot to speak today. I hold a U.S. Coast Guard Master's License. I have been a professional mariner for forty-five years, including eighteen years as a Panama Canal pilot and seventeen years as a San Francisco Bar Pilot.

The San Francisco Bar Pilots have navigated vessels in San Francisco Bay and tributaries for over 155 years. They service an area that includes the entire San Francisco Bay, and the Ports of Stockton, Sacramento and Monterey Bay. The waters of the San Francisco, Monterey, San Pablo and Suisun Bays from the Gulf of the Farrallones to the Sacramento Delta include nine bridges, twenty ports, two hundred miles of shipping lanes, and countless hidden dangers. It is the job of the San Francisco Bar Pilots to know every fathom and every nautical mile.

By California law, every vessel in excess of 300 gross tons moving within waters under the jurisdiction of the Board of Pilot Commissioners is required to use the services of a San Francisco Bar Pilot. Last year the San Francisco Bar Pilots handled approximately 10,000 vessel transits.

Since 1986, a comprehensive training program lasting approximately two years geared specifically to the exceptional demands of Bay Area waterways has been a condition to becoming a San Francisco Bar Pilot. After apprenticeship and licensing, every pilot continues professional training to stay current in all vital areas. An applicant for the training program must at minimum hold a valid U.S. Coast Guard Master's License with Radar Endorsement. He or

she must have at least two years' command or piloting experience and a Federal Pilotage Endorsement.

As a state-licensed San Francisco Bar Pilot, I am subject to the oversight, including disciplinary oversight, of the Board of Pilot Commissioners for the Bays of San Francisco, San Pablo and Suisun. The Board selects among applicants for available pilot positions; establishes and administers the training requirements, both initial and continuing, for the pilots; issues licenses; oversees the operations of the Bar Pilots, investigates incidents on the vessels piloted by Bar Pilots and takes remedial and punitive action against pilots when appropriate. This is a thorough, comprehensive, and active regulatory system.

The pilots take their professional responsibilities to vessel owners they serve and the communities in which they work very seriously. We are proud of our long history of safe navigation. Up to last week the last major accident on the Bay was when two tankers collided near the Golden Gate Bridge in 1971. Neither vessel in that incident had a San Francisco Bar Pilot on board.

I am here to answer your questions about pilots, piloting and the pilotage system in San Francisco Bay and tributaries.

Testimony of Debbie A. P. Hersman, Member
National Transportation Safety Board
Before the
U.S. House of Representatives
Subcommittee on Coast Guard and Maritime Transportation
on
"San Francisco November 2007 Oil Spill Causes and Response"
November 19, 2007

Good morning, Chairman Cummings, and Members of Congress. Thank you for allowing me the opportunity to present testimony on behalf of the National Transportation Safety Board regarding the container ship accident in San Francisco Bay. The Safety Board as you know is an independent agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in railroad, highway, marine, pipeline and hazardous materials and issuing safety recommendations aimed at preventing future accidents.

The Safety Board seldom rules out any potential causes of an accident during the initial stages of an investigation until we have had the opportunity to thoroughly investigate all potential causes. Although we gathered a tremendous amount of information, there is still considerable work remaining for us, including additional witness interviews, analysis of the voyage data recorder, and verification of documentation we have received from the Coast Guard and other parties.

After the allision, we monitored events in San Francisco Bay. On the morning of November 10th, it became clear that the incident was a catastrophe, and we launched a 6-person investigative team, including me as the Board's spokesperson. Our team was in San Francisco that day, and we began our formal investigation the following morning.

Since then, the Board has sent 3 additional investigators to augment the team. Our investigative groups address specific areas, such as deck operations, engineering, human performance, and emergency response. Other teams, such as a voyage data recorder (VDR) team, will be formed as needed.

Our investigation is focusing on the safety aspects of the accident and the initial response. The issues we have identified so far and are investigating include:

- probable cause of the ship's allision with the bridge;
- damages sustained by the ship and bridge;
- notification of the accident; and

- action taken immediately after the accident to limit and contain the spill.

This accident poses some challenges for our investigators. VDRs are a relatively new addition for ships. In fact the Cosco Busan was not required to have one. The technology is new, however, there are a number of proprietary systems. Although we have been able to listen to the VDR audio recordings and see periodic radar screenshots, we have not been able to analyze the vessel's performance, such as engine speed, rudder movements, heading and speed, because we only obtained the necessary playback software from the German manufacturer on Friday.

Since the crew is entirely Chinese, all recorded conversations among crewmembers is in Chinese. We will have a Chinese interpreter when our VDR audio group meets. The communication between the pilot and ship's personnel was in English. We are reluctant to characterize what was said until we know the substance of all communications on the bridge.

Fortunately, accidents like this are rare. The Safety Board has not investigated the pollution aspects of a major marine accident since 1990. There are some new issues for us, and we will address them with the same objectivity and professionalism as we do all our work. We are fortunate in that we have experts from other modes of transportation who can assist us, and we have a dedicated staff that works very hard to get things right.

The Board is presently in the initial phases of this investigation and there is still much more work to be done. The investigation and final report could take as long as a year to complete. As new and significant developments occur, we will be sure to keep the Subcommittee and the public informed. Safety Board investigators are still on scene today in San Francisco, and could likely return to collect additional information.

Many agencies and groups have responded to the accident and the Safety Board would like to express its gratitude to all the organizations who continue to assist the Board in this investigation.

That concludes my testimony Mr. Chairman, and I would be happy to respond to any questions you may have.

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TESTIMONY OF

DAVID LEWIS

EXECUTIVE DIRECTOR

SAVE THE BAY

BEFORE THE

HOUSE TRANSPORTATION AND INFRASTRUCTURE SUBCOMITTEE ON COAST GUARD AND MARITIME TRANSPORATION

NOVEMBER 19, 2007

SAVE THE BAY

Mr. Chairman and Members of the Subcommittee:

I am David Lewis, Executive Director of Save The Bay (Save San Francisco Bay Association). I appreciate the opportunity to testify today on behalf of San Francisco Bay, our region's greatest natural treasure.

Save The Bay is the oldest and largest organization that works exclusively to protect and restore San Francisco Bay. We were founded in 1961 to prevent the Bay from being filled in, and we represent more than 10,000 members and thousands more volunteers around the region. Our work has made the Bay cleaner and healthier, and reconnected residents to it. We involve thousands of volunteers annually to restore the Bay's shoreline, and have educated more than 35,000 students on the Bay's waters over the last decade.

The Bay Area's quality of life and economy depend on a healthy and vibrant Bay. San Francisco Bay defines our region and its identity, provides recreation and beauty, and is the engine of our economy, attracting tourists and businesses from around the world. As the largest and most important estuary on the west coast, the Bay provides vital wildlife habitat for 105 threatened and 23 endangered species. Millions of birds migrating along the Pacific Flyway rely on the Bay for food and refuge, and it is a nursery for Pacific Ocean fisheries. In the midst of seven million people, the Bay contains the largest urban wildlife refuge in the nation and the largest wetland restoration efforts on the West Coast.

The Cosco Busan oil spill is a tragedy for the Bay and the fish and wildlife that live in it. We are alarmed that this oil spill happened, outraged at the inadequate preparations and emergency response, and appalled at the destruction the oil has caused. This huge dose of pollution is devastating to the Bay's environment and disruptive to the economy, and it may have long-lasting effects on the Bay's severely-stressed ecosystem that we work so hard to restore. A faster and more comprehensive response could have contained and skimmed more of the oil before it spread so far, but we also know that the spill could have been much larger if the ship's course was slightly different.

Since the spill, our staff and volunteers have helped federal wildlife agencies document the oil's impacts so they can quantify the extent of damage to the Bay. The extremely toxic oil is threatening significant damage at some of the Bay's most sensitive habitats, including areas where Save The Bay has been working to restore and improve habitat like Santa Venetia Marsh in San Rafael, precious eelgrass and oyster beds at Keller Beach in Richmond and along the Sausalito shoreline, among other sites.

We are demanding a full investigation into the accident's causes, and supporting state and federal oversight hearings like this one today that can reveal what went wrong and enact changes to prevent future spills, improve cleanup coordination, spill preparedness and response, and environmental damage assessment. We will insist on restitution from the responsible parties to restore and compensate the Bay for wildlife and habitat destroyed by this spill.

Some of the impacts of the spill are obvious: dead and injured birds, smothered marshes, fouled beaches, idle fishing fleets, and reduced public access to the shoreline. Others are less visible: poisoned fish, shellfish, marine mammals, and other underwater plant and animal life. Oil is already entering the food chain, and whatever is not removed from the Bay could continue releasing toxics into the environment for decades.

Improve Crucial Damage Assessment, Remediation and Restoration

As cleanup efforts continue, one urgent priority is accurately cataloguing and quantifying the damage. Aerial, terrestrial and aquatic surveys are essential to direct response and cleanup, but also to document where oil impacts are occurring. Oil removed from the shoreline and beaches is also crucial evidence, vital to the National Oceanic and Atmospheric Administration (NOAA) and other state and federal agencies' ability to determine how much damage the oil has caused and where. These agencies need sufficient manpower and equipment, and sufficient authority within the incident command structure, to do their important work of damage assessment, remediation, and restoration.

We are very concerned that these efforts were hampered last week by inadequate preparation and no damage assessment structure based in California. Instead, NOAA's closest damage assessment capacity is in Washington State. NOAA may still not have the resources and authority they need in place now to collect evidence and ensure that cleanup is done properly, so sensitive habitat is not destroyed using inappropriate methods. Moving forward, you must determine whether NOAA's budget has inadequate staff and training for these crucial tasks, and address those inadequacies.

Apply Lessons Learned to Ongoing Cleanup and Remediation

As the next phases of response to this spill begin, it will be crucial to incorporate and apply lessons learned from other spills in California and throughout the Pacific Region. Planning should begin now for needed damage assessment, monitoring, restoration and activities in months two through six and beyond. An integrated effort involving the U.S Environmental Protection Agency Region IX, U.S. Fish and Wildlife Service, NOAA, State Department of Fish and Game and other state and federal resource agencies should be initiated now, so it can inform the current activities being coordinated under the Coast Guard's incident command, and so those efforts can receive adequate federal financial resources to be successful.

Improve Spill Preparedness and Coordination

Because this subcommittee's jurisdiction is the Coast Guard, your priority should be investigating that service's preparations and performance before during and after the accident, determining where there were shortcomings in planning, training, equipment, command procedures, coordination, communication, implementation and execution. You should also investigate whether inadequate resources were devoted to the service's responsibilities for oil spill prevention and response, or were inappropriately or unwisely allocated for other purposes within the Coast Guard.

But we urge this subcommittee and the Bay Area's Congressional delegation to work with other committees of jurisdiction and key state and federal agencies to pursue a broader inquiry and policy review with these goals:

- Improve navigational safety through vessel traffic control procedures and ship hull improvements
- Improve containment of oil spills through faster deployment of booms and skimmers, prepositioning of equipment, enhanced emergency communications, regularly updated interagency planning, and more frequent practice drills
- Reduce risks to fish and wildlife, sensitive habitats and water quality from ships carrying highly toxic fuels and hazardous cargo.
- Ensure that those responsible for poisoning San Francisco Bay pay the full cost of responding to this spill and restoring the natural resources of this Bay over the time it will take to accomplish that task.

We hope your efforts will yield significant improvements that reduce the risk of future accidents and reduce the impacts of spills when they do occur.

Build on Strong Local Support for the Bay

In the midst of this destruction, we also are heartened by the overwhelming outpouring of support and concern from the entire Bay Area community: offers of trained hazardous materials teams from cities, boats from local fishermen to skim oil, impromptu neighborhood efforts to deploy booms that could protect sensitive lagoons and creeks, volunteers wanting to clean beaches, philanthropists with emergency funds for bird rescue. Far too many of these offers were refused or ignored by agencies that had no plan to mobilize or coordinate them, provoking frustration and arguably compounding the damage to the Bay.

That demonstration of support for the Bay is phenomenal, almost universal here in the Bay Area. This spill has underscored that counties, cities, and individual residents want the Bay protected and restored, and are willing to help with their own assets, personnel, equipment, even their bare hands. This community is an enormous and underutilized resource for the federal and state governments to craft a better plan for oil spill prevention and response that emphasizes first responders, and plans to incorporate the region, its cities and its residents.

Take Additional Steps Now to Protect and Restore the Bay

The nation's revulsion at the despoiling of San Francisco Bay by this oil spill, and this region's deep concern for the Bay, should encourage federal and state legislators and agencies to take additional steps to protect and restore this natural and economic resource, in addition to the immediate spill recovery and restoration efforts:

- Accelerate the restoration of tens of thousands of acres of shoreline habitat on property already acquired for that purpose, and acquire additional restorable sites to re-establish the 100,000 acres of Bay tidal marsh scientists have determined are needed for a healthy ecosystem.
- Fully fund the San Francisco Bay National Wildlife Refuge Complex to protect and restore its unique assets, which have grown in size and complexity without sufficient management resources
- Tighten restrictions on trash and other pollutants that daily enter the Bay and coastal waters in storm water runoff to poison fish and wildlife and smother habitat

- Step up enforcement of federal and state clean water laws against polluters, including sewage treatment plants, industrial facilities and other violators.

The Bay needs these actions to restore it to health even more urgently after the devastating oil spill it has just suffered.

Thank you for your support, concern and ongoing efforts to protect and restore San Francisco Bay.

Office of the Mayor
City & County of San Francisco

Gavin Newsom

HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION

NOVEMBER 19, 2007

Statement of San Francisco Mayor Gavin Newsom

Chairman Cummings, House Speaker Pelosi and California members, thank you for convening today's hearing on the November 7 oil spill in San Francisco Bay. I am pleased to provide this testimony for the record.

The San Francisco Bay Area is fortunate to have outstanding leadership from our congressional delegation, including the Speaker of the House and both California senators, as well as other local, state, and federal leaders throughout the Bay. I thank you for your urgent attention to and oversight of the environmental disaster caused by last week's discharge of 58,000 gallons of toxic bunker fuel into San Francisco Bay.

Local Coordination

Since 9/11, millions of dollars in homeland security funds have been invested into our first responders across the nation to prepare for human generated events. Since Katrina, we have focused and invested heavily into local and regional planning, preparation and response capability for natural disasters. These two events have redefined the emergency management world.

The San Francisco Bay Area has been a model for outstanding regional collaboration, coordination and planning for both human and natural disasters. This region has recently completed a robust Regional Emergency Coordination Plan (RECP). However, after all of this investment, effort, preparation, planning and coordination to prepare the RECP, our local public safety leadership in this urban area was relegated to a liaison role during the oil spill because of the existing federal regulations and protocols for oil spill events developed as a result of the Exxon Valdez incident. Our local resources and expertise were left unused for days, despite our desire to assist.

Over the next months, we will be working collaboratively with the Coast Guard and our regional partners to improve response protocols for oil spills and other disasters in the post-Katrina world. We have learned so much from 9/11 and Katrina about the value of advance planning, and response/recovery coordination. Let us not allow those "lessons learned" be lost because oil was the weapon.

Legislation and response protocols in place since the Exxon Valdez disaster should be updated to include the new best practices for a coordinated approach to planning, response and recovery. The oil spill in the Bay has taught us that it is essential for federal agencies to coordinate and communicate immediately with local public safety officials. Thanks to Homeland Security funding, San Francisco Bay Area first responders have a well developed planning and response capability which is a model for local and regional collaboration and coordination. Our local and

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regional expertise and emergency response structure should play a crucial role from the *beginning* of any disaster.

After some initial challenges, our communication and coordination with the Unified Command has improved significantly under the leadership of Coast Guard Rear Admiral Craig Bone. Unified Command is now working more collaboratively with City representatives, enhancing our overall cleanup efforts. While there was improvement because of Coast Guard leadership, examination and review of Valdez-generated protocols, which allow the contractor hired by the responsible party to take a leading role in incident command, should be re-examined thoroughly in the post-Katrina world.

Since the inception of Unified Command, several City agencies have contributed to the overall response, including: the Mayor's Office, the Board of Supervisors, the Department of Emergency Management, the Port, the Fire Department, the Police Department, the Department of Public Health, the Department of Public Works, the Public Utilities Commission, the Recreation and Park Department, the Department of Human Resources, 311, the City Administrator's Office, the General Services Agency, the Controller's Office, the City Attorney's Office, Treasure Island, Animal Care and Control, and the Department of Telecommunications and Information Services. As you can see, our local government can bring considerable resources to bear in response to this and other emergencies. In particular, the Department of Emergency Management has played a key and outstanding role in managing our local resources. Close and early coordination between federal and local officials is essential to fully utilizing these resources to mitigate any disaster.

Early and frequent sharing of information is also essential in order for the City make the determination on whether to issue a Declaration of a Local Emergency, in order to facilitate receipt of state and federal disaster funds. I issued this declaration last week.

I urge Congress and our federal agency partners to work closely with local government to scrutinize the protocols for emergency response to oil spills and other disasters, and revise them to ensure close and immediate cooperation with local emergency responders from the beginning of any disaster. Admiral Bond and City of San Francisco have mutually agreed that local emergency contingency planning should be done in collaboration in this all-threats environment.

Volunteer Management

We are proud that our citizens from around the Bay Area immediately responded to the disaster by asking to volunteer for the clean up. However, the Coast Guard has told us they were surprised by the overwhelming response from the public. Unlike our local emergency response plans for earthquakes and other disasters, the response to an oil spill of this magnitude had no initial protocol with state authorities for volunteer management. As a result, thousands of citizens throughout the Bay Area who wanted to volunteer their time for the hard work of cleaning beaches and rescuing wildlife were left unused and frustrated for days as they were turned away by federal authorities because there was no effective volunteer management program for this type of event.

We are pleased that San Francisco has subsequently negotiated a volunteer management agreement with federal authorities that allows local citizens to be trained and deployed to assist with recovery from this disaster. Over 1000 local volunteers have been trained, credentialed and utilized to assist with disaster cleanup of beaches and animal rescue support. Our volunteers have helped to protect families and wildlife from the oil residue, and have helped to re-open our public beaches. I am proud of how our volunteers have stepped in to fill the gap on the cleanup and recovery from the

spill. They have also enabled us to expand our volunteer database that we can call on to assist in future disasters.

In addition, the City's 311 non-emergency information number has been the clearing house for information about the event, and provides one number for information on volunteer training and event information. Our community non-profit organizations such as SF Connect and the San Francisco Volunteer Center have rallied to support our response and recovery efforts by supporting these volunteer efforts.

I urge Congress and our federal agency partners to work with state and local government to plan in advance for volunteer management during a disaster, so that our best resources – our local residents who care passionately about their community – can be utilized effectively.

Alternatives to Oil

The release of 58,000 gallons of oil into San Francisco Bay is a stark reminder of our economy's dependence on fossil fuel, and our urgent need to develop alternatives. Ironically, the scene of last week's environmental disaster is also the scene of one of the nation's most promising experiments in green energy – tidal power. San Francisco's unique tidal energy resource is unmatched in California or anywhere else in the lower 48 states. The volume and speed of water passing through the Golden Gate, coupled with the depth of water below the bridge itself, provide a near-perfect setting for the deployment of a tidal energy generation system. San Francisco is actively exploring options for utilizing this green energy source.

I urge Congress to work with local governments to develop alternative energy sources, including tidal, solar, wind, and geothermal power. Creation of an Energy and Environmental Block Grant for cities will help us to further spur innovations and develop alternatives. When we lesson our dependence on fossil fuel, we will ultimately reduce opportunities for environmental disasters like that experienced last week in our national treasure, the San Francisco Bay.

Thank you again for your continued leadership on environment and infrastructure issues in our nation and for your commitment to protecting San Francisco Bay.

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