SUMMARY NOTES[1]

2006 Pacific States/British Columbia Oil Spill Task Force Annual Meeting

July 20, 2006

Hosted by the California Department of Fish & Game,

Office of Spill Prevention & Response

IMPROVING RESPONSE COORDINATION:

Transferring lessons from the Gulf Coast to the West Coast

PARTICIPANTS

A total of eighty-three persons were in attendance, including the Task Force Members, Coordinating Committee members, 2006 Legacy Award Winners, and invited speakers. Please reference Attachment C for a complete listing.

PRESENTATIONS AND DISCUSSIONS

The agenda for the 2006 Annual Meeting is provided in Attachment A. Please reference Attachment B for bios of all speakers. Please contact Jean Cameron, Executive Coordinator, at JeanRCameron@oregoncoast.com for copies of speakers' Power Point presentations.

KEYNOTE ADDRESS: **Ryan Broddrick, Director, California Department of Fish & Game**

- Mr. Broddrick noted that he had served as OSPR's first Chief of Enforcement, and had been the Incident Commander for the state during several oil spills. He has observed the development of Unified Command and the Incident Command System for oil spill response, calling it a "major evolution." "If we don't respond in cohesive fashion," he noted, "there's hell to pay." He noted that the ability to respond to oil spills in remote areas or in areas of vast devastation were ongoing challenges.
- Mr. Broddrick announced Lisa Curtis's appointment as Administrator of OSPR, and commented that OSPR has done a remarkable job.
- He explained that Governor Schwarzenegger is committed to pragmatic governance, and that California is committed to supporting the Pacific States/British Columbia Oil Spill Task Force. "Although we have succeeded in reducing the number of oil spills, it takes a lot of work and continued vigilance," he observed.
- He reported that California has a comprehensive Marine Protection Act which endeavors to provide for marine resource protection for the next 100 years; this issue is important to the public, he explained.
- Mr. Broddrick commented on both the critical importance and complexity of regional coordination, citing state and federal efforts to restore the Klamath River watershed and salmon runs, which impact both Oregon and California. He also stated that regional coordination on Avian Flu issues will be critical along the Pacific flyway.

[1] NOTE: This is a meeting summary and is not intended as a verbatim record of all presentations or comments made during the meeting.

WELCOMING REMARKS: **VADM Charles Wurster, Commander, U.S. Coast Guard Pacific Area**

- VADM Wurster observed that the Pacific States/British Columbia Oil Spill Task Force is a unique and valuable forum, and that the U.S. Coast Guard was proud to be a partner in its proactive efforts to tackle tough issues.
- Noting the Task Force's Mission Statement (*The mission of the Oil Spill Task Force is to strengthen state and Provincial abilities to prevent, prepare for, and respond to oil spills.*), he pointed out that all regional stakeholders must be involved.
- VADM Wurster also commented that the Task Force's vision of "No spilled oil" is a daunting goal, and one that requires a group effort. He further noted that "no spilled oil" is good business, considering today's cleanup costs.
- Having reviewed the Task Force's original 1990 report, he observed that many of its recommendations have been implemented at both the state and federal levels.
- Thanking the Task Force Members for the opportunity to participate, VADM
- VADM Wurster noted that he was pleased to attend this meeting to "listen and learn."

TASK FORCE MEMBER AGENCY UPDATES:

Kurt Fredriksson, Commissioner, Alaska Department of Environmental Conservation (DEC)

- Kurt addressed recent "Lessons Learned" in Alaska, focusing on the pipeline spill on the North Slope, the *Selendang Ayu*, and the *Exxon Valdez* spill.
- He explained that the March oil spill on the North Slope was from a 34" transit line from the field to Pump Station 1. They had expected spills in the gathering lines, he commented, but not in the transit lines. The spill of more than 200,000 gallons was the largest spill on the North Slope. Fortunately it occurred in the winter when the ground was frozen, so there was no oil absorption in the tundra and the cleanup was excellent, Kurt noted, explaining that spill drills had "really paid off." The lesson learned was that it surprised everyone! They thought they had the best corrosion protection possible. The investigation is on-going, he noted, and DEC has created an Arctic Pipeline Technology Team to determine Best Available Protection (BAP) corrosion protection standards. He anticipates that the oil industry will work with DEC to sponsor a conference on this topic in early 2007.
- Regarding the *Selendang Ayu*, Kurt explained that the response was finally closed in June. The important lesson learned had been the value of mounting an aggressive campaign to monitor the health of local fisheries and communicate that information to the public. He noted that 56% of all U.S. seafood comes through Dutch Harbor. The State of Alaska had established water quality and fish quality monitoring in local waters during the spill response, on each crab boat, and in the processing plants in Dutch Harbor. They established a zero tolerance for contamination and ensured that test results - which were all negative – were communicated to the public. This approach protected this valuable fishery from potentially devastating economic impacts, he noted.
- Kurt commented that the *Exxon Valdez* spill is not over yet, since restoration efforts continue. He explained that the $900 million provided for the NRDA settlement included a re-opener clause which allows state or federal agencies to claim up to another $100 million to cover damages "unforeseen or unexpected" at the time of the original settlement. As a

result, a $92 million claim has been filed to restore rocky beaches where oil lingers as well as to conduct a subsistence survey program. The lesson learned, Kurt explained, is "you're never done, but you can make great progress!"

Chris Trumpy, Deputy Minister, British Columbia Ministry of Environment

- Deputy Minster Trumpy highlighted a problem with railroad spills in British Columbia and other parts of Canada, noting the August 5 , 2005 derailment and chemical spill into the Cheakamus River which released about 40,000 liters of a sodium hydroxide solution that killed thousands of fish, including salmon and steelhead.
- Explaining that it seems British Columbia is averaging one train derailment each week, he reported that the Ministry has initiated a dialogue with railroad operators and federal agencies to improve spill prevention and response. The objectives of the preliminary analysis are to:
    - recognize the combined response capacity of carriers, shippers and contractors for spill response;
    - identify gaps in institutional, organizational and technical emergency preparedness, and
    - foster a government/industry understanding of current spill response practices.
- Chris also recounted events surrounding the sinking of the British Columbia ferry, *Queen of the North*, on March 22, 2006. He explained that the sunken vessel continues to leak about a gallon/hour of fuel and still contains an unknown volume of fuel , which BC Ferries needs to address before a major release occurs. He noted that a recent spill drill with Alaska had helped prepare local communities for such an event, although responses in remote locations like this one are always difficult.
- He reported on a recent incident where a chemical storage facility was discovered to have many unlabeled goods. In response to this and other similar incidents, the Ministry is reviewing their regulatory regime in order to find ways of decreasing the frequency of future incidents. One element will likely be harmonizing tracking of hazardous materials with other provinces and the federal government.
- A great deal of development is currently proposed for British Columbia's northern coast and it is likely to change the movement of oil and shipping along Alaska's border with Canada, he reported. A pipeline is proposed to carry oil from Albert to Kitimat, where tankers will load and carry it offshore to China. In addition, there is an LNG terminal also proposed for Kitimat and a major container port proposed for Prince Rupert.

Dale Jensen, Oil Spill Program Manager, Washington Department of Ecology

- Dale opened his Power Point presentation by reviewing some of the major oil spill incidents to which Ecology responded in over the last couple of years. These included two PCB releases from transformers at dams. In addition, Ecology responded to a major marina fire and related spill at Gig Harbor, a number of spills from highway accidents, and releases from several derelict and abandoned vessels. Ecology also continued to respond to Methamphetamine drug lab cleanups. When the tank barge *Millicoma* grounded near the

entrance to the Columbia River, Ecology response personnel were on site to monitor and assist with the salvage operations.

- Dale noted that the passenger ship *SS Catala* had been built in the 1930s. She grounded on state lands near the mouth of Grays Harbor in 1970 and been abandoned there, sinking deeper into the mud. The superstructure of the ship was removed to eliminate injuries from people climbing on it, but the fuel oil on board had never been removed. Recent storms have exposed the vessel, and oil was discovered seeping out, threatening an estuary area and migratory birds. Ecology and the U.S. Coast Guard determined that tens of thousands of gallons of heavy fuel oil is on board. Since there is no Responsible Party, the State had spent $1 to $2 million on the removal to date.
- Dale explained that the Washington Legislature had passed bills in 2004, after the Pt. Wells spill, which set a "zero spill" policy and charged Ecology to adopt regulations governing oil transfers, including pre-booming and transfers from trucks. The 2006 legislature approved funding for six new field staff to monitor transfers, he reported.
- Ecology is working with the U.S. Coast Guard to define what regulations the state can adopt, since some may be preempted by federal regulations, Dale explained. Federal preemption concerns must be balanced with citizens' expectations of the state, he commented, stating that "We have a broad & effective cooperative relationship (with the Coast Guard); we need to expand this partnership to co-regulate oil transfer operations." He hoped to do that through revisions to their MOA.
- Dale also reported that the Washington Legislature has authorized an independent advisory body, the Oil Spill Advisory Council, which is charged with "consulting with the department on lessons learned and agency progress on necessary actions in response to lessons learned." He noted that Ecology hires an independent contractor to review drills and responses to develop "lessons learned" which are posted on their website. The Council is reviewing these as well as looking at other models and will report to the Legislature this fall.
- It was also noted that Governor Gregoire's Puget Sound Partnership includes a focus on oil spill prevention, preparedness, and response.
- Lessons learned by Ecology's Spills Program over the past few years, he explained, included the value of independent reviews and debriefs, and of investing in equipment to respond to spills at night or in low visibility. Partnerships with the Legislature, the Oil Spill Advisory Council, the Puget Sound Initiative, and the U.S. Coast Guard are also critical. Washington's citizens have extremely high expectations, which Ecology hopes to meet through their new Contingency Planning Rules and Vessel & Facility Oil Transfer Rules.

Paul Slyman, Deputy Director, Oregon Department of Environmental Quality

- Paul explained that one of Oregon DEQ's priorities is to "Protect Humans & the Environment from Toxics," which includes oversight of the U.S. Army's efforts in Umatilla, Oregon, to destroy chemical weapons. It also involves emergency spill response; DEQ received 2,339 calls in 2005, averaging about six each day.
- Noteworthy among the 2005 events was a train derailment and spill near Kamela in NE Oregon. Tank cars carrying anhydrous ammonia and molten sulphur were secured and spills of

these hazardous materials avoided. Unfortunately, 400 gallons of diesel were spilled. Restoration is ongoing.

- In another incident, a leaking underground storage tank contaminated a pond feeding into Fanno creek near Portland; red dye diesel was removed and the tanks are also excavated.
- Eighteen spills were reported from fishing vessels; in one, the fishing vessel "The Boss" had to be salvaged where she sank in the channel into Newport. Also on the Oregon coast, a pool of elemental mercury was found on the beach in Florence; the U.S. Coast Guard eventually removed 8 pounds of contaminated sand, Paul said.
- A major marina fire destroyed or sank yachts on the Columbia River, releasing fuel and lubricant oils. An oil spill separator valve was left open at a tank farm on the Willamette River and product spilled into the river.
- Truck spills continue to be a problem; Paul cited truck spills to Roberts Creek, the Umpqua River, and Highway 38.
- Paul also reminded the audience that the stern of the *M/V New Carissa* remains embedded in the near-shore waters off of Coos Bay. Thanks to a settlement with the vessel's owners, the Oregon State Land Board has approved $22.1 million for its removal.
- DEQ's emergency response program is funded through a combination of fees and appropriations from the General Fund, Paul explained. Fees include per/trip fees on vessels entering state waters as well as annual fees on oil-handling facilities.
- DEQ has been actively involved in planning for earthquakes and other natural disasters, he explained, with a focus on planning for business continuity and continued operations.
- Looking ahead, Paul also anticipated that, since the state is promoting biodiesel, DEQ will need to develop regulations and spill response tactics to cover biodiesel spills.
- Paul noted that five LNG terminals have been proposed for Oregon, with related issues of LNG tanker traffic and pipeline connections. Paul also noted that a ship-breaking facility was proposed for Newport and DEQ had to respond to environmental concerns related to the proposal. Paul also reported that Governor Kulongoski has proposed to designate the entire Oregon Coast as a National Marine Sanctuary.

Laurence Lau, Deputy Director, Hawaii Division of Environmental Health

- Larry opened by explaining that the Hazard Evaluation & Emergency Response office implements Hawaii's Superfund Law, which includes oil and authorizes HEER to respond whenever a release of oil or other hazardous substance may imminently and substantially threaten human health and the environment.
- Hawaii's worst nightmare, he said, would be for oil to hit Waikiki Beach; what caught them by surprise recently, however, was Waikiki being closed for a sewage spill. Six weeks of rain this past spring led to a dam breach on Kauai and related fatalities; it also caused an overflow from the Honolulu sewage system that intensified over a weekend, catching authorities by surprise. As a result, they didn't mount an effective response initially. Larry also noted that monitoring bacteria levels was difficult because the tests take 24 hours and situations change rapidly in moving waters such as canals or the ocean.
- Communications with the public and media was a challenge and the public stayed fearful even after contamination was removed.

- Larry explained that President Clinton had declared the Northwest Hawaiian Islands (NWHI) to be a Coral Reef Ecosystem Refuge by an Executive Order in 2000; in 2005 Hawaii Governor Linda Lingle created a marine refuge for all State waters within the NWHI, and this year President George Bush established the NWHI to be a Marine National Monument.
- In concert with these protective designations, Governor Linda Lingle signed Act 134 in 2006, which allows a State official to step in and assist in the removal of the vessel to a safer location, without liability to the State if the owner/operator takes no action. This is intended to address a number of groundings in the Hawaiian Islands. In 2005 and 2006, two large vessels – the bulk carrier *Cape Flattery* and the research vessel *Casitas* – grounded in Hawaiian waters. In addition, three sailboats and eight commercial fishing boats grounded in the Islands.
- On July 2, 2005 the *M/V Casitas* ran aground on Pearl and Hermes Atoll, located approximately 1210 miles northwest of Honolulu. It is part of the Hawaiian Islands National Wildlife Refuge and is primarily underwater. Although the entire atoll area is over 450 square miles, only seven islets are above sea level, so the total land area is only 0.36 square km (80 acres). Wildlife at risk from spilled fuel included Brown and Red-footed Boobys, endangered Green Sea Turtles, Wedge-tailed Shearwaters, many fish species, and the endangered Monk Seal.
- Since the vessel was grounded on the edge of the atoll, pounding surf presented real hazards to the response crews. After hazardous materials and gear were removed, the vessel was pulled off the coral and scuttled in an EPA-approved site. Larry noted the unique challenges associated with response at such a remote location.
- Larry also reported on a number of grounded fishing vessels. One, grounded on a remote point of the Big Island, required removal of 5000 pounds of tuna and 300 gallons of diesel fuel. In another incident, the 55' *F/V Two Star* was hard aground at the Kewalo Basin on Oahu; the owner eventually walked away and left the state to clear away debris, fuel, and what was left of the boat.
- On November 11, 2005 the 67' *F/V Seven Stars* grounded in Onomea Bay on the Big Island. Access to the ship was impossible due to the high surf. It was a total loss by the second day; 700 gallons of diesel was released and 4000 pounds of tuna was lost.
- The tanker *Front Sunda* had a spill at the Single Point Mooring off Oahu on May 20, 2006. This is where all oil coming into Hawaii is unloaded and transferred to the Barbers' Point refinery. 100 bbl of Extra Light Arabian Crude Oil was released. Clean Islands Council's spill response vessel was on-scene for oil removal with sorbet boom, and MSRC's OSRV was on standby. The release was caused by a faulty hose coupler. Fortunately, due to warm winds and a light, volatile product, most evaporated and there was no wildlife or other environmental damage. The response was concluded by noon on May 21st.

Lisa Curtis, Administrator, California Office of Spill Prevention and Response

- Ms. Curtis referred the audience to California's section in the Task Force Annual Report for information on past activities, and focused her remarks on issues "on the horizon" for the

OSPR, specifically their expanded Drill and Exercise Program, Shoreline Protection, and Mystery Spills.

- OSPR will create a new independent Drills and Exercises Unit to implement recommendations, statutory and regulatory requirements, and the findings of the Department of Finance audit, Lisa explained. Drill/Exercise Program Coordination staff, with knowledge of the Marine Spills Branch, Scientific, and Enforcement programs, will be tasked with developing objectives, goals and procedures. OSPR hopes to expand the number and duties of Drill-Specific Coordinators to allow for complete cradle-to-grave drill planning and attendance. OSPR plans to integrate the agency Training Program with the new Unit and expand the Training Program to include ICS and cross-training for drills and spill responses.
- OSPR will also expand the participation by contingency plan reviewers in drill design and evaluation, as well as increase staff attendance at industry drills. They plan to capture "Lessons Learned" and establish feedback loops to future drills and training. The new Unit will track drill credits assuring all contingency plan requirements are properly tested during a three-year cycle. In addition, they will enforce regulatory requirements and propose regulatory changes that would enhance the drill program. Finally, the Unit will be charged with developing and maintaining a database to track and coordinate drill-related activities and drill statistics.
- Noting that Carl Jochums would be giving a presentation on the Shoreline Protection Program on the morning panel, Lisa explained that California law requires that contingency plans identify measure to protect sensitive shorelines, but set no standards for evaluating those measures. As a result, California oil spill response organizations (OSROs) have been held to performance rather than planning standards. OSPR has been working with key stakeholders to develop planning standards; this effort will culminate in a rulemaking process that will include public hearings.
- Regarding mystery spills, Lisa explained that spill risks from sunken ships in California waters is a major concern. OSPR has mapped these sunken vessels; there are 1488 records in their Sunken Ship Database. They have ranked the top risks based on location and volume of oil on board.
- Among the proactive measures they plan are continued literature and database searchs, acoustic surveys to accurately locate wrecks, acoustic and ROV missions to reconnoiter the vessels' condition, and ongoing monitoring to evaluate the known threats. If a release occurs from any of these wrecks, reactive measures will include oil spill response and salvage.
- One current mystery spill is the Sea Cliff mystery spill, which Lisa described. Oiled birds were found on the Seacliff beach almost two years ago, beginning on 9/11/04; almost all are cormorants, which are diving birds. They were found within 200 meters of an old cement ship. The number found at any given time was below response-trigger threshold. All were oiled with fresh oil, yet no oil was found on the beach and there was no obvious source.
- The suspected source was the *SS Palo Alto*, an oil tanker built of reinforced concrete in 1919 at Alameda, California as part of the U.S. Government fleet for World War I. The vessel is 435 ft long and was never operated as a tank ship. As a matter of fact, she only sailed under her own power on sea trials and then was laid up for 10 years. In 1929, the ship was sold to the Cal-Neva Company and transformed into an amusement attraction. It was

towed to Sea Cliff Beach and positioned 600 feet offshore. Her cargo tanks were filled with sand and a pier was built from the shore to the former ship. She had a ballroom, an elaborate café, dining room, saloon, carnival concessions and a 54-foot heated swimming pool. In 1932, the amusement venture went out of business and the *SS Palo Alto* was sold to the State of California for $1.00. It was used primarily as a fishing pier until storm damage to the hull rendered it unsafe.

- In its current condition, the *SS Palo Alto* appears to be in three sections and is believed to contain bunker fuel in unknown quantities, which may be left over from her sea trials or it may be fuel used during her career as an amusement center. The exact oil characteristics are unknown.
- The *SS Palo Alto* presents numerous hazards. Her structural integrity has been significantly compromised; the decks are holed, the bulkheads have collapsed, and the primary supporting structures are wasted and fractured. Her decks present additional hazards to inspectors, since marine growth makes them slippery or conceals decayed or holed deck areas. Exposed rebar and other structural steels, and tripping hazards are all present. Any diving operations will be affected by wave surge, poor visibility, and the exposed rebar. There is also concern that hazardous or explosive gases may be present in any sealed tanks. [2]

UPDATE ON TASK FORCE ACTIVITIES AND PLANS: **Jean Cameron, Executive Coordinator**

- Noting that the Task Force operates on a fiscal "work" year that runs from July 1 to June 30th, and that the Task Force operates according to three objectives in support of their mission statement, Jean began with a report on activities completed during the 2005-2006 work year under the Spill Prevention Objective.
- The Task Force initiated a new project focused on improving pipeline spill prevention, preparedness, and response. The first phase of this multi-year project focused on gathering information about the regulations governing pipelines, and the first step was to survey how regulatory agencies define the pipelines they regulate. That report is now available on the Task Force website.
- Jean explained that a number of Spill Prevention projects are ongoing, such as POSPET, the Pacific Oil Spill Prevention Education Team. POSPET is a group of agencies and non-profit organizations who do outreach to recreational boaters and marinas focused on spill prevention as well as reporting and response. With staffing and web support from the Task Force, they meet twice a year to exchange information on outreach techniques and coordinate their message. With substantial assistance from the WA Department of Ecology and CA OSPR, 2800 laminated outdoor signs, 14,100 decals, and 20,100 brochures are being distributed at boat shows, marinas, and fueling docks from British Columbia to California this

[2] In a September 2nd press release, OSPR announced that "After a lengthy investigation and oil fingerprinting, OSPR's Petroleum Chemistry Laboratory identified the *SS Palo Alto* as the source of oil that has killed 51 birds and left another 19 injured since 2004. A project to remove the oil began on September 5. Accessible oil will be removed by precision mechanical techniques that will not cause any further damage to the eroding vessel. Additionally, screen barriers will be fabricated and installed to prevent birds from entering the oil tanks in the future. The screens will only affect areas nearest to the oil tanks. They will not prevent wildlife access to other parts of the ship where they breed and shelter in areas unaffected by the oil." Expected completion of the oil removal operation was projected for mid-October.

summer with POSPET's "Spills Aren't Slick" message. Jean noted that POSPET meeting notes, a list of POSPET members, and PDFs of the *Spills Aren't Slick* materials are posted on the POSPET page on the website.

- CAPT Laura Stratton of the Washington Department of Ecology monitors the status of double-hull conversions of the TAPS tankers that ply West Coast waters. The Task Force member agencies receive her reports regularly, and the Task Force keeps a link to the report on its website. CAPT Stratton reported that, as of April 2006, 16 tank ships are participating in the TAPS trade; 12 of these tankers (75%) have double hulls, 3 of these tankers have double bottoms, and only one is a single-hull ship. Of the four ships that do not have double hulls, the last one to be retired or converted will be the single-hull SEARIVER LONG BEACH, which is due to be retired in 2010, at which time the entire TAPS fleet will consist of double hull tankers.
- Under a project to promote voluntary Best Industry Practices (BIPs) for vessels and tank barges, the Task Force encouraged West Coast Harbor Safety Committees to adopt the BIPs as Standards of Care in their ports. They also presented the BIPs to the Port of Vancouver, British Columbia as well as the British Columbia Chamber of Shipping. Both indicated that they are substantially in compliance with these recommendations. The Council of Marine Carriers in British Columbia has also indicated that their member tug/towing companies are in compliance with the tank barge BIPs. Jean noted that the Task Force is still trying to get a meeting with the American Waterways Operators Pacific Region Quality Steering Committee to discuss this matter. More information regarding the Best Industry Practices recommendations is available on the website.
- Jean also explained that the Coordinating Committee regularly exchanged information on a number of Spill Prevention Topics of Concern, including:
    - Cruise ship operations with regard to spills and other water pollution impacts
    - Oil spill prevention research and development
    - Offshore Lightering
    - Oil spill risks from sunken vessels
    - Waste oil dumping
    - Oil Transfer regulations
    - Spills from trucks and implementation of state/provincial recommendations
    - Salvage capabilities and regulations
    - Tug escort requirements
- The Task Force's regional oil spill database débuted in 2003. Jean stated that "Our goal is continuous improvement of this database in order to provide information on spill trends and causal factors that allows us to target our spill prevention efforts." The Database Workgroup has been chaired by Jack Barfield of the Washington Department of Ecology; all U.S. member agencies participate and the British Columbia Ministry of Environment is developing a spill database and plans to join the Task Force project as soon as possible. In the 2005 data which Jean presented (available in the 2006 Annual Report on the website) charts are based on volume spilled, which is shown in both percentages and number of gallons.

- Jean noted that there was a significant amount of crude oil spilled in 2005 compared to 2004; crude oil spills were less than 1% of the 2004 total, but were 35% of the total volume spilled in 2005. The largest crude spill was 126,000 gallons (72.1%), caused by structural failure of a pipeline in California due to a landslide. The second largest contributor to crude oil spills was "Facilities," which accounted for 16,963 gallons (9.7%) of the volume spilled. The facility spills were mainly due to Equipment Failure.
- The total of non-crude spills for 2005 showed a decrease of 256,268 gallons from the 2004 total of 675,175 gallons. Diesel and gasoline continued to be the largest contributors in 2005, as was the case in 2003 and 2004.
- As with the crude oil, pipelines and facilities were also the major sources of non-crude spills. Of the eight large non-crude spills over 10,000 gallons in 2005, five were from pipelines; moreover, the 176,964 gallon contribution from pipelines showed an increase of 45,611 gallons over the 2004 total. Three of these eight large spills were from facilities. The facility total of 160,509 gallons is less than the 2004 total of 404,336; however, the 2004 figure included a single facility spill of 270,000, which skews the comparison. With this consideration, the 2004 and 2005 facility spill totals are consistent.
- The top Causal Factors in 2005 were Equipment Failure (49%) and Human Error (33%).This is consistent with the 2003 and 2004 data. The "Unknown" category increased to 12% from the 2004 value of 3%. Analysis of the "Unknown" causal factors indicates that a large percentage are vehicular accidents in which response personnel are relying on police reports that do not contain the degree of specificity needed to assign a causal factor. Additional field response resources would be required to improve on this situation, Jean noted.
- Under their Spill Preparedness/Response Objective, the Task Force continued to monitor and comment on U.S. Coast Guard (USCG) requirements for Contingency Plans for non-tank vessels. Jean reported that they also submitted a petition for rulemaking to the USCG to raise the Limits of Liability for vessels and facilities by the Consumer Price Index amount since 1990, which they had the authority to do but had not yet done. Although the Coast Guard replied that such a process was underway, she speculated that it's been overtaken by recent legislation which has increased the Liability Limits in an effort to protect the solvency of the Oil Spill Liability Trust Fund.[3]
- Jean reminded the audience that the Task Force had worked with the USCG Pacific Area, with Transport Canada, and with key regional stakeholders to draft planning and decision-making guidelines based on IMO's Places of Refuge guidelines. The USCG Pacific Area has referred these to the Pacific Area Districts for incorporation into Area Plans, and

[3] A 9/26/06 email from Jan Lane, Director of the National Pollution Fund Center, states that "The Delaware River Protection Act of 2006 amended and increased liability limits under the Oil Pollution Act of 1990 for vessel spills, and should be responsive to your petition. The increases to limits for the most part were approximately 50%, which roughly corresponds to the consumer price index increases since OPA was enacted. Increases to liability limits for single hull tank vessels (approximately 150%) far exceeded consumer price index increases. The Act also amended the provision authorizing further increases to limits based on consumer price index increases to begin from the date of enactment of the Act. In simplest terms, Congress enacted increases to limits for vessels that overtook our planned rulemaking to adjust limits to reflect consumer price index increases since OPA was enacted. Authority for future rulemaking to increase vessel limits of liability is limited to consumer prices increases since enactment of the Delaware River Protection Act of 2006. The CG is required to make those adjustments every three years."

Transport Canada is developing national guidelines which are consistent as well. The Task Force is monitoring adoption of these Places of Refuge Area Plan Annexes as well as the adoption process in Canada.

- In April, the Task Force sponsored a Roundtable on Expanding Response Options to Night or Low-Visibility Situations. Invited speakers and attendees shared information and ideas regarding public expectations of spill response, experience with technology for tracking and removing oil during darkness, operational concerns, and the perspective of the planholder. The technology is getting better and has been successfully used in a number of settings, although worker safety remains the primary concern, Jean reported. Summary notes of the presentations and discussions are available on the website.
- Jean then summarized various ongoing projects under the Spill Preparedness/Response objective, including:
    - Maintaining the Integrated Vessel Response Plan Guidelines on our website and updating them when member agencies modify their regulations; and
    - Maintaining the OILS-911 spill reporting number in British Columbia, Washington, Oregon, and California. Spill reports made to this easy-to-remember number by recreational boaters and marina operators are automatically routed to the emergency response office of the jurisdiction from which the call originates. From July 2005 through June of 2006, 326 spills were reported using OILS-911.
- Jean also noted that, as they do with Spill Prevention topics, the Coordinating Committee regularly exchanged information on a number of Spill Preparedness/Response Topics of Concern, including:
    - Drill programs
    - Financial responsibility requirements, state and federal
    - Response technologies, including research and development
    - OSRO activities & capabilities
    - NRDA activities
    - Applied response technologies
    - Coordination of inter-jurisdictional wildlife care
- Jean noted that activities under our Communications Objective included :
    - Roundtable & Annual Meetings – these are public events and rotate among the member jurisdictions. The 2005 Annual Meeting was hosted by Alaska, and the 2006 Roundtable was hosted by OSPR in the Bay Area.
    - Legacy Awards are given at the Annual Meeting each year and give the Task Force a chance to honor persons, organizations, or groups who go beyond regulatory compliance to demonstrate an outstanding commitment to improved spill response or prevention.
    - The Task Force tracks U.S. and Canadian federal policy development and rulemaking proposals and submits comments when appropriate.
    - The Task Force Coordinating Committee met with representatives from U.S. EPA and the U.S. Coast Guard this past year, and also received a briefing from Merv Fingas of Environment Canada.

    - The Task Force has identified Points of Contact for each of the oil spill regulatory agencies in the Gulf States and regularly shares information of common interest.
    - The Task Force maintains a very informative website where visitors can find our Annual Work Plans and Annual Reports; information on all Legacy Award Winners from 1999 to present; Roundtable and Project reports; Annual & Coordinating Committee meeting notes; links to POSPET member organizations; links to our member agencies, key federal agencies, other oil spill regulatory agencies (including in the Gulf States); contact information for the Coordinating Committee, and much more. Jean noted that the Task Force website has received over 939,000 "requests" since it was put in place in 2003; nearly 432,000 of those were during the past "work year."
- Looking ahead to what's in the Task Force's 2006-2007 Annual Work Plan, the Task Force will complete and compile information on pipeline regulations. The 2007 Roundtable will provide an opportunity for dialogue with pipeline regulators and industry representatives regarding ways to improve pipeline spill prevention, preparedness, and response.
- The Task Force will continue development of the Regional spills database and host an Investigator Training Course.
- The Task Force will continue to monitor the USCG's requirements for Contingency plans for non-tank vessels & the solvency of the Oil Spill Liability Trust Fund.
- The Task Force will continue to promote adoption of Places of Refuge Planning and Decision-making guidelines by Area Committees and monitor the USCG's publication of a Places-of-Refuge NVIC and Transport Canada's adoption of final guidelines.
- And the Task Force will continue to support POSPET, track the conversion of the TAPS tankers, promote voluntary Best Industry Practices, discuss Topics of Concern, and maintain Integrated Vessel Response Plan guidelines and OILS-911.
- In addition, the Task Force will initiate several new projects:
    - When the West Coast Offshore Vessel Traffic Risk Management Project Workgroup produced their final recommendations in 2002, they included a recommendation that the Task Force, the U.S. Coast Guard, and the Canadian Coast Guard review the implementation status of their recommendations in five years. The Task Force will begin that review this fall and produce a final report in 2007.
    - The Task Force also intends to promote Remote Sensing for spill prevention and response by tracking the development of remote sensing technologies, by encouraging the USCG to implement RADARSAT tracking of illegal dumping in the Pacific Area, and by encouraging OSROs and contingency plan holders to invest in remote sensing tools, including airborne remote sensing technologies.
    - The Task Force has two Mutual Aid Agreements; one covers transfer of member agency personnel and equipment and the other covers the release of private sector equipment cited in approved plans. We will review our contacts and drill both Mutual Aid Agreements. This will help us gain experience with using them and determine whether any changes are needed.
    - The Task Force plans to expand our outreach to U.S. East Coast states and Canadian provinces as we did with the Gulf States over the past year, identifying points of contact for information sharing and mutual aid.

- Finally, the Task Force Members have approved hosting a "Clean Pacific" conference in Seattle in September 13 – 14 of 2007.

CALIFORNIA INITIATIVES AS WEST COAST MODELS (Bud Leland, OSPR Assistant Deputy Administrator, Moderator)

California's Oiled Wildlife Care Network - An Overview: Dr. Mike Ziccardi, Director

- Dr. Ziccardi explained that OPA '90 established a requirement that Area Contingency Plans "… provide for a specific fish and wildlife response plan … to minimize disruptions to fish and wildlife and their habitat." California's Lempert-Keene-Seastrand Act went much further and created the Oiled Wildlife Care Network (OWCN). The Act requires OSPR to rescue marine life and to establish six regional facilities for that purpose. The Act further requires on-going facility operation and maintenance, established an oiled wildlife research program, and required UC Davis to administer the OWCN.
- OSPR established and administered the program from 1994–1997; the Wildlife Health Center at UC Davis has administered the program since 1997. Oversight is provided by both an Advisory Board and a Scientific Advisory Committee.
- The OWCN's mission is to "Provide the best achievable treatment to oiled wildlife." The program is funded with interest earned by California's $50 million Oil Spill Response Trust Fund. Dr. Ziccardi noted that OWCN programs are covered by the four Rs: Readiness, Response, Reaching Out, and Research.
- There are three OWCN/OSPR facilities in California, twelve primary care facilities, and twenty-five "participating organizations." These include industry, academic, scientific & wildlife rehab organizations. Through OWCN agreements, these participating organizations provide integrated, rapid, regional response, while OWCN trains, equips, and maintains readiness at these locations. The facilities are put to other uses during non-spill periods.
- Readiness training includes basic information and health & safety. In addition, supervisor training focuses on basic skills such as spill/animal care overview and advanced health and safety. Advanced Skills Training involves advanced animal care training. Continuing Education is also provided and covers research findings and Table-top exercises.
- Dr. Ziccardi explained that OWCN's Response strategies are fully integrated into ICS. The Wildlife Care and Processing Group operates under the Wildlife Branch in Operations, as do the Wildlife Hazing, Reconnaissance, and Recovery and Transport groups. The Wildlife Care unit also includes the Wildlife Intake, Stabilization, Cleaning, Recovery, and Support units.
- Their logistical procedures are pre-established and their rescue/rehab methods tested regularly. Their pre-developed protocols ensure best care, he noted, and data and samples are collected in a manner consistent with legal and NRDA requirements. He also noted that OSPR has MOUs in place with the U.S. Fish and Wildlife Serve as well as the National Marine Fisheries Service.
- Dr. Ziccardi stated that the Network's statewide scope ensures rapid response; in addition, the pre-trained volunteers and staff react decisively.
- The OWCN is cost-effective, he explained, since contingency-plan holders can list OWCN at no cost. Moreover, their tiered response ensures an appropriate level of response, and

equipment and supplies are cached throughout the state to reduce shipping costs and delivery times.

- OWCN has participated in more than sixty oiled wildlife responses, treating more than 6,000 live animals; they've averaged a 50-75% release rate in these responses. They have trained more than 1,000 full-time volunteers and 1,500 "convergent" volunteers (incident-specific). They have also trained more than 200 biologists and 300 public agency responders. Damages collected using OWCN animal data and samples have totaled more than $100 million.
- With regard to public outreach, Dr. Ziccardi described programs aimed at kindergarten through high school and college levels. OWCN maintains a website, publishes newsletters, and provids presentations like this one. They also work with industry on drills, training, and presentations.
- OWCN has worked with U.S. federal agencies to develop national standards for oiled wildlife care, has provided care and facility guidance documents to the State of Washington, has provided input on facility design for Hawaii, Oregon, South Carolina, Texas, and Washington, and assisted with revisions to the NW Area Contingency Plan. In addition, they've assisted with national training for oiled mammal response, otter response in British Columbia, and bird response in South Carolina. OWCN has provided spill response services in Hawaii, Louisiana, and Washington.
- At the international level, OWCN has assisted with wildlife care facility/network development in Argentina, Australia, Belgium, Brazil, Canada, Japan, Mexico, New Zealand, Russia, South Africa, and the United Kingdom. They have provided training in Japan, the Netherlands, and Norway; and they've responded to spills in the Galapagos, Japan, and Spain.
- OWCN's research focuses on improving animal care, assessing wildlife health, determining population information, and developing new technology. They have allocated more than $2 million in funding for over 60 projects in the last ten years as well as conducted two post-release projects that have shown that release rates are higher than previously thought.
- In-house research has covered such topics as the effects of dispersants, optimal seabird nutrition, and methods of rapid oiling assessment. OWCN has also developed a facility modeling tool that will determine facility and utility needs based on the number of animals moving through a facility.
- Dr. Ziccardi also explained that OWCN and OSPR are involved in a joint project to develop a field data collection system that will be simple, easy-to-use, reliable, and rugged. A hand-held device would auto-record search efforts, provide accurate location/time information, and directly create GIS data sets. This information would be downloaded to computers at their facilities.
- OWCN is also working to improve facility data collection systems using wireless tablet PCs and scanning PDAs to incorporate field data, read bar code bands, allow volunteer input, enable full animal tracking, automatically generate reports, and provide for immediate on-line reporting.
- Integrating their research findings into their fine-tuned response network provides for continuous improvement in wildlife care in California as well as regionally, nationally, and globally, Dr. Ziccardi concluded.

California's Oil Spill Response Volunteer Program: A Model of Innovation: Cindy Murphy, OSPR

- Ms. Murphy explained that the California Ocean Assistance Spill Team (COAST) was founded in 1992 to provide a large corps of pre-trained volunteers able to respond at the shortest possible notice. It was also intended to provide a capability to coordinate and train convergent volunteers. In 1994 OSPR contracted with COAST to develop a volunteer program specific to oil spill response; one result was OSPR's Volunteer Guidance Manual.
- According to their Mission Statement, the OSPR Volunteer Program allows concerned citizens to participate in tasks connected to saving wildlife and habitat during oil spill response. Cindy explained that volunteers are used at the wildlife care centers; they're not allowed in the field for search and collection of oiled wildlife, since OSPR has staff who have hazardous material response training and know the protocols for collecting oiled wildlife.
- Volunteers are an excellent resource, Cindy noted, and using volunteers also provides a valuable opportunity for OSPR to partner with affected communities and utilize valuable local knowledge.
- Cindy recounted the following statistics regarding volunteers used in various spill responses:
    - Over 350 volunteers donated approximately 7,650 hours in the Monterey Bird Incident (Oct. 1997);
    - Over 300 volunteers donated approximately 8,200 hours in the response to the *Kure* spill (Nov. 1997);
    - Over 500 volunteers donated approximately 9.600 hours in the response to the *Stuyvesant* (Sept. 1999);
    - Over 400 volunteers donated approximately 12,000 hours in the response to the *Luckenbach* (Nov. 2001-2002); and
    - Over 500 volunteers were used in the Ventura Oiled Bird Incident (Jan. 2005), with 160 volunteers serving on one day alone.
- There are two types of volunteers in the program, she explained. "Convergent Volunteers" are volunteers who arrive at the scene of a spill and are not previously trained, and who may or may not have wildlife experience. Often the media is utilized to bring in many of these volunteers, she noted. OSPR also maintains a volunteer database of contact information for persons who assisted in previous spills or who registered with OSPR.
- Trained volunteers are persons affiliated with a OWCN Participating Organization who have completed OWCN's oil spill wildlife response training and/or participated in previous oiled wildlife response, although not all persons pre-trained for wildlife experience have had spill experience.
- Cindy explained that she manages Convergent Volunteers on behalf of OSPR, while January Bill & Yvette Hernandez manage the Trained volunteers for OWCN.
- Human health and safety is the first priority in decisions regarding the use of volunteers at an oil spill incident, Cindy stated. Volunteers will not be utilized to work directly in the recovery of oil, and volunteers will not be assigned to work in areas where there is a known potential health hazard.
- Volunteers must:
    - Be 18 years of age;

- Sign California Department of Fish and Game's Volunteer Service Agreement (workers compensation);
- Take the Oath of Allegiance and Declaration of Permission to work for persons; employed by the State of California;
- Have Health and Safety training ;
- Complete the Volunteer Skills Information Form; and
- Have authorization to use Privately Owned Vehicle on State business (if needed).

- Each of the wildlife centers has a Volunteer Coordinator. A Volunteer Coordinator's duties are to oversee facility orientation and Health and Safety training. In addition, s/he must monitor safety for the volunteers, record their hours, identify key volunteers, and produce a daily status report. After the response, the Coordinator organizes and participates in the "hot-wash" and sees that each volunteer receives a Letter of Appreciation and Certificate
- Cindy explained that monitoring is very challenging in a large scale event, therefore the tracking of skills, collecting feedback, and delivering on-going training is often difficult. In large scale incidents, communication between all levels of recruitment, training, and management is essential.
- Animal handling jobs for volunteers might include holder, tuber, rinser, or washer. The responsibilities of a volunteer can also change according to their skill level, commitment, and abilities. There are many non-animal handling jobs that are crucial as well, Cindy explained. These include cage cleaning, clerical/data entry, construction or electrical projects, errands, food preparation, laundry, pool maintenance, scribe, tasks at the volunteer operations center, and beach surveys (non-oiled beaches).
- Cindy also explained that OSPR does outreach to volunteers between spill events; for instance, they organize meetings and provide instructional videos. OSPR also maintains an automated phone system, allows for pre-registration on OSPR's website, updates the website, and maintains a Volunteer Database of some 1500 persons. OSPR also maintains written Job and Task Descriptions and trains their Volunteer Coordinators.
- For more information on California's oil spill response volunteer program, visit either www.dfg.ca.gov/ospr or www.owcn.org.

California's Harbor Safety Committees, an Overview: Joan Lundstrom, San Francisco HSC

- Ms. Lundstrom explained that California's Harbor Safety Committees (HSCs) are a key aspect of oil spill prevention in the state. They were created by state law and mandated to develop "Plans for the safe navigation and operation of tankers, barges, and other vessels within the harbor … encompassing all vessel traffic within the harbor." This includes recreational boats such as kayaks, she explained. OSPR funds the HSCs' secretariat service.
- Harbor Safety Committees act as a forum for discussion and the development of recommendations regarding maritime safety and security issues. Members are appointed by the OSPR Administrator to represent various maritime interests as defined in the law, including port authorities, tank ship operators, pilots, tug and barge operators, recreational boaters, etc. The U.S. Coast Guard is also represented, as well as the California Coastal Commission, the San Francisco Bay Conservation and Development Commission, California State Lands, and local governments.

- There are five HSCs in California, Joan explained: Humboldt Bay, the San Francisco Bay Region, Port Hueneme, Los Angeles/Long Beach, and San Diego. She then reviewed the issues and activities of each, beginning with Humboldt Bay, which has thirteen members and meets quarterly. Humboldt Bay harbor traffic is primarily fuel barges, lumber ships, and recreational boaters. Their issues of concern have included adequate dredging of the harbor; possible expansion of the geographic boundaries to include nearby ports; funds to maintain a limited Physical Oceanographic Real-Time System (PORTS); pilotage projects and employment; and abandoned vessels.
- The San Francisco Bay Region HSC has 21-members and meets monthly. Harbor traffic in the Bay region includes container ships and car carriers, oil and chemical tankers, commuter ferries, and recreational boaters. Joan explained that the San Francisco Bay Region's geographic boundaries begin twelve miles out to sea and extend upriver to the ports of Sacramento and Stockton – a distance of approximately 100 miles. Issues of concern have included permanent funding and more efficient operation of PORTS system; protocols for passing and routing of commuter ferries; increased kayak launch sites; and input on state legislation requiring tug escorts for vessels carrying hazardous cargo.
- Port Hueneme has a 16-member HSC and meets tri-monthly. Their harbor traffic primarily includes ships carrying bananas and fresh fruit, automobile carriers, and bulk cargo (wood, miscellaneous, and petroleum). Issues of concern at Port Hueneme include the effect of a proposed offshore LNG floating supply unit on the safe navigation of vessel traffic in and out of the port; geographic jurisdiction; and funding for reliable current and wind gauges for PORTS.
- Joan reported that Los Angeles/Long Beach has a 21-member HSC, which meets bimonthly. LA/LB is the busiest U.S. container port; other traffic includes oil tankers, cruise ships, bulk cargo, and recreational boaters. LA/LB issues have included revision of bollard pull testing regulations for tug escort vessels and the tug/tanker matrix for larger tankers; port security; conflicts between small recreational craft and large vessels; clean air initiative regulations, and vessel safety.
- San Diego has a twenty-member Harbor Safety Committee, and meets bimonthly. Harbor traffic in San Diego includes U.S. Navy vessels, cruise ships, cargo ships, cargo barges, fuel barges, and recreational boaters. Issues facing the San Diego HSC include funding for the San Diego Marine Information System; support for statewide PORTS; pursuing mandatory boater education; and a Navy fuel depot allegedly leaking oil into San Diego Bay.
- Joan noted that one of the strengths of California's Harbor Safety Committees is the fact that state funding for the Secretariats enables continuity and stability for the committees. In addition, the Harbor Safety Committees are a recognized forum where the maritime community and relevant state and federal agencies come together to discuss issues and hot topics and work together. Similarly, the Harbor Safety Committees are an established venue to cooperate with the U.S. Coast Guard on national security issues.
- Joan concluded by explaining that all five California Harbor Safety Committees work together on common issues and exchange ideas through OSPR, which hosts an annual gathering of the HSCs for information exchange.

Determining Best Achievable Shoreline Protection: Carl Jochums, OSPR

- Mr. Jochums explained that state law mandates Best Achievable Protection (BAP) as the standard for response, planning and preparedness.
- BAP poses the critical questions of response preparedness, "how many resources should industry provide" and "in what time frames."
- With regard to shoreline protection from vessel spills, previously, the shipping industry had the responsibility of addressing these issues by identifying worst case, pessimistic consequences of spills using modeled spill trajectories in their vessel response plans (VRPs). However, there were problems with this approach. Those trajectories were not based on assumptions which were tested nor, in some cases, even stated, he explained. Consequently, trajectory issues and assumptions complicated contingency plan reviews or were disputed; also, the amount of resources and time frames were not clear. Likewise, the capability of contracted resources were not clear or proven, and the actual preparedness of industry or their contracted resources was difficult to assess or drill (whether a VRP or an Oil Spill Response Organization (OSRO)).
- So OSPR has initiated an effort to identify response preparedness criterion for both VRP and OSRO approval needs, Carl explained. Using NOAA's oils spill model, GNOME, OSPR has identified response resource needs for shipping industry by modeling trajectories from generic ship risk sites which resulted in rapid impacts to sensitive sites; response resources were identified from respective site protection strategies in Area Contingency Plans (ACPs).
- This approach makes preparation of Vessel Contingency Plans easier and more consistent, and removes a layer of complication and controversy regarding trajectories. It levels the playing field by clearly defining amounts and kinds of resources required, as well as the time-frames for deployment. Moreover, this approach clearly defines the capability required of contracted resources and provides testable criterion of preparedness for both industry and their OSROs. Review and approval of Vessel Response Plans (VRPs) for shoreline protection is now a matter of comparing operational areas to contracted OSRO approvals.
- Carl explained that OSPR selected NOAA's General Oil Spill Modeling Environment (GNOME) model for San Francisco Bay, other bays, and the coastline. Their objective was to use the models to generate trajectories from origins and under conditions of release which have severe enough consequences to reasonably define the envelope of response resources required for most conditions (i.e., BAP).
- Their criteria for model input was: locations where oil could be released from ships with rapid spreading and serious risk to natural resources; adverse conditions - those tides, currents, and winds which aggravate the spread of oil and maximize sensitive site impacts and response resource demands; volume and type of oil which would have wide application to shipping industry, since oil foot prints are similar regardless of volume and type; and continuous releases.
- Twenty operational zones were identified for California's 5300 miles of coastline and OSPR staff (Marine Safety Branch and Scientific Field Staff) provided probable trajectory origin points. NOAA provided respective GNOME current and tide files for these zones. Using GNOME, staff experimented with variable inputs: tidal curve (date) and time, currents, winds, dispersion factors, re-floatation half-life, and other model variables.

- For example, one scenario was constructed using a spill volume of 13,000 bbls of fuel oil type #4, which is between diesel and light crude. Tides and currents were selected to maximize site impacts, and winds varying from none to less than 20 knots and often of short duration - which encourages oil spreading - were input to the model. Trajectory maps were generated by NOAA for 1, 2, 3, 4, 6, 12, 18, 24, 30, 36, 42, 48, 54, and 60 hours. Using these trajectories, Carl explained, tables of ACP Sensitive Site impacts are organized by time of impact, and protection strategies and response resources are identified on the tables. Carl provided examples of the Shoreline Protection Tables. Carl provided a comparison of GNOME response resource consequences with consequences from a frequently used VRP trajectory. The comparison indicated that similar amounts of resources were engaged in similar time frames.
- Carl explained that the outreach process has involved informal meetings with stakeholders from OSPR's Technical Advisory Group (TAG) and the Western States Petroleum Association. Project presentations have also been made to Port Area Committees. This has resulted in identifying and resolving stakeholder concerns. In addition, Area Committees have reassessed and refined their Site Protection Strategies (often referred to as Geographic Response Strategies in some states). The Shoreline Protection Tables are being finalized and moving toward regulation through the due process of formal public hearings, comment, and review.
- In conclusion, Carl stated that this approach meets the critical need for clarifying resource requirements. The timetables of impacts and requisite response resources define industry planning requirements and create a level playing field for all vessel response plan holders, providing a service to industry while also setting best achievable protection levels. The methodology also clarifies the equipment and logistics challenge for OSRO's, while simplifying VRP preparation and review.

PRESENTATION OF THE 2006 LEGACY AWARDS

- The Pacific States/British Columbia Oil Spill Task Force proudly presented their 2006 Legacy Awards to the **Clean Islands Council, Foss Maritime Company, Tesoro Hawaii Corporation, and the Marine Exchange of Alaska**.
- Legacy Awards are given to industry, non-profit, or public agency organizations and individuals, or for team efforts. The Task Force gives Legacy Awards for projects, accomplishments, or leadership that demonstrates innovation, management commitment, and improvements in oil spill prevention, preparedness, or response resulting in enhanced environmental protection. Efforts to promote partnerships and involve the public are favored. Organizations, individuals, or projects nominated for the Legacy Award must be located in or operating in the Task Force jurisdictions of Alaska, British Columbia, Washington, Oregon, California, and Hawaii. Organizations or individuals representing a regulated industry must demonstrate a satisfactory history of compliance with state, provincial, and federal oil spill regulations.
- For information on the award-winning efforts of the 2006 recipients, and for a photo of the winners, please go to http://www.oilspilltaskforce.org/awards_2006.htm

TRANSFERABLE LESSONS FROM THE GULF RESPONSE - *THE FEDERAL PERSPECTIVE*

(Kurt Fredriksson, Alaska DEC Commissioner, Moderator)

CDR Ron Cantin, Commanding Officer, U.S. Coast Guard Gulf Strike Team

- CDR Cantin explained that he would address the Coast Guard's role, the challenges they faced, the solutions to those challenges, and lessons learned. He noted that he had served as the Incident Specific FOSC for Alabama and Mississippi for the first three weeks, then for Louisiana as well, until the very recent completion of HAZMAT removal from the marsh areas. U.S. Coast Guard (USCG) response operations during the Katrina/Rita months included Search and Rescue (SAR), pollution response, vessel salvage, waterways management, and repair/restoration of Aids to Navigation.
- SAR was the initial priority, involving USCG rescue swimmers and boats, as well as helicopters for rooftop rescues. It was the largest domestic Coast Guard response in history and involved the rescue of a total of 33,735 persons! This included 12,000 rescued by flood punts, 7,200 rescued by air, and a total of 9,400 medical evacuations. This was equivalent to seven years' worth of SAR in only two weeks; roughly 700 persons were rescued each hour. To complicate the challenge further, some were combative, some ill, some using drugs, and some were armed.
- Regarding oil and hazardous material response, CDR Cantin explained that the USCG initially took responsibility for oil spills and EPA took HAZMAT under ESF-10 funding and responsibilities. Approximately 8.4 million gallons of oil was spilled from 144+ spills in Louisiana, nine of which were "medium" or "major." The Incident Command Post was located in Baton Rouge, LA, nearly 100 miles from closest spill; they later had to evacuate Baton Rouge briefly for Hurricane Rita.
- Each spill had its own response, so an Area Command was established to coordinate resources among the responses. More than a thousand oil spill responders were engaged and more than eleven helicopters were contracted. Overall, it was the largest domestic spill response since the *EXXON Valdez*. CDR Cantin then described some of the spills.
- He reported that 25,110 bbls of mixed crude oil were spilled at the Murphy Oil facility in Meraux, LA from a ruptured tank. The tank had to be secured and contained, and an active recovery undertaken. Approximately 1500 homes adjacent to the site were stained by the spill.
- 3.78 million gallons of heavy Louisiana sweet crude was spilled at Bass Enterprises South in Cox Bay, LA when two oil tanks moved off their foundations, CDR Cantin noted. 155 response personnel were assigned to this cleanup operation, which included cleanup of many oiled trees; these were burned as a method of removal. Debris removal was a huge challenge for most responses; it was estimated that 15 years' worth of landfill volume was generated by Katrina.
- 139,230 gallons of heavy Louisiana Sweet Crude were spilled at the Shell Nairn facility in Pt. Sulpher, LA; 128,100 gallons were estimated to have naturally dispersed/evaporated. 42 response personnel used two skimmers and deployed 3700' of hard boom and 14,790' of absorbent boom in that response.

- In another example, CDR Cantin reported that 592 bbls of light crude oil were spilled at the Dynegy Facility in Venice, LA by two tank failures. The source was secured and a response initiated.
- Commenting on wildlife rescue and rehabilitation challenges, CDR Cantin stated that "Alligator washing is an acquired competency" as he showed a photo of a small alligator being cleaned. "This little guy got everything but a pedicure," he noted.
- CDR Cantin explained that, after the oil response was nearly complete, the USCG and the EPA merged into one overall ESF-10 organization at an Incident Command Post in New Orleans. They then worked together for many months, with the primary USCG focus being HAZMAT in the marshes. He also noted that, in Alabama and Mississippi, the ESF-10 organization was unified from the beginning and remained that way throughout. He reported that there were over 1,400 personnel working under ESF-10 for Hurricane Response Operations: 142 from EPA, 39 from the USCG, 38 from Louisiana DEQ, and 107 BOA contractors.
- Hazardous waste containers collected from both inland and coastal zones included 21,325 drums, 9,129 propane tanks, 20,053 cylinders, 3,015 other large containers, and 1,149,816 small containers.
- After the storm thousands of vessels were left damaged, many of them obstructing waterways and some obstructing roads. The Coast Guard's goals were to open the waterways as soon as possible and also to ensure that damaged vessels could navigate safely on the river. Of a total of 2283 salvage cases, 1326 remain open, CDR Cantin reported. Most of the completed salvages were those approved for ESF funding.
- The Captain of the Port of New Orleans had closed a number of waterways as a precautionary measure just prior to Katrina's impact, CDR Cantin explained. Many vessels were left in damaged condition, however, and submerged objects, ranging from vessels to oil rigs, were hazards to navigation following the storm. Side-scan sonar and various NOAA scans displayed anomalies in the waterways. In addition, 99% of the Aids to Navigation in Alabama, Mississippi, and Louisiana were damaged or destroyed. Getting the waterways back into safe condition was another major challenge for the USCG.
- CDR Cantin stated that Katrina presented everyone affected with huge and sometimes unique challenges. For instance, responders had to compete for resources. "Anything we needed," he explained, "the evacuees or industry needed too, such as food, ice, and water. In addition, contract and civilian aircraft were in great demand during the oil response phase, since they were also needed for oil platform overflights and restoration. He estimated that aircraft availability was probably the single largest factor affecting logistics.
- The total loss of infrastructure was the biggest challenge, of course. Communications was severely impacted, including radio, telephone, internet, mail, airplanes, Fed Ex, vessel traffic, etc. They worked with the state police and also used some MARAD vessels as relay stations. Basic utility services such as electricity, water, and sewer were unavailable. Even local USCG assets such as buildings, equipment, and records were either destroyed or severely impacted. The estimated cost of repairs and rebuilding of USCG facilities in the impacted area is more than $40 million.

- With roughly 93,000 square miles affected by the storms, many roads were also impassable, making the movement of supplies very difficult. The ports were also closed initially, and then restricted, so that air transportation was often the only method, yet the airport was also closed for 10 days! CG aircraft were busy doing rescues so they were only available for other assignments on a limited basis.
- Looting and snipers added to the challenges; logistics runs required armed escorts, CDR Cantin noted. USCG units were looted, with uniforms and gear stolen. Snipers were not uncommon, and many boat and aircrews reported gun fire.
- Understanding the multiple Joint Federal Offices (JFOs) and working with them was yet another challenge, since it's a new paradigm.
- More than 10% of the entire USCG population nationwide was deployed to the Katrina/Rita response. Many local responders were also evacuees; this was a huge factor, CDR Cantin noted, particularly since many lost homes, uniforms, or vehicles, and only had the clothes on their back. They had to order replacement uniforms, boots, PPE, even underclothes, he explained, not to mention supplies for the USCG personnel deployed to the area.
- There were USCG Incident Management Teams in Mobile, Alexandria, Baton Rouge, and St Louis, all supporting responders in multiple field locations; this required a great deal of coordination and management.
- Logistics such as berthing, food, and transportation are critical, and they learned that one solution does not fit all, CDR Cantin stated. For berthing in Alexandria, LA where they had as many as 400 responders, they used five to six hotels, a church gymnasium, an abandoned National Guard facility and a conference room with cots. They also had a shuttle service to transport people. The USCG used a Methodist church camp in Baton Rouge, and MARAD provided vessels with berthing and messing capability. Using an in-place Basic Ordering Agreement, they set up an incident command post at the Clean Harbors facility in Baton Rouge with about 40 trailers, most of which were occupied by USCG personnel. Mobile bunk rooms were also used, as were additional mobile equipment often used by the Forest Service in fighting wildfires such as shower trailers and Port-a-potties.
- For food they started with MREs, he reported. In Gulfport, MS the Emergency Response Team built a new mess hall in a matter of days to replace the one destroyed at the USCG Station Gulfport. The Civil Engineering Unit in Miami provided mobile mess trailers that came complete with cooks.
- Transportation was an issue for weeks, CDR Cantin noted. Once the SAR phase was complete, they needed to get oil spill responders into the affected areas. They spent much of the day moving folks into their work areas and returning to base where messing and berthing were available. They hired commercial aircraft to move people and equipment, as well as to do overflights documenting spill locations, etc. At the peak of the oil response operations they had 11 helicopters and two fixed wing aircraft on contract, he reported. Of course, getting fuel for response vehicles and equipment was another challenge with transportation systems so severely impacted.
- CDR Cantin then focused on recommendations based on lessons learned. One was to truly exercise Logistics. Another was to develop and exercise "Continuity of Operations" plans that have support (logistics & engineering) units integrated with operational units. It's also

important that those plans identify more than one evacuation location. Processes outside your Incident Management Team will affect you, he warned, such as contracts and procurement, personnel mobilization, equipment/supplies, and heavy maintenance.

- He also emphasized the importance of having trained and qualified response personnel available to mobilize. In addition, be ready to deal with affects of a major incident on local responders, he cautioned, including stress, personal losses, economic impacts, and huge work demands. "ICS works, so get good at using it at advanced levels," he advised - or at least have a few people who are trained at that level to coach the rest.
- Critical equipment to have will include communications equipment, both voice and data, plus specialized gear. Responders should plan to be self-sustaining for five to six days with regard to food, berthing, transportation, and consumables such as batteries, office supplies, etc. That means planning for procurement & contracting personnel sufficient to handle the load and able to function at the field level. CDR Cantin also recommended expanding BOAs beyond oil spills to also include natural disasters.
- Such readiness will require building good relationships and ensuring compatibility with fellow agencies through joint training and exercises; he listed such agencies as DOD, FEMA, EPA, MARAD, NOAA, State partners, and the Forest Service. Joint exercises should include a focus on Information Flow Processes, Personal Documentation, and Cross Training (Swap Crews).
- Looking at future needs, CDR Cantin recommended Expeditionary Units, redundant communications systems, more Liaison Officers and ESF trained members. He also recommended that a National Salvage Policy be developed.
- In closing, CDR Cantin stated that this response effort was unprecedented in the history of our national response system, and logistics was the key element to their success.

CDR Bill Robberson, the Environmental Protection Agency (EPA) Region 9

- CDR Robberson explained that EPA and the U.S. Coast Guard (USCG) were working under the National Response Plan, which activates Stafford Act funding, known as Emergency Support Function or ESF 10 funding. As administered by FEMA, this required agency-specific missions, and EPA was the ESF-10 lead agency for hazardous materials and oil spills. EPA's complete list of missions included New Orleans search and rescue (800 people were rescued by EPA), rapid environmental assessments, emergency spill response (in coordination with the USCG), and collection and disposal of household hazardous waste as well as abandoned/orphaned drums, containers, and ordinances such as firearms. EPA had more than 400 personnel assigned to these missions, with their IMT located in Baton Rouge, LA.
- CDR Robberson showed slides of the vast devastation and reiterated CDR Cantin's points that access to the impacted areas was severely hampered by infrastructure damage. Nevertheless, EPA personnel evaluated sites of particular concern, such as NPL sites, regulated facilities, and smaller production platforms.
- The Murphy spill was the largest and required the most coordination among agencies. The entire tank farm at the Murphy Refinery was flooded. Ultimately 25,110 bbls were spilled and oiled more than 1800 homes over one square mile of nearby neighborhoods, as well as city canals. An EPA FOSC was the first federal official on site, on Sept. 3, and ordered a

response/cleanup by Murphy Oil. The USCG took the lead for oversight and enforcement, stabilizing the spill and then turning it over to EPA in November. After Murphy Oil was sued, Bill explained, their representatives couldn't interact with the public, which greatly complicated the cleanup. Overall, approximately 72% of the oil was recovered (~18,000 bbls), Bill noted.

- An EPA/USCG Memorandum of Understanding was signed on 10/08/05 to maintain the span of control and optimize critical resources in southern Louisiana. The USCG took responsibility for cleanup of the waterways, and EPA took responsibility for long-term remediation, cleanup on land, residential areas, and non-commercial waterways. They were also responsible for assessments of 600 drinking water systems.
- CDR Robberson stated that good working relationships with other agencies were critical. He described the Louisiana Department of Environmental Quality as "superb partners" and also noted that EPA had assistance dealing with health risks from the U.S. Agency for Toxic Substances and Disease Registry and the Louisiana Department of Health and Hospitals. He also noted that EPA OSCs stayed on assignment for longer periods than usual, which helped build trust with the residents. Each of EPA's ten regions nationwide rotated personnel through assignments to the response.
- EPA and the Louisiana Department of Environmental Quality (LDEQ) conducted oversight of all Murphy cleanup actions, including complete cleanup of public areas and roads, sediment sampling (interior and exterior), exterior and interior cleaning of oiled buildings, the gutting of homes as needed, yard excavation and replacement, and canal cleanup and boom maintenance.
- Oversight and monitoring of the Murphy cleanup required EPA to evaluate 10% of all sediment samples independently of Murphy. EPA also had to conduct inspections for FEMA trailer sites in the Murphy spill area, as well as inspections for final site closure. LDEQ had the final sign-off for site completion. There was some question as to whether state or federal cleanup standards would be applied, but they agreed to use the state RECAP performance standards (Risk Evaluation/Corrective Action Program).
- A Class Action lawsuit was filed against Murphy Oil by some local residents; subsequent restrictions set by the Federal Court hampered Murphy's communication with suing property owners, which in turn led to problems of access to the affected area. As a result, EPA was unable to clean up whole contiguous blocks of neighborhoods, or even the entire affected area, leading to what CDR Robberson called the "island effect" of oiled homes next to cleaned homes.
- Besides exposure to the oil or contaminating/transporting oil from adjacent oiled properties onto your own, local residents faced health risks from mold, snakes, rodents, structural problems, and debris.
- Altogether, Bill reported, more than 1662 home exteriors were washed, 469 home interiors were cleaned, more than 8059 samples were taken from 4825 addresses, 839 EPA split samples were taken and sent to lab for separate analysis, more than 323,200 cu. yards of debris were removed, and oil removal in the canals was completed.
- Regarding what worked well in the EPA response activities overall, CDR Robberson noted that EPA believes strongly in the Incident Command System (ICS) response structure, and

has ten Incident Management Teams trained in ICS in the U.S. He also felt that EPA's drinking water system evaluations were successful, as were the search and rescue efforts by EPA teams.

- In summarizing overall challenges, CDR Robberson explained that "Situational Awareness" was challenging due to the vastness of the affected area and the overwhelming nature of the devastation. He also listed Crisis Communication Systems, Data Management and Analysis, Response Logistics, and the Decision-making role of EPA Program Management vis-à-vis Area Command/Incident Command.
- Regarding Response Logistics, he explained the challenge of matching available response personnel with the necessary qualifications and experience, with the result that it was difficult to correctly staff some positions. This was further complicated by the need to coordinate the rotation of nationwide EPA personnel in and out of the area.
- Regarding the decision-making role of EPA Program Management vis-à-vis Incident Command/Unified Command, he noted the value of Senior Executives understanding their roles and responsibilities. It was also important to differentiate between strategic/policy decisions and tactical decisions. He noted that there was still some EPA management resistance to following ICS, so their understanding and acceptance of the process throughout the response organization was limited.
- CDR Robberson's recommendations to those of us on the West Coast, as we seek to apply the Lessons Learned from the Katrina and Rita response, were to:
    - Improve our situational awareness reporting abilities;
    - Know our partners better (Federal, State, and NGO);
    - Spend time on drills and exercises;
    - Define the Executive's role;
    - Develop pre-incident Mutual Aid agreements;
    - Conduct pre-incident Resource Typing and Training strategies; and
    - Develop the Information/Data Management Infrastructure.

Charlie Henry, NOAA SSC Gulf of Mexico

- Mr. Henry opened by explaining that NOAA's Scientific Support Coordinators (or SSCs) provide the Federal On Scene Coordinator (FOSC) with scientific advice during an emergency spill response. SSCs are essentially scientific-technical consultants to the FOSC for oil and hazardous material incidents, he said, and SSCs may be requested to respond to any emergency since NOAA has an all hazards mission. SSC support covers weather forecasts, information on tides and currents, hazard characterization, modeling and trajectories, information on natural resources at risk, over-flight observations and documentation, information management, SCAT, analysis of environmental issues and trade-offs, and other consultation.
- NOAA's response role began even before the hurricane made landfall, Charlie explained, since NOAA was providing weather forecasting. He also noted prior planning initiatives, including preplanning by USCG Sector New Orleans and the fact that there were strong working relationships within the RRT and with major oil and gas producers.

- Initial USCG Sector New Orleans requests to NOAA HAZMAT were to fully staff two command posts and one forward operations base (ESF-10 Pollution Response Base in Baton Rouge); to provide satellite maps of the flooded areas for Search and Rescue; to provide weather support for all operations; to provide navigation survey support to open waterways; to assess immediate HAZMAT threats to public (jointly with EPA and State of Louisiana); and to assess and respond to secondary pollution threats to public and natural resources (including oil spills and orphaned drums and HAZMAT containers). There are nine SSCs regionally positioned throughout the U.S., Charlie noted, and eight of them were called to respond to these requests.
- Initial challenges on-scene included poor communications. The Baton Rouge site had limited electrical power, phone service, and internet access. In Alexandria, LA - where the USCG Command was relocated - there was full electrical power as well as better phone service and internet access.
- Many of NOAA's weather stations had been destroyed or damaged. And, as already noted, thre was limited transportation to get people on-scene, and then limited gasoline available once on-scene. Housing was limited, and there was a shortage of trained NOAA Response Coordinators given the scope of the problem (Katrina, Rita, etc.). NOAA's budget was severely impacted by this response, he noted.
- Charlie reported that more than 17,000 orphaned containers, 55-gallon and larger, were recovered in wetland habitats of coastal Louisiana under an ESF-10 Mission Assignment. The Louisiana Department of Environmental Quality (LDEQ) served as the lead state agency for these actions, and EPA and USCG conducted the response action with LDEQ. 11,419 containers were recovered in just four Parishes.
- He also noted that physical dispersion by wind and waves was a major fate of oil released during the height of the storm event.
- He also noted that NOAA worked with the Army Corps of Engineers to develop performance-based standards for wetlands cleanup.
- Cleanup efforts are continuing, Charlie noted, including recovery of more orphaned hazardous material containers, salvage operations and removal of marine debris, and further investigations into the causes of the oil spills.

TRANSFERABLE LESSONS FROM THE GULF RESPONSE - *OTHER PERSPECTIVES*

(Jean Cameron, Moderator)

A State's Perspective: J.T. Ewing, Texas General Land Office (TGLO)

- Mr. Ewing opened by explaining that USCG MSU Port Arthur and USCG Sector Houston requested TGLO assistance on August 29th, 2005. On August 31st they received a FEMA mission assignment with a project number through the USCG. Their team arrived in New Orleans on September 1 and was assigned as a Boat Team for Search & Rescue Operations. They arrived self-sustained, J.T. explained, noting that the purchase of any necessary supplies required either cash or barter, while in the New Orleans area.
- The eye of Hurricane Rita hit SE Texas on September 24th, requiring TGLO to return its personnel to Texas. Pre-storm situational meetings and conference calls were held with the State Operations Center, elected officials, and first responders. TGLO worked with the U.S.

Coast Guard on responses to oil spills, and the Texas Commission on Environmental Quality worked with EPA on hazardous material releases.

- TGLO's primary focus was on a fuel storage tank release in a marsh, at the Texas Point National Wildlife Refuge. Logistics were a major challenge in this remote location, and most response personnel and resources were already at work in New Orleans. They did find that their cell phones worked there, as did 800 MHz radios.
- The storage tank, 30' high and 54' in diameter, had been carried 1.5 miles by the storm, coming to rest in the shallow marsh. Response without damaging the marsh was a concern. Responders laid a portable pipeline to the tank to remove remaining 12000 gallons of diesel, running two miles of polyline to a barge in Sabine Pass.
- Since they couldn't leave it in the refuge for fear of trapped fuel under a bulkhead section of the tank, it was disassembled and brought out in sections by airboat.
- It was important to do an emergency restoration while the heavy equipment was still on-scene, because this equipment was in high demand elsewhere. Emergency restoration meant repairing damage to the estuarine hydrology and rapid replacement of lost ecological services. They tasked a single individual (Bill Grimes of TGLO) with the project; he was knowledgeable regarding National Wildlife Plans as well as the local Army Corps of Engineers regulatory process and staff. Strong professional relationships between state and federal regulatory agencies expedited the processing and coordination in this "emergency" restoration situation. "Give everybody likely to be involved in the decision-making a verbal heads up, with a brief explanation of your goals and expectations, and the anticipated project benefits," advised JT, "and follow up everything with a phone call or e-mail."
- In closing, JT covered the following "Lessons Learned":
    - Be prepared to resource responders' material needs from locations far from the expected storm activity;
    - Plan for the humanitarian assistance needs of your responders, their families and local communities; and
    - Since communications are crucial, develop a duplicate communications strategy in case your first plan doesn't work!

The Industry Perspective: Dave Harris, Emergency Preparedness Coordinator, Marathon Oil Company

- Mr. Harris set the stage by pointing out that 2005 was the most active hurricane season since the last major sequence of storms in the late '50's to early '60's, when the Gulf of Mexico offshore oil industry was in its infancy. There were only a few hundred platforms then, and all of them were located in shallow water close to the coastline. Today there are over 4,000 offshore oil industry installations, and many are in extremely deep water, hundreds of miles from the coastline. Tens of thousands of workers are involved, he explained. The Gulf represents 25% of U.S. oil production, as well as 65% if U.S. refining capacity.
- Reviewing what he called "the human toll" of Hurricanes Katrina and Rita, Dave pointed out that 2.7 million people went without power, an estimated 1.5 million people were evacuated,

there was $120 billion estimated in damages, 275,000 homes were destroyed, and there were 1,333 confirmed deaths, with 4,000 persons still missing.

- On August 29th of 2005, 92% of U.S. offshore oil production and 83% of U.S. offshore natural gas production was "shut-in." Nine refineries (25% of U.S. capacity) were shutdown and 15 refineries were affected (14% of the U.S. refineries reduced production). Crude runs were reduced by 700,000 bbls/day in the Midwest. There was no electricity to run the major pipelines feeding the Southeast and Midwest, and the Capline was shutdown, as was the LOOP, with the result that 10% of the U.S.'s crude imports were curtailed.
- In trying to restore operations, the Gulf oil industry had to deal with heavy devastation to homes, businesses, industry, infrastructure and transportation, Dave noted. Access to facilities was extremely limited by flooding, debris fields, trees, bridges, power lines down, etc. In some cases, access was denied by federal, state and municipal governments for safety reasons. Highway access routes were either jammed or one-way only. Fuel supplies were limited or non-existent, accommodations were limited for response employees, and food and other supplies were gone in all area stores.
- Facility spill investigations were delayed by the limited availability of air, sea and land transport, and access to facilities was blocked by officials in many areas. Local employees were often unavailable, and relief employees were unfamiliar with the local systems.
- Regarding Lessons Learned, Dave listed the following:
    - Pre-planning, pre-planning, and more pre-planning!!
    - Communications pre & post-storm;
    - Pre-staging of both equipment and personnel;
    - Plan for business continuity;
    - Advance agreements with suppliers and government officials;
    - Make sure your plans are in sync with those of the communities surrounding your operations;
    - For post-storm facility access, have adequate credentials and letters;
    - Contract in advance for trucking and aircraft; and
    - Develop an Aerial/Satellite reconnaissance capability.
- Dave recommended that government agencies assist with infrastructure damage evaluations by utilizing satellite imagery and aerial over-flights for assessments of offshore platforms, refineries, pipeline terminals, damage to surrounding communities, and the viability of transportation infrastructure. By collecting information on oil spill sources, severity and locations, government could work with industry to set response priorities.
- He also recommended that the oil industry and API work with NOAA, NASA and other appropriate agencies to develop a database of GPS coordinates for platforms, drilling rigs, pipeline corridors, refineries, terminals, and re-entry access routes, as well as pre-storm satellite/over-flight imagery to serve as a baseline.
- Dave stated that the key to the success of any major natural disaster response is communication, so industry/government cooperation to share information is crucial. This can include preplanning for pre and post-storm evaluation of infrastructure (imagery), pre-clearance of key response personnel for entry into effected areas (credentials), and pre-qualification of key personnel for use of the National Communication System (credentials).

- Marathon Oil has adjusted their shutdown procedures in preparation for the 2006 hurricane season. They now initiate their preparations six days from projected landfall, versus three days previously. Four to three days before projected landfall, they begin to modify operations to protect people and assets. For instance, they increase both gasoline and crude inventories at refineries and key terminals, they designate standby/ride-out teams and put them in place, and they relocate key response personnel to alternate sites outside the Region. About three days before landfall, employees are released from offices and offices are shutdown if a direct strike is projected. Full shutdown of remaining onshore facilities in the path of the storm occurs 24 hours before landfall.
- Marathon Oil is also placing a major focus on support for their employees. They have an "employee plan" in place which includes identification of those who staff facilities (ride-out crews) and timing for evacuating others, with enough time to "safely" evacuate the region. Dave warned everyone to "keep an eye on decisions made by the communities in which you work. Be ready to modify your plans quickly." It's also important, he said, to have information regarding your employee and contractor's plans (where are they going, how can they be contacted? What will they need? How can we support them?). In addition, an Executive Relocation Plan guarantees continuity for corporate decision making.
- Dave noted the constraints on mounting an effective post-storm response and investigation when vehicles, boats, and aircraft are destroyed or moved out of the area. If there are functioning vehicles, FEMA may commandeer them in the aftermath, he warned.
- With regard to personnel training, Dave noted the value of annual refresher training PRIOR to the beginning of hurricane season. He also noted the value of ensuring that information in the Human Resources database is up to date. Generate up-to-date personnel location maps, he noted, and establish clear expectations regarding communications before and after an event. Review the plans/expectations of communities where company facilities and employees are located and be sure to communicate your company's strategy for meeting employee needs.

Salvage Perspective: John Witte, Jr., Executive Vice-President, Donjon Marine Co.,Inc.

- Mr. Witte was responsible to coordinate forty salvage providers during the Katrina/Rita response, which began on September 3rd, 2005 and ended on February 18, 2006.
- He provided numerous photos of fishing boats and barges which had been stranded inland by the storm surge. Impacts to local fishing fleets were tremendous, and salvage required removal of vessels stacked on one another and vessels carried far inland, sometimes blocking highways! He noted that many owners repaired their vessels themselves in order to get back to work.
- The Wreck Removal Coordination Group included Navy SUPSALV and the U.S. Coast Guard Salvage team. The Group hired Donjon as project manager for salvage in Louisiana, Mississippi, and Alabama.
- The Incident Management Team included the U.S. Coast Guard, FEMA, and the Army Corp of Engineers. Various types of ESF funding was used for wreck removal. Removal priorities were set by the U.S. Coast Guard.
- Mr. Witte described five important response qualities as follows:

1. Preparation – always crucial to an adequate response, especially one as vast and complicated as this;
2. Cooperation – among oversight agencies, between various levels of government, and among salvors involved in the effort;
3. Understanding – of both the problem and each responder's role in the solution;
4. Flexibility – to deal with the variety of challenges - some never encountered before – is the hallmark of a good salvor; and
5. The Desire to Succeed – which leads to perseverance!

Response Organization Perspective: A.J. Heikamp, Marine Spill Response Corporation Southern Region Vice-President

- Hurricanes Katrina and Rita required the largest response effort in the history of the Marine Spill Response Corporation (MSRC), even surpassing the response to Hurricane Ivan in 2004, Mr. Heikamp (A.J.) explained.
- Seven MSRC Oil Spill Response Vessels (OSRVs) were utilized, including all four Gulf of Mexico-based OSRVs, as well as vessels from Florida, Georgia, and Virginia. Two large ocean-going barges were utilized to store recovered oil. Smaller boats, skimmers and support equipment were also required.
- Approximately 100 company personnel were required during peak periods; with rotations and relief, a total of about 180 different MSRC employees were put to work. About half of these personnel were cascaded in from outside of the region at any one time. MSRC was also providing oversight of ten different response contractors during this effort.
- MSRC provided an unprecedented level of telecommunications support to the response effort. Six MSRC mobile telecommunications suites were repositioned from Seattle, WA; San Francisco, CA; the Los Angeles area; Edison, New Jersey; and Miami, Florida - in addition to the Lake Charles telecommunications suite. All were operating simultaneously to provide satellite, voice, data, Internet, and radio capabilities. All twenty-three MSRC telecom specialists were utilized, as well as seventeen contract personnel. One MSRC communications suite was barged to Grand Isle (due to an inaccessible bridge) to allow one customer to microwave dial tone to their offshore platforms. A.J. noted that MSRC plans to add another telecommunication suite to their inventory and hire five more communications technicians.
- MSRC response operations – primarily along the Lower Mississippi River and offshore of Louisiana – included oil recovery from a leaking tank farm, from severed pipelines, from marshy areas, and from a well blow-out. MSRC's OSRVs were also utilized for command and control and floating hotels in areas with no power or accommodations. MSRC also provided telecommunications (see above) and temporary power where needed. In addition, they provided management assistance to various customers' ICS teams.
- Hurricane Rita hit Louisiana less than a month after Katrina, and the eye of the storm hit the Port Arthur/Lake Charles general area, forcing MSRC to evacuate its Command Center and forcing the oil industry to suspend all Katrina operations. All region-effected employees were moved 100 miles north to set up a temporary command center, and the entire Command Center team was replaced by out-of-region personnel at Lake Charles. After Rita's landfall, a new Command Center was established in Houma, Louisiana, which remained as MSRC's

command center while the Lake Charles office/warehouse was uninhabitable. The entire Command Center team was resplaced by out-of-region personnel for a shore period at Houma. MSRC is now operating out of office trailers in Lake Charles, while the facility is being repaired, A.J. reported.

- A.J. showed photos of damage to employee housing, explaining that sixteen MSRC employees had lost their homes. MSRC provided temporary housing and administrative leave to allow individuals to attend to family needs. Also on the topic of employee stress, he noted that many employees continued to provide response services despite poor or non-existent accommodations (no power, slept in automobiles, cold showers), and that the entire telecommunication personnel staff continued to work without relief due to the specialized nature of their equipment.
- A.J. also explained that MSRC sustained storm damage to their facilities in Fort Jackson, Pascagoula, Mississippi and Lake Charles, and presented photos of the damage.
- Food was not available in areas hit by the hurricanes - looting was an issue and there were empty shelves in areas where evacuees were sent. Drinking water was contaminated and many municipal water systems were inoperative, he explained. Bottled water supplies were quickly depleted in both hurricane-hit areas as well as evacuee areas. A.J. said that the Lesson Learned was to stockpile a minimum of one week's supply of food and water for 25 people.
- Regarding fuel, he noted that electricity is needed to pump gasoline at gas stations, so the power outages prevented access to the fuel. In addition, hi-jacking of fuel and other supplies being transported was an issue. The Lesson Learned, he said, is to have contracts in place for fuel distribution, plus a stockpile of fuel for the first several days for your emergency generators. He recommended that the law require that gas stations have generator backup systems in place, especially in high-risk areas.
- Since the electrical utility infrastructure was devastated, portable generators were initially in short supply. The Lesson Learned – to have regional and/or national sources for portable generators, and purchase generators for command centers.
- Since security services were limited or non-existent in the areas hit by the storms (looting overtaxed the security services), it would be wise for industry and FEMA - as well as government agencies and businesses - to have regional and/or national contracts in place for private security services.
- With regard to communications, regular phone service was either down or intermittent, and cell phones were overloaded and/or down, except for text messaging. Many local, parish (county), and state communication systems were incompatible with one another. There were not enough MSRC communications suites to meet the demand. A.J. did report that the Homeland Security Calling Card worked quite well; it works only on land lines, not on cell phones, he explained.
- Like food and water, living quarters were non-existent in areas hit by the hurricanes, as well as in areas where evacuees went, so responders and contractors couldn't find any either. As a result, MSRC purchased twenty-six 30' to 35' camping trailers for use as living quarters/command trailers.

- There were also shortages of medical personnel and supplies, as well as medical facilities. "Emergency planners should stockpile sufficient numbers of medical and first aid kits with either your trailers or your 7-day supply of food/water," A.J. advised.
- In conclusion, he also pointed out that traffic in areas to which people were evacuated had become a nightmare, while roads and bridges in storm-affected areas were either damaged or totally destroyed. The lesson learned, he said, was that "it's going to take a lot longer getting from Point A to Point B than anyone ever imagined."

Following the panel presentations outlined above, the Task Force Members invited public comment, but there was none. The Task Force Members then formally adopted the 2006-2007 Annual Work Plan.

Dale Jensen invited everyone to the Clean Pacific conference in Washington in September of 2007, which will incorporate the Task Force's 2007 annual meeting, and Lisa Curtis then adjourned the meeting.

Attachment A: AGENDA

2006 Pacific States/British Columbia Oil Spill Task Force Annual Meeting

July 20, 2006

Hosted by the California Department of Fish & Game,

Office of Spill Prevention & Response

IMPROVING RESPONSE COORDINATION:

Transferring lessons from the Gulf Coast to the West Coast

7:30 a.m. Registration Opens

8 a.m. Meeting Convenes/Introductions

8:15 Keynote Address: Ryan Broddrick, Director, California Department of Fish & Game

8:35 Welcoming Remarks: VADM Charles Wurster, Commander, USCG Pacific Area

8:45 Task Force Member Agency Updates

- Kurt Fredriksson, Commissioner, Alaska Department of Environmental Conservation
- Chris Trumpy, Deputy Minister, British Columbia Ministry of Environment
- Dale Jensen, Oil Spill Program Manager, Washington Department of Ecology
- Paul Slyman, Deputy Director, Oregon Department of Environmental Quality
- Laurence Lau, Deputy Director, Hawaii Division of Environmental Health
- Lisa Curtis, Administrator, California Office of Spill Prevention and Response

10:15 Break

10:30 Update on Task Force Activities and Plans: Jean Cameron, Executive Coordinator

10:45 California Initiatives as West Coast Models; Bud Leland, Assistant Deputy Administrator, OSPR, Moderator

- California's Oiled Wildlife Care Network: An Overview: Dr. Mike Ziccardi, Director
- California's Oil Spill Response Volunteer Program: A Model of Innovation: Cindy Murphy, OSPR
- California's Harbor Safety Committees, An Overview: Joan Lundstrom, San Francisco HSC
- Determining Best Achievable Shoreline Protection: Carl Jochums, OSPR

Noon Buffet Luncheon co-hosted by Chevron Shipping Company, LLC and the Pacific States/British Columbia Oil Spill Task Force

- Presentation of the 2006 Legacy Awards
  - Clean Islands Council
  - Foss Maritime Company
  - Tesoro Hawaii Corporation
  - The Marine Exchange of Alaska

1:45 Transferable Lessons from the Gulf Response - the Federal Perspective

Kurt Fredriksson, Commissioner, Alaska DEC; Moderator

- CDR Ron Cantin, Commanding Officer, USCG Gulf Strike Team
- Bill Robberson, EPA Region 9
- Charlie Henry, NOAA SSC Gulf of Mexico

2:45 Break

3:00	Transferable Lessons from the Gulf Response - Other Perspectives

CDR Scott Schaefer, U.S. Coast Guard, Moderator

- States' Perspective: J.T. Ewing, Texas General Land Office
- Industry Perspective: Dave Harris, EPG Coordinator, Marathon Oil Company
- Salvage Perspective: John Witte, Jr., Exec. VP, Donjon Marine Co., Inc.
- Response Organization Perspective: A.J. Heikamp, MSRC So. Region Vice President

4:15	Public Comment and Task Force Members' Response
4:55	Task Force Members adopt the 2006-2007 Annual Work Plan
5 p.m.	Adjourn

Attachment B: Speaker Bios

(In order of appearance on the agenda)

RYAN BRODDRICK

L. Ryan Broddrick was appointed director of the California Department of Fish & Game by Governor Arnold Schwarzenegger on January 20, 2004. Broddrick, who has more than 20 years of experience in the department and more than 30 years of experience with resource conservation issues, first joined the Department of Fish & Game in 1981 as a game warden.

During his career, Broddrick was promoted through the department's enforcement ranks, becoming Regional Patrol Chief for the Office of Oil Spill Prevention and Response in 1991. In 1993, he was appointed regional manager of the Sacramento Valley-Central Sierra Region, where he oversaw the department's operations within a 17 county geographic region.

In 1996, Broddrick was promoted to deputy director, and one year later was appointed chief deputy director by Governor Pete Wilson. He retained that position under Governor Gray Davis and served as acting director during the transition between administrations.

Broddrick left the department in 2001 to join the Western Regional Office of Ducks Unlimited as the director of conservation policy. At Ducks Unlimited, he was a strong advocate for wetlands and waterfowl, forging wildlife habitat partnerships between landowners, agriculture, and conservation groups.

As director of the Department of Fish & Game, Broddrick is responsible for the management of California's diverse fish, wildlife and plant resources and their habitats for their ecological values and enjoyment by the public. He oversees a budget exceeding $274 million and a workforce of more than 2,000 dedicated employees.

Broddrick, who was born in Merced, California, graduated from the University of California, Davis, in 1974 with a Bachelor of Science degree.

VADM CHARLES WURSTER

Vice Admiral Charles D. Wurster assumed his duties as Commander, Coast Guard Pacific Area in May 2006. The Area of Operations for this command encompasses over 73 million square miles throughout the Pacific Basin to the Far East. Vice Admiral Wurster oversees the operation of units performing missions in maritime safety, maritime mobility, protection of natural resources, maritime security, homeland security, and national defense.

Prior to this assignment, he served as Commander of the Fourteenth Coast Guard District in Honolulu, Hawaii. He also served as Assistant Commandant for Acquisition at Coast Guard Headquarters, Washington, D.C. Vice Admiral Wurster has also served on assignments in Alameda, California; Kodiak, Alaska; and Seattle, Washington, making him very familiar with these member jurisdictions.

Vice Admiral Wurster is a 1971 honors graduate of the U.S. Coast Guard Academy. He received a Master's degree in Civil Engineering from the University of Illinois in 1976 and is a 1993 graduate of the Industrial College of the Armed Forces. He is a registered Professional Engineer and is a Fellow of the Society of American Military Engineers. His awards include four Legion of Merit awards and the Society of American Military Engineers Sverdrup Medal. He is also the recipient of nine unit and meritorious unit commendations.

DR. MIKE ZICCARDI

Dr. Ziccardi received his DVM from UC Davis in 1993 (emphasizing free-ranging wildlife health) and Masters and PhD in epidemiology in 1994 and 2001, respectively, evaluating the effects of petroleum exposure in marine wildlife.

He has worked on oil spills since 1994 as a contract veterinarian for DFG-OSPR and the Wildlife Health Center at UC Davis, and as program coordinator for the Oiled Wildlife Care Network.

His current position is Director of the OWCN and Assistant Adjunct Professor/Senior Wildlife Veterinarian at the Wildlife Health Center.

CINDY MURPHY

Cindy has worked for the California Department of Fish and Game, Office of Spill Prevention and Response since 1993. Currently, Cindy manages the Local Government Oil Spill Contingency Plan Program and OSPR's Statewide Volunteer Program.

In working closely with the Oiled Wildlife Care Network, UC Davis and other wildlife organizations, Cindy has managed over 1200 oil spill volunteers during her career as a volunteer coordinator.

She graduated with a degree in Communications from California State University, Sacramento.

JOAN LUNDSTROM

Ms. Lundstrom serves as Chair of the San Francisco Harbor Safety Committee, representing the San Francisco Bay Conservation and Development Commission. She is a Charter Member of the Harbor Safety Committee and has previously served as Chair of the Tug Escort, PORTS and Underwater Rocks Work Groups.

Joan is also a member of the Technical Advisory Committee (TAC) to California Office of Spill Prevention and Response, representing local governments.

Joan has served six terms as a City Council Member for the City of Larkspur, California and also served as Mayor. She serves or has served on the Flood Control Board, the Executive Committee Transportation Authority of Marin County, and as Chair of Safe Routes to Schools.

She claims to be retired, in spite of her work on the Harbor Safety Committee and TAC

CARL JOCHUMS
Carl Jochums has a MS of Ecology from University of California, Davis, A BA in Zoology from the University of Illinois, and conducted additional graduate studies at Oregon State University in community /evolutionary ecology and environmental statistics/systems ecology.

He has worked with Ca DFG/OSPR for thirteen years in oil spill preparedness and response as Staff Environmental Scientist and spill responder and is currently the OSPR Statewide ACP Coordinator. He served an additional eight years as a DFG game warden and in environmental review.

Carl also has private enterprise experience in database development and chemical membrane separations technology and helped start-up two businesses.

He has published three papers in International Oil Spill Conferences, one in peer reviewed ecological literature, and co-holds two patents.

Carl has received Department of Fish and Game's Sustained Superior Achievement and Director's Achievement Awards for his work at OSPR.

CDR RON CANTIN
Commander Ronald J. Cantin is a 26 year veteran of the U.S. Coast Guard and has served as the Commanding Officer, U.S. Coast Guard Gulf Strike Team from July 2005 to present.

Commander Cantin enlisted in the Coast Guard in 1980 and served as an Aviation Machinist's Mate at Aviation Training Center Mobile, AL & Air Station San Diego, CA until 1989. He graduated Officer Candidate School in July 1989 & holds a degree in Aviation Technology. He served at the Coast Guard Ninth District Marine Safety Division implementing pollution response and enforcement programs for the Great Lakes region from 1989 to 1991.

Commander Cantin next served as Chief, Port Operations Department responsible for pollution response, port safety and security, and waterways management programs in one of the busiest areas of the Great Lakes at Marine Safety Office Detroit, MI from 1991 to 1993. From there, he was assigned as the Assistant Supervisor at Marine Safety Detachment Houma, LA between 1993 & 1997 where he orchestrated all pollution response, waterways management, and commercial vessel inspection activities in a bustling portion of the oil and gas production region of the Gulf of Mexico. In one of the more significant response cases while in Houma he served as the Coast Guard Incident Commander for a 5000 BBL crude oil spill into a South Louisiana National Estuary.

He was next assigned as Supervisor at Marine Safety Field Office Cape Cod where he directed all pollution response, waterways management, port safety and security, and commercial vessel inspection activities for Cape Cod, and nearby Islands from 1997 to 2000. While assigned at

Cape Cod, he was a key member of the response team during the John F. Kennedy Jr. plane crash search and recovery operation.

Continuing his progression of field assignments, Commander Cantin next served as Executive Officer, at the Pacific Strike Team in Novato, CA from 2000 to 2003. As a response officer there, he led teams during some of the most noteworthy incidents or events in recent history. Such as the U.S. Capitol Anthrax incident, the 2002 Winter Olympics in Salt Lake City, UT, the cleanup of destruction in the wake of Typhoon Chata'an on the Island of Guam, and he lead the Military Environmental Response Team during Operation Iraqi Freedom that both planned for, and stood ready in the combat zone to respond to any major releases of oil.

An advanced Incident Command System instructor, he was next assigned as the Coast Guard Pacific Area Incident Command System & Incident Management Assist Team Coordinator overseeing program implementation throughout the entire Pacific half of the Coast Guard. Most recently as Commanding Officer Coast Guard Gulf Strike Team, he served as the Incident Specific Federal on-Scene Coordinator (ISFOSC) initially for Alabama, and Mississippi right after landfall of Hurricane Katrina. He led the recovery of tons of hazardous materials, and mitigated dozens oil spills. A few weeks later he moved to storm damaged Louisiana were he again was assigned as ISFOSC in charge of the response effort to more than 8.5 million gallons of spilled crude oil.

Commander Cantin has the distinction of being the first person to obtain the "Type I Incident Commander" certification ever in the Coast Guard.

BILL ROBBERSON

Commander Bill Robberson has been with the United States Environmental Protection Agency (EPA) Region 9 for 20years; he is a Commissioned Officer in the US Public Health Service and a Licensed Civil Engineer (P.E. – Professional Engineer) in CA.

Bill leads the EPA Region 9 component of the Regional Response Team (RRT), a response support and coordinating body comprised of federal, state and tribal representatives and participants from industry and local agencies. Bill is also the Region 9 Incident Management Team (IMT) Liaison Officer. In response to Hurricanes Katrina and Rita, Bill was one of the first EPA responders deployed in the field and the Incident Command Post several days after Katrina made landfall. Bill subsequently made several deployments to the ESF-10 ICP in LA over the following seven months.

Prior to these assignments, Bill was a member of the Region's Oil Team; in 1996 he assembled and led the Region's cross-media workgroup on MTBE; he managed EPA's State of California Drinking Water Program for 9 years; and he was the program manager for EPA's Waste Water Treatment Construction Grants projects in the SF Bay and Los Angeles Areas.

Bill flew for the Navy for 18 years both operationally and as a flight test pilot; he is also a licensed Airline Transport Pilot (ATP).

CHARLIE HENRY

Charlie Henry is a National Oceanic and Atmospheric Administration (NOAA) Environmental Scientist and the Scientific Support Coordinator (SSC) for Texas, Louisiana, Mississippi, Alabama, and the Florida Panhandle. As a SSC, Henry is responsible for managing scientific issues and natural resource trustee concerns that arise during oil and hazardous chemical spills and providing direct technical expertise and consultation to the lead Federal On-Scene Coordinator during an emergency response.

Henry has some 20 years of spill response experience responding to oil and chemical spills. The first 13 of those years were spent at Louisiana State University as a Research Associate under contract to NOAA to provide chemistry support during emergency events and research spill response technology such as dispersants and bioremediation.

Henry has responded to more than one hundred oil and chemical spills including the 1989 Exxon Valdez Oil Spill, the 1991 Kuwait Oil Fires, and the 2000 Jessica Oil Spill in the Galapagos Islands off Ecuador. In the aftermath of Hurricane Katrina, Henry responded on-scene as part of the United States Coast Guard team response to six major oil spills, numerous smaller oil spills, and thousands of orphaned HAZMAT containers (cylinders, drums, totes, and tanks).

J.T. EWING

J.T. Ewing is currently the Regional Director for the Texas General Land Office's Oil Spill Prevention and Response Division in Southeast Texas. He has held this position since the creation of the regional office over fourteen years ago. He oversees the enforcement of the Oil Spill Prevention and Response Act as it applies to vessels and facilities. His position qualifies him to serve as the State On-Scene Coordinator in the Unified Command for all significant spills that occur along the Texas Gulf Coast. JT also serves as the Regional Response Team alternate contact for the Texas General Land Office (TGLO). He has participated in numerous area drills as well as supervised the response actions of hundreds of local spills. He also served as the State On-Scene Coordinator for a two thousand barrel spill in the Neches River in April of 1994, and as the Assistant SOSC during the October 1994 San Jacinto River spill and fire. He served as the Deputy Operations Chief during the Buffalo 292 and 286 spills in March of 1996 in Galveston. J.T. most recently headed up a team from the TGLO to aid in the rescue of individuals in New Orleans after the Hurricane Katrina floods.

Prior to joining the General Land Office, J.T. worked for an oil spill sales/applications engineering firm that provided its worldwide clientele with procurement, equipment and remediation services.

J.T. is currently a member of the Sabine-Neches Chief Association and the Sabine Lake Foundation. He was also designated Vice-Chairperson and Logistics Co-Chair of the Southwest

Louisiana/Southeast Texas Area Committee by the U.S. Coast Guard, Captain of the Port, MSO Port Arthur. J.T. grew up in Lake Charles, Louisiana and graduated from McNeese State University.

DAVE HARRIS

David joined Marathon Oil Company in 1971 following graduation from Bowling Green State University with a BS degree in management. In 1979, he completed an MBA from Xavier University.

From 1971 through 2006, he served in a number of Marathon organizations ranging from crude oil trading to emergency preparedness, while holding various administrative and managerial positions in Marathon's up and downstream components.

In 2001, he transferred to the corporate Emergency Preparedness Group (EPG). In this group, he coordinates training of Marathon's North American upstream business unit personnel in the utilization of the Incident Command System and assists in the coordination of the corporate level emergency response and crisis management teams. As a result of his security and EPG assignments, he has acquired extensive experience in both the domestic and international arenas.

Mr. Harris is a retired Director of the Energy Security Council and a member of the American Petroleum Institute.

JOHN WITTE, JR.

John Witte, Jr. currently serves as Executive Vice President of Donjon Marine Co., Inc., a provider of multi-faceted marine services including marine salvage, heavy lift, dredging and related emergency response services (Hillside, NJ), a position he has held since 1982. As such, he administers Donjon's Marine Salvage, Marine Transportation, Heavy Lift and Marine Demolition activities. In 1990, Mr. Witte was also instrumental in creating Donjon's OPA 90 salvage, firefighting and lightering response program, at the time providing retainer services to more than 1,000 tank vessels and barges calling at U.S. ports. In 2005, as a result of the ever-changing state and federal regulatory requirements being imposed upon Salvors and Salvage Operations as a result of the modifications to OPA 90 and similar legislation, Mr. Witte oversaw the creation of Donjon-Smit, an OPA 90 Alliance. With its Joint Venture partner, Smit America's Salvage, Donjon-Smit presently provides OPA 90 coverage for over 3,000 vessels. Mr. Witte is also responsible for Donjon's Regulatory Compliance Program relative to all its Marine Activities.

With more than 30 years of experience with Donjon, Mr. Witte has worked as a Salvage Technician, Diver, Equipment Operator, Assistant Salvage Master, Salvage Master and Project Manager in support of Donjon Marine's Salvage and related emergency response activities. While Mr. Witte trained under Donjon's other Salvage Masters, his primary instructor was his father and Donjon's Senior Salvage Master, Mr. J. Arnold Witte. As a result of this experience, Mr.

Witte also performs a similar training function to Donjon's present Salvage Response team as was provided to him by Donjon Salvage Masters in the past.

Over his years of service to Donjon Marine and its clients, Mr. Witte has attended more than 250 casualties, currently serving as Project Manager for all Federal Salvage work in support of the recovery efforts in the Gulf Coast after devastating hurricanes Katrina and Rita swept through the area. Donjon is the Lead Salvage Contractor for the Katrina/Rita Response as a result of its competitively bid U.S. Navy Salvage and Related Services Contract with the U.S. Navy, Supervisor of Salvage and Diving.

Mr. Witte is also Donjon's representative to both the International Salvage Union (ISU) and The American Salvage Association (ASA), presently serving as the latter's Vice President. He is also a representative to the American Waterways Operators (AWO) as part of the subcommittee reviewing the revised Salvage Regulations relative to OPA 90. He also regularly participates as a panel member for Salvage related discussion groups such as New York Waterways.

Mr. Witte attended High School at The Pingry School and subsequently attended Hobart College located in Geneva, New York, where he majored in political science with a minor in religious studies.

A.J. HEIKAMP

A. J. Heikamp received both his BS in Civil Engineering and MS in Environmental Engineering from Tulane University. Since graduation Mr. Heikamp has accumulated over 37 years of environmental expertise in both industry and government.

Prior to joining MSRC in January of 1991 as Operations Manager for the Gulf Region, Mr. Heikamp spent 12 years at LOOP, Inc. where, in addition to the responsibility for the company's oil spill response efforts, oil spill contingency planning and oil spill training, he managed the Fire, Safety and Security departments.

Mr. Heikamp is currently the Vice President of the Southern Region of MSRC headquartered in Lake Charles, Louisiana.

Attachment C: 2006 Annual Meeting Attendees

Task Force Members
Lisa Curtis, Administrator, Office of Spill Prevention & Response, California Department of Fish & Game
Kurt Fredriksson, Commissioner, Alaska Department of Environmental Conservation (moderator)
Dale Jensen, Spills Program Manager, Washington Department of Ecology
Larry Lau, Deputy Director for Environmental Health, Hawaii Department of Health
Paul Slyman, Deputy Director, Oregon Department of Environmental Quality
Chris Trumpy, Deputy Minister, British Columbia Ministry of Environment

Coordinating Committee
Larry Dietrick, Alaska Department of Environmental Conservation
Duncan Ferguson, British Columbia Ministry of Environment
Curtis Martin, Hawaii Department of Health
Ken Mayer, Office of Spill Prevention & Response, California Department of Fish & Game
Jon Neel, Washington Department of Ecology
Mike Zollitsch, Oregon Department of Environmental Quality

Staff
Jean Cameron, Task Force Executive Coordinator
Christell Spinelli, OSPR (Photographer/Registration)
Linda Green, OSPR (Registration)

Speakers & Moderators
Ryan Broddrick, Director, Department of Fish & Game
VADM Charles Wurster, Commander, USCG Pacific Area
Dr. Mike Ziccardi, Director, California Oiled Wildlife Care Network
Cindy Murphy, OSPR
Joan Lundstrom, San Francisco Harbor Safety Committee
Carl Jochums, OSPR
CDR Ron Cantin, Commanding Officer, USCG Gulf Strike Team
CDR Bill Robberson, EPA Region 9
Charlie Henry, NOAA SSC Gulf of Mexico
J.T. Ewing, Texas General Land Office
Dave Harris, Marathon Oil Company
John Witte, Jr., Donjon Marine Co., Inc.
A.J. Heikamp, MSRC So. Region Vice President
Bud Leland, OSPR (moderator)

Legacy Award Winners
Kim Beasley, General Manager, Clean Islands Council
John Thielst, Marine Operations Group Superintendent, Tesoro Hawaii
Mark Smith, VP of Supply & Trading, Tesoro Maritime Company
Ed Page, Executive Director , Marine Exchange of Alaska
Don McElroy, Senior VP, Foss Maritime
CAPT Sam Nelson of the Justine Foss

Attendees

Manny Aschemeyer, LA/LB Marine Exchange
R. Mitchel Beauchamp, M. Sc., OSPR TAC
Rich Berkowitz, Transportation Institute
CDR Vic Blalack, PACAREA (Prm)
John Brown, CA State Lands
Michael Carreon, USCG Sector LA
Kevin J. Cavanaugh, USCG
Marc Chaderjian, CA State Lands
Bill Conley, PWS RCAC
Mike Cooper, WA Oil Spill Advisory Council
Mr. Alan Coté, President of the Inlandboatmen's Union
John Crawford, Foss Maritime
LCDR Christopher Curatilo, USCG D14
John Devens, PWS RCAC
LT John Dittmar, District 13 Prevention Division
Stuart G. Downer, Business Agent, Inlandboatman's Union
Steve Edinger, Assistant Chief of Enforcement, OSPR
Ellen Faurot-Daniels, CA Coastal Commission (maybe!)
Sean Guerre, Trade Fair Group
CDR Dirk Greene, USCG Office of Incident Management and Preparedness
CAPT Paul Gugg, Prevention Division, USCG Pacific Area
LT Gregory Haas, Aide to the Pacific Area Commander
Ike Ikerd, General Manager, Clean Seas, LLC
Terry Joslin, BlueWater & Associates
Christopher Klumpp, OSPR
Peter Korody, Regional Director, Inlandboatmen's Union
Joy Lavin-Jones, OSPR
Capt. James Lawson, Regional Director Marine, Transport Canada, Pacific Region
Doug Larson, Hudson Marine Management Services
Kevin Mercier, CA State Lands
Don Montoro, U.S. Navy
Mike Munger, CIRCAC
Raymond C. Nottingham, Marine Spill Response Corporation
Craig Ogawa, MMS
Laura O'Hare, USCG Sector LA
Jeff Poteet, OSPR
Jack D. Prescott, Office of Spill Prevention & Response, San Diego
Michael Rampolla, Crowley Marine Services/ Marine Response Alliance
Steve Sawyer, OSPR
Dave Selga, Socal Regional Director, Foss Maritime
Kevin B. Smith, the Water Quality Insurance Syndicate
Jordon Stout, NOAA Hazmat
Ravindra (Ravi) Varma, CA State Lands
CDR D. P. Verfaillie, D13 Marine Response
Alex Walker, Vice President and General Manager, Chevron Shipping Company Marine Transportation
Frank Whipple, Amergent Techs
Richard Wright, MSRC