PACIFIC STATES/BRITISH COLUMBIA OIL SPILL TASK FORCE

2011 ANNUAL REPORT

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COVER: Humpback Whale breaching in an Alaska bay.

The states of Alaska, Washington, Oregon, California and Hawaii have joined with the Province of British Columbia in order to combine resources and coordinate efforts to protect their shared waters and 56,660 miles of sensitive coastlines from the devastating impacts of oil spills.

This Annual Report of the Pacific States/British Columbia Oil Spill Task Force is submitted to the Governors of California, Oregon, Washington, Hawaii and Alaska, and to the Premier of British Columbia, as well as to the citizens whom they represent. It provides information on the activities and accomplishments of the Task Force and its member agencies from June 2010 through May 2011.

The States/British Columbia Oil Spill Task Force was established by a Memorandum of Cooperation signed in 1989, following two West Coast oil spill incidents. The first involved the tank barge *Nestucca,* which spilled oil impacting the coasts of Washington and British Columbia in December of 1988. The second incident was the catastrophic spill by the T/V *Exxon Valdez* in Alaska's Prince William Sound in March of 1989. These events highlighted common concerns shared by West Coast states and the Province of British Columbia related to spill risks from coastal vessel traffic, the need for cooperation across shared borders and a shared commitment among West Coast citizens of both the U.S. and Canada to protect their unique marine resources.

The Oil Spill Task Force produced a report in October of 1990 that included 46 joint recommendations for spill prevention and response, as well as recommendations specific to each member's jurisdiction. Most of these recommendations have since been incorporated into state or provincial statutes, rules, or programs. They are also reflected in the U.S. Federal Oil Pollution Act passed in 1990 (OPA '90), as well as the Canadian Shipping Act Amendments adopted in 1993.

When the State of Hawaii authorized its Department of Health, Environmental Health Division, to join the Task Force in 2001, the governing Memorandum of Cooperation was updated and signed by Hawaii Governor Benjamin Cayetano, Alaska Governor Tony Knowles, Washington Governor Gary Locke, Oregon Governor John Kitzhaber, California Governor Gray Davis and Gordon Campbell, Premier of British Columbia. The organization's name was changed to the Pacific States/British Columbia Oil Spill Task Force.

The continuing focus of the Oil Spill Task Force is on fostering regulatory compatibility, sharing information and resources, and coordinating regional projects to improve oil spill prevention, preparedness, and response in the shared Pacific waters of the U.S. and Canada. These efforts are guided by our Strategic Plan and Annual Work Plans and are based on our Mission, Goals, and Objectives as stated on the following page.

This Annual Report does not reflect oil spill prevention and response activities on the part of any federal agencies or industry organizations except as may have occurred in response to or in cooperation with the Pacific States/British Columbia Oil Spill Task Force or a member agency.

Long Term Vision Statement:

No Spilled Oil.

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.

Ongoing Goals:

Prevent spills that impact natural resources in our member jurisdictions, both large spills with significant impacts and chronic small spills with cumulative impacts.

Facilitate communication among member agencies in order to promote policy uniformity and consistency, improve prevention, preparedness, response, and recovery capabilities, and maximize efficiency of effort by sharing ideas and "products";

Clarify the roles and responsibilities of state and provincial agencies with regard to federal agencies in order to reduce regulatory gaps and overlaps while avoiding potential conflicts;

Advocate in national and international arenas on issues of common concern, building respect through credibility, clarity of purpose and collaboration;

Serve as a catalyst for improvements by working cooperatively with federal agencies, other states and provinces, industry, response contractors, public interest groups and concerned citizens to create opportunities for policy and technology breakthroughs;

Educate the public and stakeholders on the impacts of oil spills and issues relating to spill prevention, preparedness, response and restoration;

Identify emerging trends in oil transportation, production and storage in order to assist member agencies with their strategic planning; and

Serve as a model of proactive regional cooperation and coordination.

Objectives:

Spill Prevention: To prevent oil spills from a variety of sources, including vessels, pipelines, facilities, vehicles and railroads.

Spill Preparedness and Response: To enhance oil spill preparedness and response capabilities throughout our region.

Communications: To continuously improve communications within the Task Force as well as with key stakeholders and the general public and to maintain a high level of public and stakeholder involvement in Task Force activities.

Task Force Members

Scott Schaefer (2010-2011)
Acting Administrator, Office of Spill Prevention and Response, California Department of Fish and Game

Larry Hartig (2007-2011)
Commissioner, Alaska Department of Environmental Conservation

Cairine MacDonald (2010-2011)
Deputy Minister, British Columbia Ministry of Environment

Gary Gill (2010-2011)
Deputy Director for Environmental Health, Hawaii Department of Health

Dale Jensen (2010-2011)
Director, Washington Department of Ecology

Dick Pedersen (2007-2011)
Director, Oregon Department of Environmental Quality

Coordinating Committee Members:

Larry Dietrick (1999-2011)
(Alternates: Betty Schorr and Gary Folley)
Alaska Department of Environmental Conservation

Graham Knox (2006-2011)
British Columbia Ministry of Environment

Curtis Martin (2001-2011)
Hawaii Department of Health

Jon Neel (1989-1998, 2005-2011)
Washington Department of Ecology

Scott Schaefer (2000-2004, 2009-2011)
Office of Spill Prevention and Response, California Department of Fish and Game

Mike Zollitsch (1997-2011)
Oregon Department of Environmental Quality

Executive Coordinator:

Jean Cameron (1993-2011)
Pacific States/British Columbia Oil Spill Task Force

1989–2011

OIL SPILL TASK FORCE **TWENTY-TWO YEARS OF ACCOMPLISHMENTS**

INITIAL REPORT

The Oil Spill Task Force produced a report in October of **1990** that included 46 joint recommendations for spill prevention and response, as well as recommendations specific to each member's jurisdiction.

OIL SPILL PREVENTION INITIATIVES

Recommendations regarding Training and Standards to minimize human errors were adopted in **1995**.

A review of West Coast pilotage and recommendations to improve pilotage safety were completed in **1997**.

A survey of state/federal pipeline spill prevention standards to identify regulatory gaps and overlaps was completed in **1998**; recommendations for interagency coordination to improve pipeline spill prevention were made in **1999**.

The Task Force partnered with the U.S. Coast Guard and Canadian authorities to sponsor a stakeholder workgroup that assessed the oil spill risks associated with offshore vessel traffic on the west coast and, in **2002**, this West Coast Offshore Vessel Traffic Risk Management Project workgroup recommended a number of steps to reduce that risk, including voluntary minimum distances from shore for coastwise vessel traffic.

Since **2002**, the Task Force has collected data on spills of one barrel or larger in the West Coast states and uses a common Data Dictionary to ensure standardized entries. We also sponsor investigator training every two years or as needed.

The Task Force worked with tank vessel operators in **2003** to rank voluntary practices that help prevent oil spills. We have done educational outreach regarding these "Best Industry Practices" to both the commercial vessel and tug/tank barge industries.

A review of the status of implementation of the 2002 West Coast Offshore Vessel Traffic Risk Management Project recommendations was conducted in 2007; new recommendations generated by a stakeholder workgroup were adopted in **2008**.

We established a web page for West Coast Harbor Safety Committees in **2009**.

We tracked the double-hull conversion status of tankers in the Trans-Alaska Pipeline (TAPS) trade from **2003-2010.** All TAPs tankers are now double-hulled.

Ongoing: We are tracking the double-hull status of all tank ships and barges serving ports in our member jurisdictions

Ongoing: We support the Pacific Oil Spill Prevention Education Team (POSPET) whose members do spill prevention outreach to recreational boaters and marinas. The Task Force provides staff support, a web page, a listserve and funding for outreach materials.

Ongoing: We applaud federal adoption of salvage and firefighting regulations for tank vessels and encourage adoption of the same regulations for nontank vessels.

OIL SPILL PREPAREDNESS/RESPONSE INITIATIVES

The Task Force adopted a Mutual Aid Plan in **1993** to facilitate sharing member agency staff and resources.

A comparison of contingency plan requirements for vessels and facilities was completed in **1995** and was updated in 2009. This is available on our website.

Recommendations regarding policies governing the use of alternative response technologies such as in-situ burning and dispersants were adopted in **1995** and the status of such policies is continuously reviewed by the Task Force.

A review of oiled wildlife care facilities on the West Coast was completed in **1995**.

We adopted a Mutual Aid Agreement in **1996** that outlines protocols for releasing private sector equipment cited in approved contingency plans for the purpose of Mutual Aid.

In **1997** we adopted a voluntary Integrated Vessel Response Plan (IVRP) format based on the key elements of the U.S. Coast Guard's Vessel Response Plan. This format allows correlation with west coast state planning requirements as well as with the Shipboard Oil Pollution Emergency Plan (SOPEP) required by Transport Canada.

A subsequent Task Force Agreement to accept vessel contingency plans in a format that integrates both state and federal planning requirements was adopted in **1998**.

Recommended protocols for oiled bird and marine mammal rescue and rehabilitation were published in **1998**.

The Task Force partnered with the U.S. Coast Guard to sponsor a stakeholder workgroup which updated the Oil Spill Field Operations Guide, effective **2000**.

A set of updated and simplified "Recommended Contingency Planning Elements" was adopted by the Task Force members in **2003**.

In partnership with the U.S. Coast Guard and a stakeholder workgroup, we developed guidelines for decision-making in response to vessel requests of a Place of Refuge in **2005**.

We developed Area Committee planning guidelines for Volunteer Management in **2008**.

We sponsored a webinar on using Social Media during a spill response in April **2009**.

We completed a comprehensive review of oil spill planning and preparedness along the two U.S./Canadian borders in our region and produced a report with recommendations for improvements in **2011**.

Ongoing: Member jurisdictions along the West Coast require oil spill contingency plans for nontank vessels. We also support U.S. Coast Guard adoption of contingency plan regulations for nontank vessels.

Ongoing: A table illustrating the Financial Responsibility requirements of member agencies is maintained on the Task Force website.

Ongoing: We advocate for increasing the Limits of Liability for both vessels and facilities in order to protect the U.S. Oil Spill Liability Trust Fund.

Ongoing: We monitor developments in the use of the Incident Command System as a response paradigm in order to advance the interests of our member agencies and promote improved training concepts.

Ongoing: The Task Force maintains an easy-to-remember oil spill reporting number (1-800-OILS-911) for use by recreational and fishing vessels operating from British Columbia to California.

Ongoing: We regularly monitor oil spill research and development of new technologies and advocate for research priorities. We formed an Oil Spill Research and Development Workgroup in 2009 that meets by conference call to provide updates on oil spill R&D projects.

Ongoing: We are reviewing our two Mutual Aid Agreements based on Lessons Learned from the Deepwater Horizon oil spill.

COMMUNICATIONS INITIATIVES

The Task Force was created in **1989** by a Memorandum of Cooperation signed by the Governors of Alaska, Washington, Oregon and California and the Premier of British Columbia.

The Legacy Awards Program has been ongoing **since 1999**, honoring groups or individuals who go beyond regulatory requirements to improve oil spill prevention, preparedness and response.

A second Memorandum of Cooperation was signed by the Governors and Premier in **2001** when the State of Hawaii joined the Pacific States/British Columbia Oil Spill Task Force.

The Task Force signed a partnership Memorandum of Understanding with the U.S. Coast Guard Pacific Area in May of **2008**. The Coordinating Committee meets with Pacific Area representatives annually as a "Steering Committee" to implement this MOU. Representatives of the U.S. EPA have been invited to join this meeting as well.

Ongoing: We maintain contact information on our website for our project "points of contact" in each member agency, as well as links to member agency information on incident responses.

Ongoing: The Task Force hosts a one–day Annual Meeting, open to the public and rotated among our member jurisdictions, every other year.

Ongoing: The Task Force hosts a biennial multi-day "Clean Pacific" conference, also rotated among our member jurisdictions.

Ongoing: The Task Force has sponsored public roundtable discussions on Spill Response Readiness, Natural Resource Damage Assessments, Spills from Trucks, Green Ports, Places of Refuge, response in low-visibility conditions and Cruise Ship Pollution.

Ongoing: Stakeholder participation is encouraged in Task Force Annual Meetings, at the Clean Pacific Conferences and at Roundtables, as well as in project workgroups as appropriate.

Ongoing: A Task Force website is maintained at http://www.oilspilltaskforce.org.

Ongoing: We produce an Annual Report which includes updates on Task Force and Member Agency activities as well as the spill data for the preceding year.

Ongoing: The Task Force participates in the trustee/industry Joint Assessment Team's efforts to

coordinate natural resource damage efforts

Ongoing: The Task Force provides comments on U.S. and Canadian regulatory initiatives of interest to our members.

Ongoing: We have identified Points of Contact in other coastal states and provinces for information sharing.

Ongoing: The Task Force Members meet annually; the Coordinating Committee members meet at least quarterly, either in person or by conference call.

Ongoing: Task Force staff facilitates internal communication and information exchange among member agencies.

Ongoing: We regularly share information on spill prevention, preparedness and response Topics of Concern among member agencies.

Ongoing: The Task Force Executive Coordinator responds to information requests and represents the Task Force at meetings, workshops and conferences as time and budgets allow.

Ongoing: We operate on the basis of multi-year Strategic Plans which are implemented through Annual Work Plans.

Yakutat Harbor, Alaska

Dear Reader,

In this era of partisan grandstanding, I'm proud that the people I work with are committed to the ideals of cooperation and collaboration to solve problems. For example, nearly 90 people – representing government agencies, industry, OSROs and NGOs - have just completed three years working together to analyze our U.S./Canada transboundary spill response capabilities and offer recommendations for improvements. Ongoing project workgroups sponsored by the Oil Spill Task Force continue to provide a forum for coordination on topics ranging from Oil Spill R&D to spill prevention education for boaters and marinas.

Even though our Task Force member agencies are dealing with significant budget cuts, they also remain committed to working with other agencies, regulated industry, response organizations, public interest groups and elected officials to meet their spill prevention, preparedness and response goals. Their successes over the past year include:

- *The Alaska Department of Environmental Conservation provides leadership on risk assessments statewide and demonstrated how robust both their Places of Refuge planning and Emergency Towing systems were during the M/V Golden Seas response. In addition, Larry Dietrick, the SPAR program manager, gave extensively of his time as a member of the U.S. Coast Guard's Incident Specific Preparedness Review (ISPR) Team for the Deepwater Horizon oil spill;*
- *The British Columbia Ministry of Environment has boosted their response capacity through a major restructuring of their program and they're also working with industry, NGOs and response organizations to improve BC's oiled wildlife rescue and rehabilitation capabilities;*
- *The California Office of Spill Prevention and Response and their parent agency the Department of Fish and Game sent 70 staff to assist with the Deepwater Horizon response. Four of these were U.S. Coast Guard reserves; the rest served multiple 2-4 week assignments between May of 2010 and April of 2011;*
- *Hawaii's Hazardous Evaluation and Emergency Response (HEER) Office did a superb job of hosting our 2010 Annual Meeting, ensuring that local response personnel from multiple agencies and interest groups were able to attend. They continue to work collaboratively on response to a range of incidents, from tsunamis to oil spills;*

- *The Oregon Department of Environmental Quality also dealt with impacts from the Japanese tsunami and a variety of oil spills, while collaborating with other agencies to improve GIS capacities and respond to risks posed by derelict and abandoned vessels; and*
- *The Washington Department of Ecology paid close attention to the lessons of the Deepwater Horizon response and worked to pass Washington House bill 1186 – which greatly enhances Washington's response capacity – and did so with strong bipartisan support. Ecology is working hard to realize their commitment to a "rapid, aggressive and well-coordinated response 24/7."*

Of course, these are just a few hints of what both the Task Force and its member agencies have accomplished over the last year, so please read on! And please keep in mind as you do so, that we honor cooperation and collaboration and respect anyone committed to active listening and problem-solving.

Sincerely,

Jean R. Cameron
Executive Coordinator

SPILL PREVENTION PROJECTS

THE DATABASE PROJECT

The Task Force's regional oil spill database was initiated in 2003 with the collection of the 2002 data. Each subsequent year our Annual Report has included a compilation and analysis of regional data from the prior year. Our ongoing goal is continuous improvement of this database in order to provide information on spill trends and causal factors; this allows us to better target our spill prevention efforts. In addition to the 2010 data in this Annual Report, spill data from 2002 – 2010 is available in the Annual Reports at www.oilspilltaskforce.org.

The Database Workgroup is chaired by Camille Stephens of the Alaska Department of Environmental Conservation; Camille also compiles the information supplied by other member agencies and produces the final graphics after Workgroup review. The Data Workgroup members include Cathy Conway, Adrian Chatigny, and Damon Williams of the California Office of Spill Prevention and Response; Mike Zollitsch of the Oregon Department of Environmental Quality; Marcia Graf and Curtis Martin of the Hawaii Office of Hazard Evaluation and Emergency Response; and Jack Barfield of the Washington Department of Ecology. The British Columbia Ministry of Environment monitors the project, is developing a spill database, and plans to join the Task Force project as soon as possible.

Only spills of one barrel or larger are included in our Database. The Database Workgroup endeavors to

Alaska's scenic Prince William Sound and Columbia Glacier.

refine data submittals consistent with the Task Force Data Dictionary (available at : http://www.oilspilltaskforce.org/docs/notes_reports/data_dictionary_revised2010.pdf), with particular emphasis on reducing the amount of data categorized as "other" or "unknown." It is an ongoing challenge to refine information entered into the database to a level of specificity that supports effective analysis while also conforming to the varied collection capabilities of member agencies.

The 2010 data is provided on the following pages. Highlights include:

- A total of 1,057 releases occurred during 2010, with a total volume of 997,542 gallons spilled.
- Of those, 928 releases were non-crude spills totaling 693,734 gallons. For the non-crude spills:
  - Facilities (73%) and Vehicles (16%) were the major sources during 2010;
  - 92% of the total volume was attributed to Equipment Failure (48%) or Human Error (44%); and
  - Nearly two-thirds of the non-crude volume was spilled to Land (64%).
- Crude oil comprised 30% the total volume for 2010. Equipment Failure (90%) was the predominant cause of crude oil spills during 2010 and Inattention (66%) was the cause of approximately two-thirds of all Human Error-caused crude oil spills.

We note that California's spill volumes often exceed that from other West Coast states; this reflects California's uniqueness. California has the largest population of all our member jurisdictions, which means more transportation of petroleum products to cover demand, which increases the statistical likelihood of an incident. In addition, California produces as well as refines petroleum, which further increases the risk of spills. California also has an aging infrastructure that has not been well maintained by producers, driving up the number of oil-water spills to land in recent years. California's Office of Spill Prevention and Response has no prevention jurisdiction over these producers.

The 2002-2010 data provides us with an opportunity to look at nine-year trends, which is also shown in this report. Here are the highlights:

- A total of 8,590 releases occurred during the 9-year period, with a total volume of approximately 8.1 million gallons.
- Over that 9-year period, the combined volume of Non-Crude spills was more than twice that for Crude Oil spills.
- The top two Crude Oil spills during the 9-year period were 463,848 gallons in California (2008) and a 267,000 gallon spill in Alaska (2006). The combined volume of these two incidents comprised 30% of the total Crude Oil volume released for the period.
- Overall, Facilities (51%) and Pipelines (25%) were the major sources of spills during the 9-year period.
- Overall, Equipment Failure (57%) and Human Error (31%) were the major spill causes.

The Oil Spill Task Force database is created and maintained for information purposes only. The data represents the respective agencies' best information at the time it was entered into the database, although recorded quantities are often under-reported. Each agency that assists in the creation and maintenance of the Task Force database in no way guarantees the accuracy of the information and no guarantee of accuracy shall be expressed or implied.

2010 ANNUAL SUMMARY OF SPILLS

- A total of 1,057 releases occurred during 2010, with a total volume of 997,542 gallons.

SUMMARY OF RELEASES BY PRODUCT (2010)

PRODUCT	COUNT	GALLONS	VOL.
Crude Oil	129	303,808	30%
Diesel Oil	483	288,691	29%
Other	20	195,834	20%
Mineral Oil / Transformer Oil	137	67,228	7%
Gasoline	45	43,011	4%
Kerosene / Jet Fuel	30	41,952	4%
Lube Oil / Motor Oil	42	17,719	2%
Oily Water Mixture	35	11,342	1%
Bunker C / IFO / HFO	7	7,223	0.7%
Hydraulic Oil	58	6,729	0.7%
Waste Oil	28	3,687	0.4%
Aviation Fuel	9	3,332	0.3%
Asphalt / Creosote	10	2,789	0.3%
Heating Oil	11	2,290	0.2%
Unknown	4	942	0.1%
Edible / Vegetable Oil	8	895	0.09%
LNG / LPG	1	70	0.01%
TOTAL	**1,057**	**997,542**	

SPILLS GREATER THAN 10,000 GALLONS (2010)

PRODUCT	VOL.	STATE	DATE	SOURCE TYPE	CAUSE TYPE	MEDIUM
Other	193,200	CA	1/4/2010	Facility	Equipment Failure	Land
Crude Oil	191,562	AK	5/25/2010	Pipeline	Equipment Failure	Impermeable Surface
Diesel Oil	142,800	AK	1/11/2010	Facility	Human Error	Marine
Mineral/Transformer Oil	42,000	CA	12/8/2010	Facility	Equipment Failure	Land
Kerosene/Jet Fuel	33,600	CA	2/15/2010	Vessel	Org/Mgmt Failure	Marine
Diesel Oil	24,500	WA	10/27/2010	Facility	Equipment Failure	Land
Crude Oil	21,336	CA	6/1/2010	Pipeline	Equipment Failure	Land
Crude Oil	12,852	CA	6/28/2010	Facility	Equipment Failure	Fresh Water

2010 NON-CRUDE SPILLS

Total Spills	928
Total Volume (gal)	693,734
Average Spill Size (gal)	748

SUMMARY BY PRODUCT:

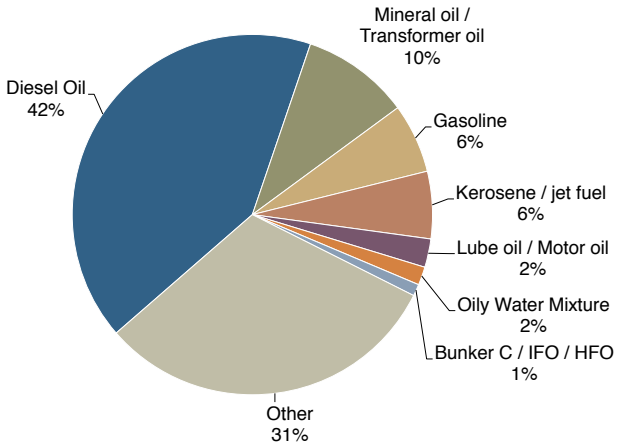
Top Products

Product	Gallons
Diesel Oil	288,691
Other	195,834
Mineral/Transformer Oil	67,228
Gasoline	43,011
Kerosene/Jet Fuel	41,952

- 928 non-crude spills totalling 693,734 gallons occurred during 2010.

NON-CRUDE SPILLS BY PRODUCT, ALL STATES (2010)

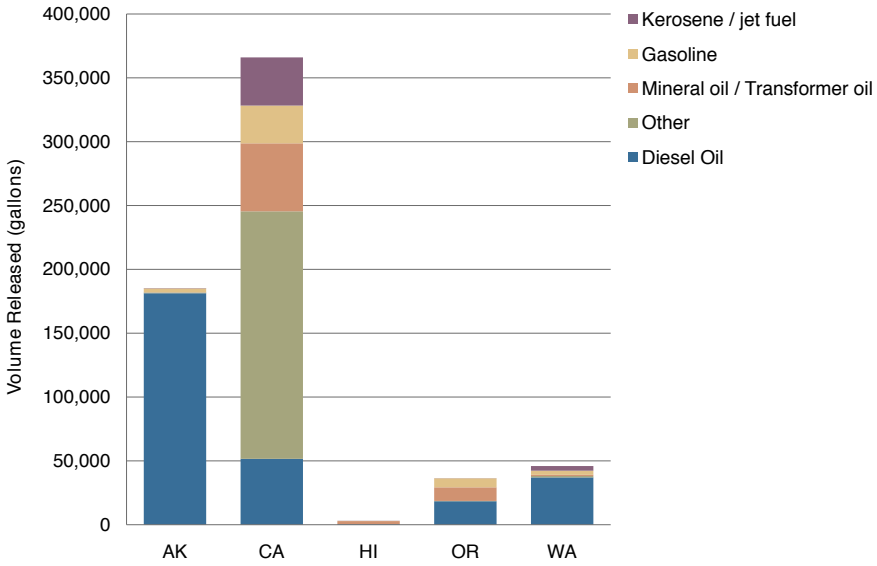
(percent total volume)



NOTE: For graphing purposes, "Other" includes products comprising 1% or less of the total volume released: Hydraulic Oil, Waste Oil, Aviation Fuel, Asphalt/Creosote, Heating Oil, Unknown, Edible/Vegetable Oil, LNG/LPG.

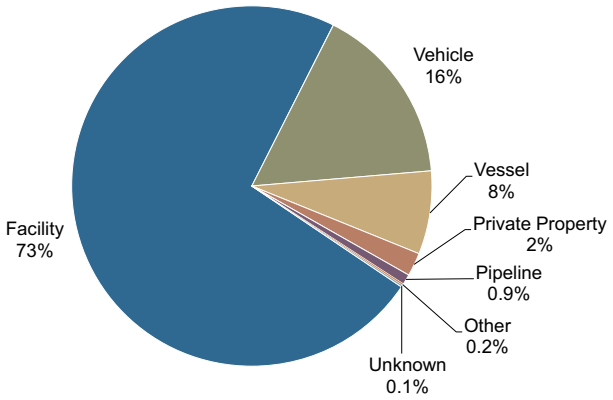
NON-CRUDE SPILLS BY PRODUCT AND STATE (2010)

(5% or more total volume)

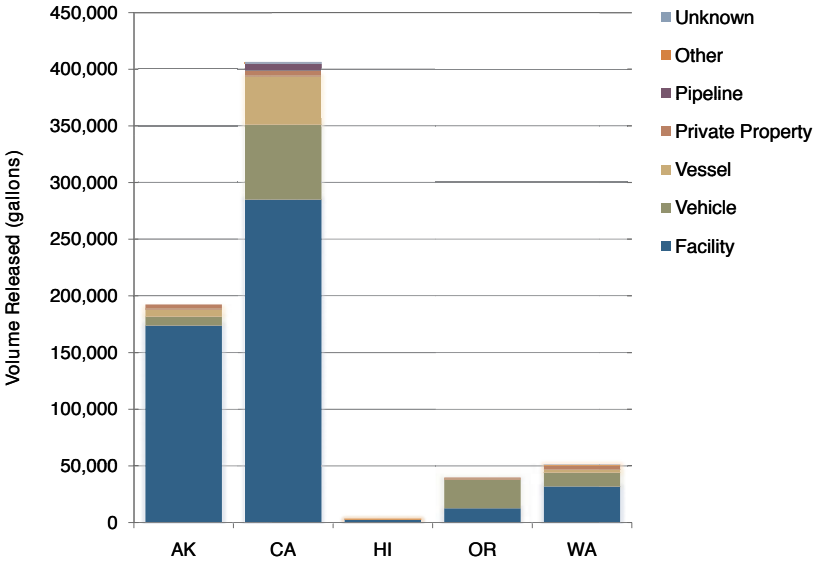


NON-CRUDE SPILLS BY SOURCE, ALL STATES (2010)

(percent total volume)



NON-CRUDE SPILLS BY SOURCE AND STATE (2010)



2010 NON-CRUDE SPILLS

SUMMARY BY SOURCE:

Top Sources

Source	Gallons
Facility	506,559
Vehicle	112,352
Vessel	51,757

- Facilities (73%) and Vehicles (16%) were the major sources of non-crude spills during 2010.

2010 NON-CRUDE SPILLS

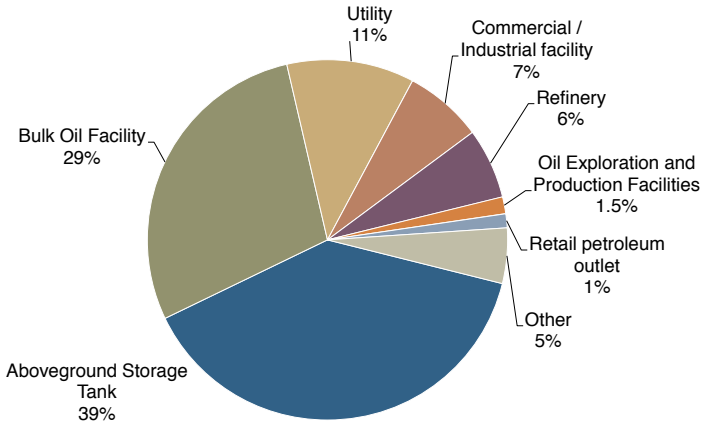
SUMMARY BY SOURCE:

(continued)

- Aboveground Storage Tanks (39%) were the top contributors to facility spills.
- Approximately half of the Vehicle spill volume was from Tank Trucks.

NON-CRUDE SPILLS – FACILITY DETAIL (2010)

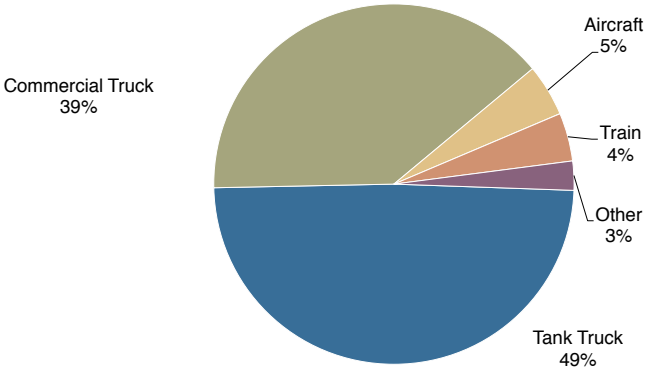
(percent total volume)



NOTE: For graphing purposes, "Other" includes Facility classifications which comprised 1% or less of the total volume released: Municipal/Power Generation Utility, Underground Storage Tank, Leaking Drum or Container, Marina.

NON-CRUDE SPILLS – VEHICLE DETAIL (2010)

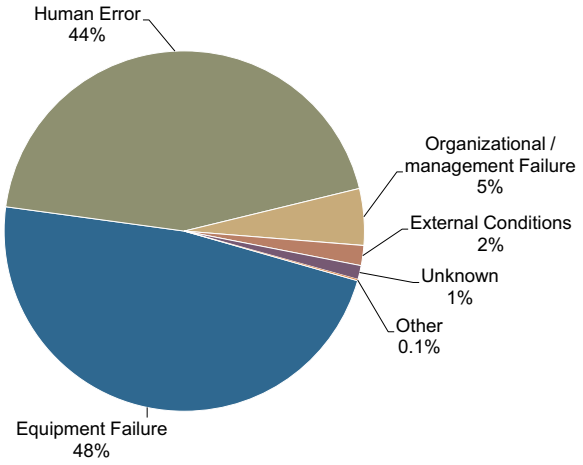
(percent total volume)



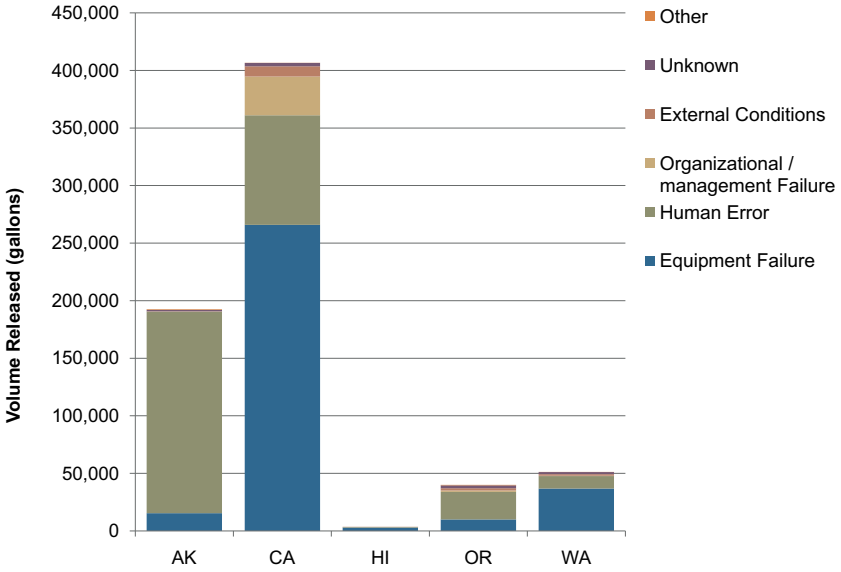
NOTE: For graphing purposes, "Other" includes Non-commercial Vehicle, Private Vehicle, Construction Utility Vehicle.

NON-CRUDE SPILLS BY CAUSE, ALL STATES (2010)

(percent total volume)



NON-CRUDE SPILLS BY CAUSE AND STATE (2010)



2010 NON-CRUDE SPILLS

SUMMARY BY CAUSE:

Top Causes

Cause	Gallons
Equipment Failure	331,008
Human Error	305,485
Org/Mgmt Failure	35,299

- 92% of the total non-crude spill volume was attributed to Equipment Failure (48%) or Human Error (44%).

2010 NON-CRUDE SPILLS

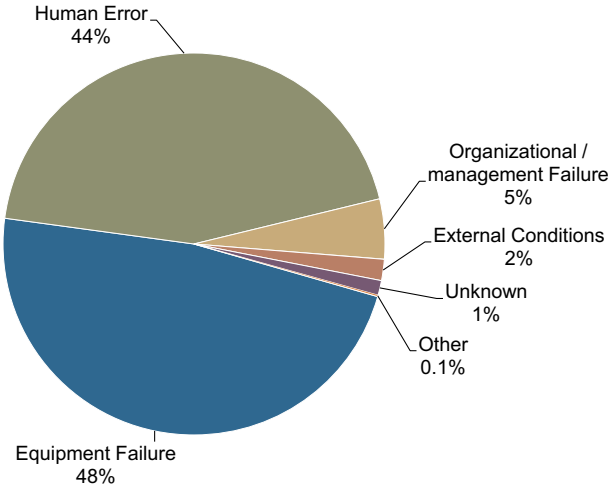
SUMMARY BY CAUSE:

(continued)

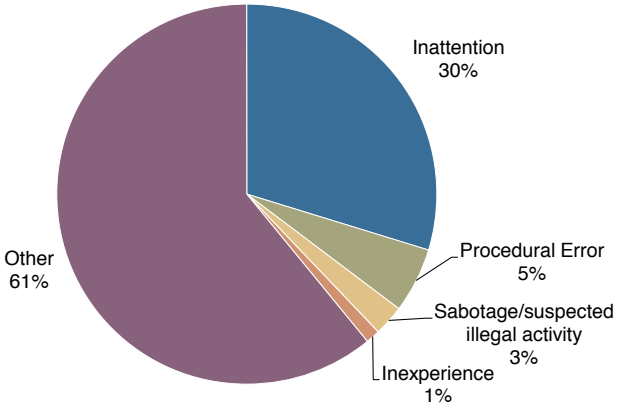
- Approximately two-thirds of the Equipment Failure spills were due to Structural Failure (67%).

We note that 61% of the causal information detail for Human Error was recorded as "Other." This reflects the difficulties faced by our member agencies in tracking down more detail on human error causes for non-crude spills, since many are small, and many are also vehicles spills (16% of the spills reported) for which other agencies are first responders.

NON-CRUDE SPILLS – EQUIPMENT FAILURE DETAIL (2010)
(percent total volume)



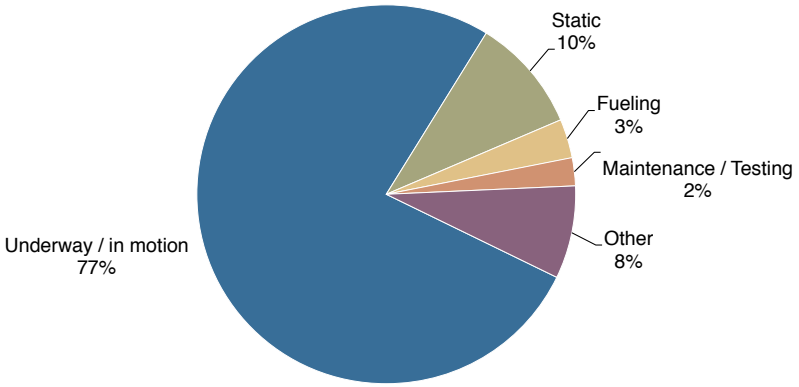
NON-CRUDE SPILLS – HUMAN ERROR DETAIL (2010)
(percent total volume)



NOTE: For graphing purposes, "Other" includes: Judgment, Improper Equipment Use, Fatigue, Inaccurate computation, Communications, Deliberate violation

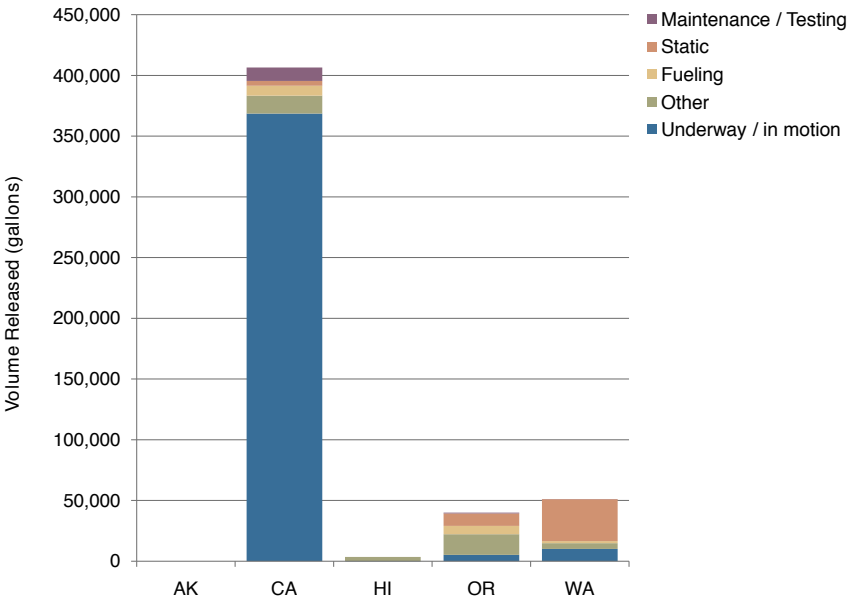
NON-CRUDE SPILLS BY ACTIVITY (2010)

(percent total volume)



NOTE: For graphing purposes, "Other " includes activity classifications with less than 5,000 gallons spilled: Fueling , Tank/Hold Cleaning , Cargo (oil) operations, Bilge pumping.

NON-CRUDE SPILLS BY ACTIVITY AND STATE (2010)



2010 NON-CRUDE SPILLS

SUMMARY BY ACTIVITY:

NOTE: Activity was not recorded for spills in Alaska.

Activity	Gallons
Underway/In Motion[1]	384,022
Static	48,820
Other[2]	22,669
Fueling	16,653

- Underway/in motion was the main activity at the time of the spill (77%).

[1]Underway/Transiting/Pipeline in Operation: Normal and controlled operations of a pipeline, vessel, or vehicle while carrying out normal operations.

[2]Other includes classifications with less than 5,000 gal spilled: Stationary/ In Port, Unknown, Tank/Hold Cleaning, Construction, Internal Transfer, Oil Transfer (cargo), Oil Transfer (non-fuel), Not operating, Cargo (oil) Operations, Lightering.

2010 NON-CRUDE SPILLS

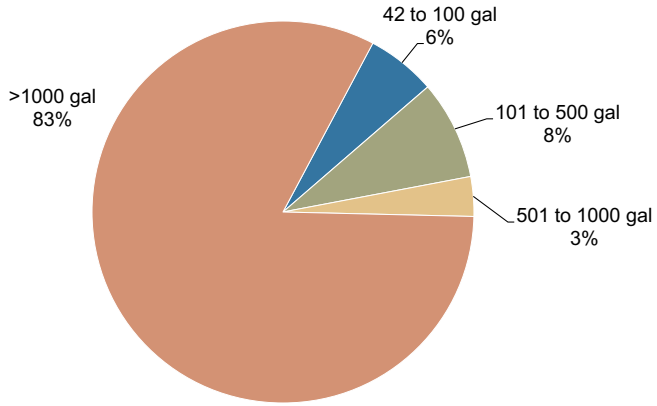
SUMMARY BY SPILL SIZE:

Size Class	Gallons
42 to 100	40,745
101 to 500	58,078
501 to 1000	23,231
>1000	571,680

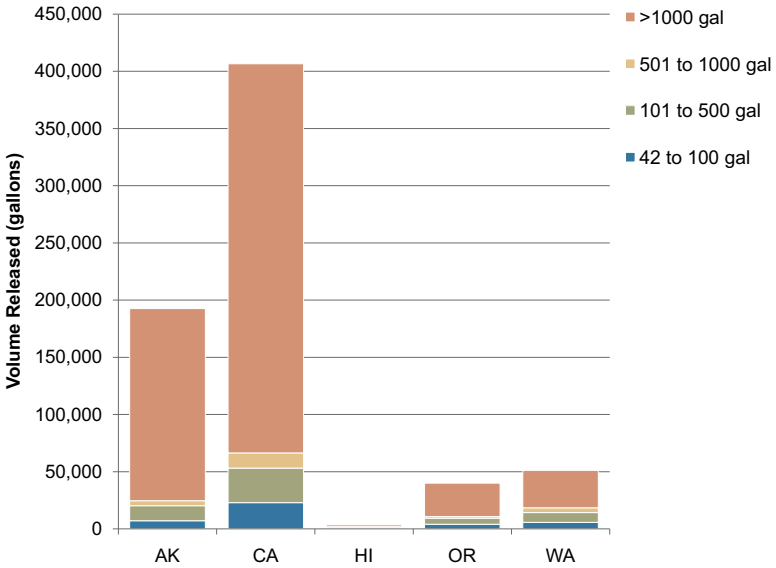
- More than 80% of the total non-crude spill volume was due to spills greater than 1,000 gallons.

NON-CRUDE SPILLS BY SPILL SIZE (2010)

(percent total volume)

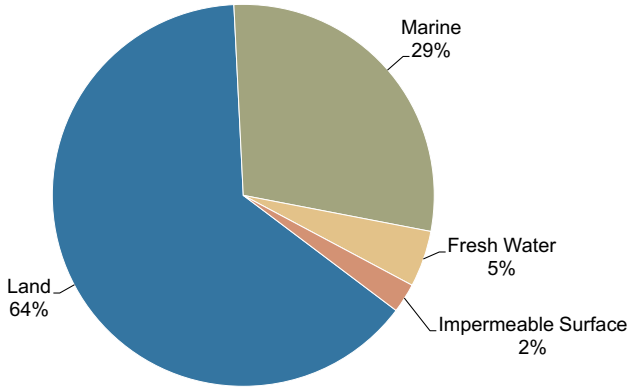


NON-CRUDE SPILLS BY SPILL SIZE AND STATE (2010)

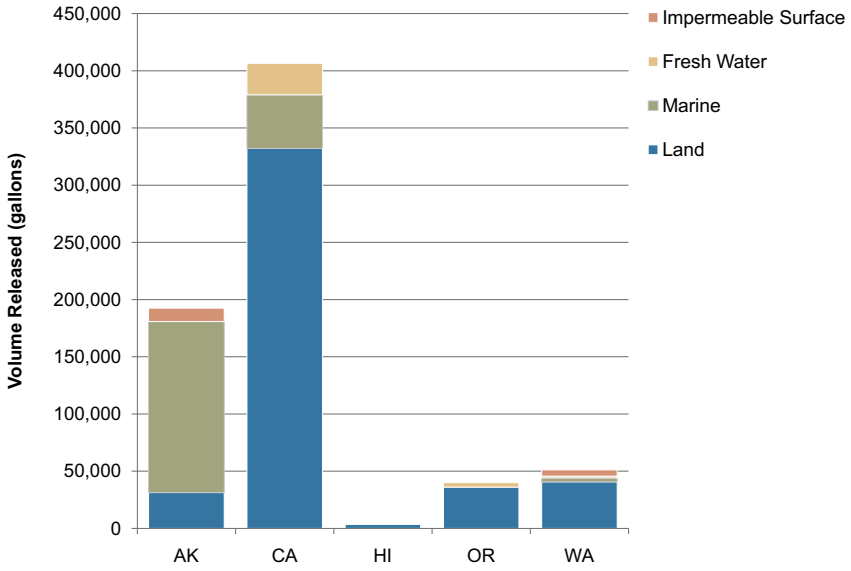


NON-CRUDE SPILLS BY MEDIUM IMPACTED (2010)

(percent total volume)



NON-CRUDE SPILLS BY MEDIUM AND STATE (2010)



2010 NON-CRUDE SPILLS

SUMMARY BY MEDIUM:

Size Class	Gallons
Land	443,571
Marine	199,868
Fresh Water	33,035
Impermeable Surface	17,260

- Nearly two-thirds of the non-crude volume was spilled to land (64%).

2010 CRUDE SPILLS

Total Spills	129
Total Volume (gal)	303,808
Average Spill Size (gal)	2,355

SUMMARY:

Product Type

Product	Gallons
Non-Crude Oil	693,734
Crude Oil	303,808
Total	**997,542**

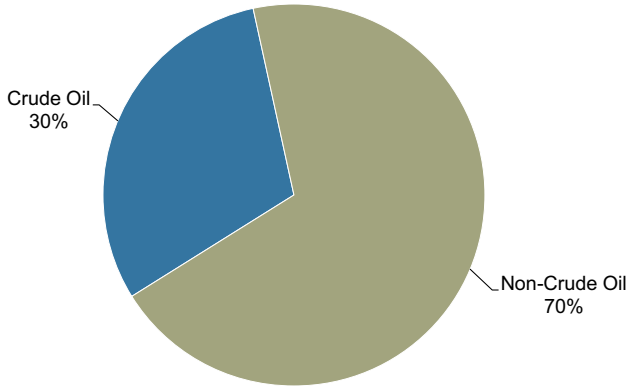
- Crude Oil comprised 30% the total volume for 2010.

Top Sources

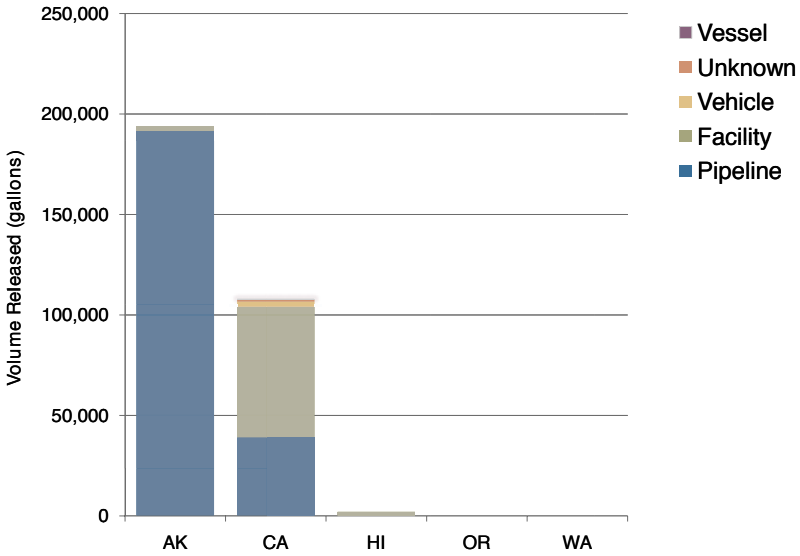
Source	Gallons
Pipeline	230,717
Facility	69,412
Vehicle	2,612
Unknown	1,025

CRUDE VS. NON-CRUDE SPILLS, ALL STATES (2010)

(percent total volume)

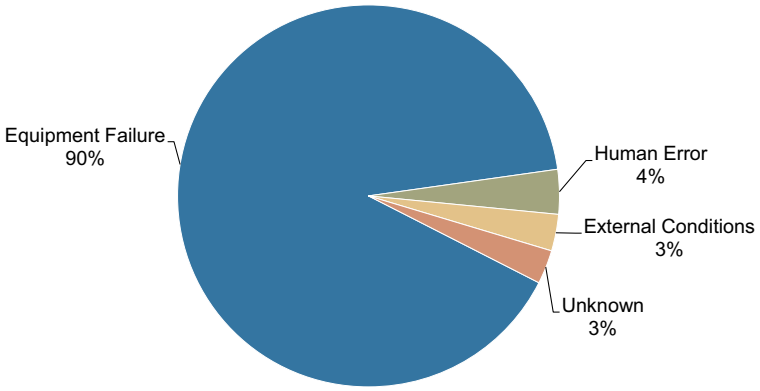


CRUDE SPILLS BY SOURCE TYPE AND STATE (2010)



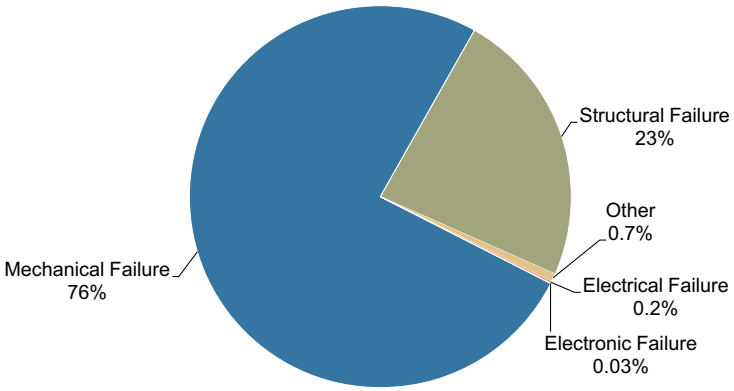
CRUDE SPILLS BY CAUSE, ALL STATES (2010)

(percent total volume)



CRUDE SPILLS – EQUIPMENT FAILURE DETAIL (2010)

(percent total volume)



2010 CRUDE SPILLS

SUMMARY BY CAUSE:

Top Causes

Cause	Gallons
Equipment Failure	274,223
Human Error	11,495
External Conditions	9,408
Unknown	8,682

- Equipment Failure (90%) was the predominant cause of crude oil spills during 2010.

Equipment Failure Detail

Cause	Gallons
Mechanical Failure	207,562
Structural Failure	64,260
Other	1,906

- Mechanical Failure was the main cause among spills due to Equipment Failure.

2010 CRUDE SPILLS

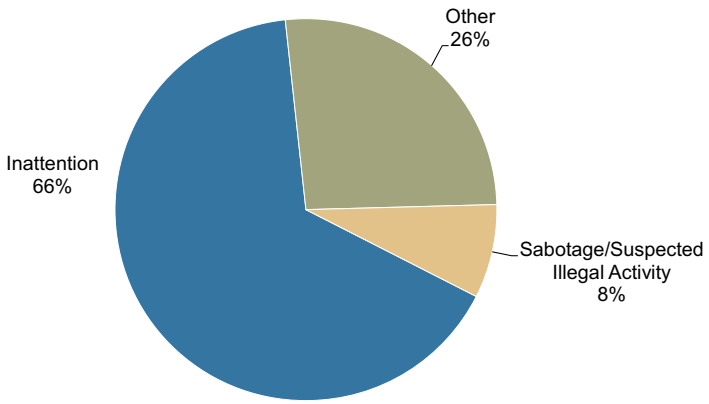
SUMMARY:

Human Error Detail

Cause	Gallons
Inattention	7,560
Other	3,024
Sabotage/Suspected Illegal Activity	911

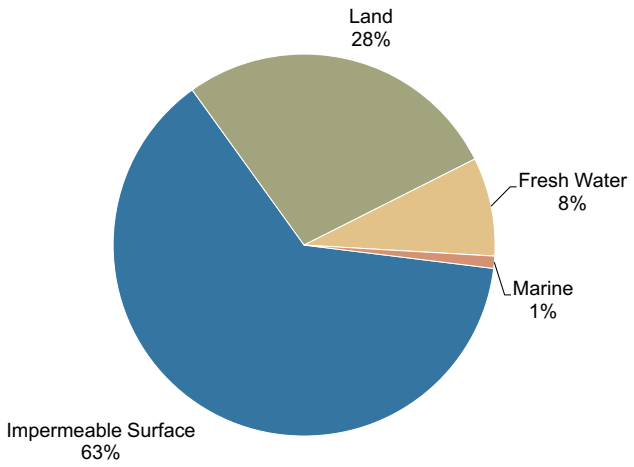
- Inattention (65%) was the cause of approximately two-thirds of all Human Error spills.

CRUDE SPILLS – HUMAN ERROR DETAIL (2010)
(percent total volume)



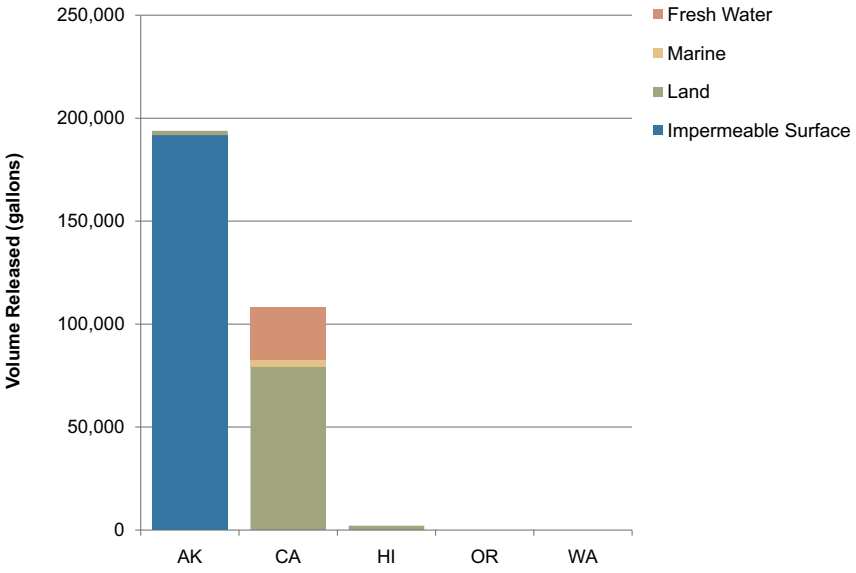
CRUDE SPILLS BY MEDIUM IMPACTED (2010)

(percent total volume)



CRUDE SPILLS BY MEDIUM AND STATE (2010)

(percent total volume)



2010 CRUDE SPILLS

SUMMARY BY MEDIUM:

Top Causes

Medium	Gallons
Impermeable Surface	191,776
Land	83,520
Fresh Water	25,416
Marine	3,096

- During 2010, crude spills to Impermeable Surface (63%) comprised the highest percent total volume for all states. It should be noted that a single 191,562 gallon spill in Alaska accounted for virtually the entire volume.

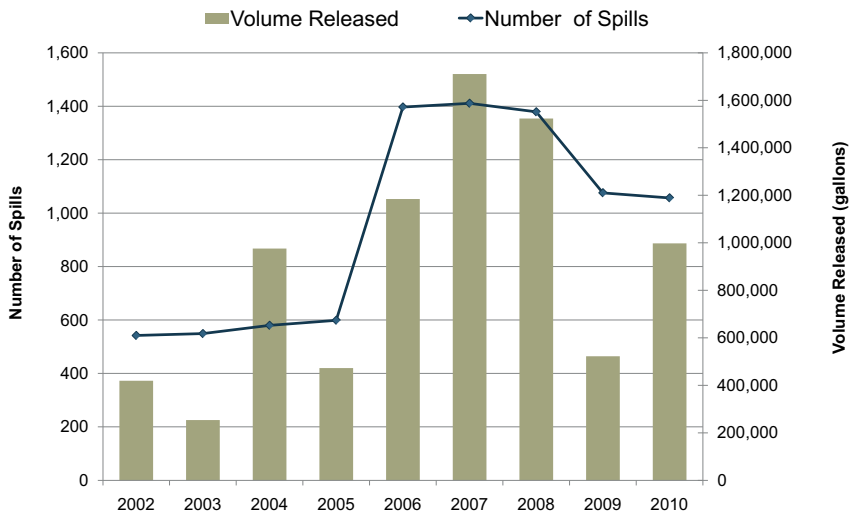
SUMMARY OF SPILLS (2002 - 2010)

- A total of 8,590 releases occurred during the 9-year period 2002-2010, with a total volume of approximately 8.1 million gallons.

RELEASES BY PRODUCT (2002 - 2010)

PRODUCT	COUNT	GALLONS	VOL.
Crude Oil	1,004	2,461,609	30.5%
Diesel Oil	4,193	2,120,915	26.3%
Oily water mixture	341	979,275	12.2%
Bunker C/IFO/HFO	74	712,342	8.8%
Other	326	460,282	5.7%
Gasoline	311	387,401	4.8%
Mineral/Transformer Oil	752	190,629	2.4%
Kerosene / Jet Fuel	154	168,949	2.1%
Aviation Fuel	113	146,185	1.8%
Asphalt / Creosote	100	123,145	1.5%
Lube oil / Motor oil	356	89,509	1.1%
Waste oil	220	63,478	0.8%
Hydraulic oil	418	56,382	0.7%
Unknown	62	39,431	0.5%
Heating Oil	124	31,205	0.4%
Edible / Vegetable oil	29	17,069	0.2%
LNG / LPG	13	11,580	0.1%
TOTAL	**8,590**	**8,059,386**	

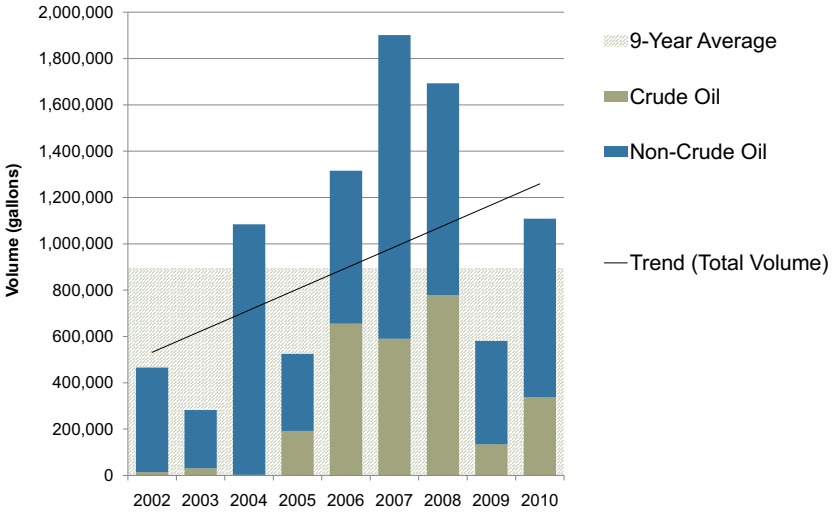
NUMBER OF SPILLS AND VOLUME RELEASED (2002 - 2010)



CRUDE VS. NON-CRUDE SPILLS BY YEAR (2002 - 2010)

	NON-CRUDE		CRUDE		TOTAL	
YR	COUNT	GALS	COUNT	GALS	COUNT	GALS
2002	519	406,229	23	12,769	542	418,998
2003	533	225,721	16	28,015	549	253,736
2004	573	973,545	7	2,092	580	975,637
2005	580	299,516	19	172,871	599	472,387
2006	1,155	594,280	242	589,867	1,397	1,184,147
2007	1,202	1,179,964	209	530,918	1,411	1,710,882
2008	1,154	823,197	225	700,297	1,379	1,523,494
2009	942	401,591	134	120,972	1,076	522,563
2010	928	693,734	129	303,808	1,057	997,542
9 YEAR CUMULATIVES						
Total	7,586	5,597,777	1,004	2,461,609	8,590	8,059,386
Avg	843	621,975	112	273,512	954	895,487

CRUDE VS. NON-CRUDE SPILLS (2002 - 2010)



SUMMARY OF SPILLS (2002 - 2010)

SUMMARY BY PRODUCT:

- Over the 9-year period, the combined volume of Non-Crude spills was more than twice that for Crude Oil spills.

Crude Oil Spills

- The top two Crude Oil spills during the 9-year period were 463,848 gallons in California (2008) and a 267,000 gallon spill in Alaska (2006). The combined volume of these two incidents comprised 30% of the total Crude Oil volume released for the period.

Non-Crude Oil Spills

- Bunker C/IFO/HFO spills represented 9% of the total volume (Crude and Non-Crude combined) with only 74 spills, about 1% of the number of spills for the 9-year period.
- Diesel Oil comprised 26% of the total spill volume and 38% of the Non-Crude spill volume for the period.

SPILLS GREATER THAN 10,000 GALLONS (2002-2010)

PRODUCT	VOL.	STATE	DATE	SOURCE	CAUSE	MEDIUM
Crude Oil	463,848	CA	04/24/08	Pipeline	Equipment Failure	Land
Diesel Oil	420,000	CA	10/30/07	Facility	Equipment Failure	Land
Bunker C/IFO/HFO	321,052	AK	12/08/04	Vessel	Human Error	Marine
Bunker C/IFO/HFO	270,000	WA	08/25/04	Facility	Human Error	Land
Crude Oil	267,000	AK	03/02/06	Pipeline	Equipment Failure	Land
Other	193,200	CA	01/04/10	Facility	Equipment Failure	Land
Crude Oil	191,562	AK	05/25/10	Pipeline	Equipment Failure	Impermeable Surface
Diesel Oil	145,000	AK	03/23/08	Vessel	Human Error	Marine
Diesel Oil	142,800	AK	01/11/10	Facility	Human Error	Marine
Oily Water Mixture	128,000	Ca	11/26/08	Facility	Equipment Failure	Land
Crude Oil	126,000	CA	03/09/07	Facility	Equipment Failure	Land
Crude Oil	126,000	CA	03/23/05	Pipeline	External Conditions	Fresh Water
Aviation Fuel	115,353	CA	11/22/04	Pipeline	Equipment Failure	Land
Crude Oil	87,192	CA	01/10/07	Facility	Equipment Failure	Land
Crude Oil	63,000	CA	04/23/07	Facility	Equipment Failure	Land
Oily Water Mixture	63,000	CA	07/29/08	Facility	Unknown	Land
Diesel Oil	58,800	CA	07/07/07	Facility	Human Error	Land
Bunker C/IFO/HFO	58,000	CA	11/07/07	Vessel	Human Error	Marine
Crude Oil	42,000	CA	06/12/07	Pipeline	Equipment Failure	Land
Mineral/Transf. Oil	42,000	CA	12/08/10	Facility	Equipment Failure	Land
Crude Oil	40,000	CA	04/17/07	Pipeline	Equipment Failure	Land
Oily Water Mixture	37,306	CA	11/11/06	Facility	Equipment Failure	Impermeable Surface
Oily Water Mixture	36,750	CA	06/24/09	Facility	Equipment Failure	Land
Oily Water Mixture	33,600	CA	04/14/06	Pipeline	Equipment Failure	Impermeable Surface
Kerosene/Jet Fuel	33,600	CA	02/15/10	Vessel	Org/Mgmt Failure	Marine
Oily Water Mixture	31,500	CA	12/03/09	Facility	Equipment Failure	Land
Oily Water Mixture	31,500	CA	06/10/08	Facility	External Conditions	Land
Oily Water Mixture	30,240	CA	04/20/07	Facility	Equipment Failure	Land
Diesel Oil	30,000	OR	05/09/02	Other	External Conditions	Fresh Water
Gasoline	29,400	CA	08/14/05	Pipeline	Human Error	Land
Crude Oil	29,400	CA	10/01/06	Facility	Equipment Failure	Impermeable Surface
Gasoline	27,500	CA	04/25/07	Vehicle	Equipment Failure	Land
Crude Oil	26,460	CA	01/30/06	Pipeline	Human Error	Land
Crude Oil	26,250	CA	06/11/08	Facility	Equipment Failure	Land
Oily Water Mixture	26,250	CA	06/17/09	Facility	Equipment Failure	Land
Crude Oil	25,200	CA	11/27/05	Pipeline	Equipment Failure	Land
Gasoline	24,500	HI	10/06/04	Unknown	Equipment Failure	Land
Diesel Oil	24,500	WA	10/27/10	Facility	Equipment Failure	Land
Kerosene/Jet Fuel	24,000	WA	03/01/05	Pipeline	Equipment Failure	Land
Oily Water Mixture	21,546	CA	06/27/08	Facility	Equipment Failure	Land
Crude Oil	21,336	CA	06/01/10	Pipeline	Equipment Failure	Land
Diesel Oil	21,000	CA	05/18/06	Pipeline	Equipment Failure	Land
Oily Water Mixture	21,000	CA	07/11/08	Facility	Equipment Failure	Land
Crude Oil	21,000	CA	11/06/06	Facility	Unknown	Land
Oily Water Mixture	21,000	CA	03/29/07	Pipeline	Human Error	Land
Other	21,000	CA	06/04/03	Facility	Equipment Failure	Marine
Crude Oil	20,622	CA	09/06/08	Facility	Equipment Failure	Land
Diesel Oil	20,000	CA	05/02/05	Pipeline	Equipment Failure	Land
Diesel Oil	20,000	CA	12/08/09	Facility	Human Error	Land
Gasoline	18,900	HI	02/13/08	Facility	Human Error	Land

Continued on next page

SPILLS GREATER THAN 10,000 GALLONS (2002-2010) Continued

PRODUCT	VOL.	STATE	DATE	SOURCE	CAUSE	MEDIUM
Crude Oil	18,900	CA	05/15/06	Facility	Human Error	Land
Diesel Oil	18,200	WA	11/03/06	Facility	Equipment Failure	Land
Gasoline	16,800	CA	03/24/06	Vehicle	Unknown	Land
Crude Oil	16,800	CA	10/13/06	Pipeline	Equipment Failure	Land
Crude Oil	16,800	CA	06/02/06	Facility	Equipment Failure	Impermeable Surface
Crude Oil	16,800	CA	12/03/09	Facility	Equipment Failure	Land
Gasoline	16,800	CA	03/24/06	Vehicle	Unknown	Land
Waste Oil	15,750	WA	06/12/06	Facility	Equipment Failure	Land
Diesel Oil	15,000	OR	10/31/05	Facility	Human Error	Fresh Water
Diesel Oil	15,000	WA	08/01/08	Facility	Equipment Failure	Impermeable Surface
Other	14,700	CA	12/04/04	Pipeline	Equipment Failure	Fresh Water
Diesel Oil	14,680	AK	12/08/04	Vessel	Human Error	Marine
Other/Unknown	14,138	AK	12/18/02	Facility	Other	unknown
Oily Water Mixture	14,070	CA	07/29/07	Facility	Human Error	Land
Oily Water Mixture	14,000	CA	09/16/06	Pipeline	Equipment Failure	Land
Crude Oil	14,000	CA	03/07/03	Pipeline	Equipment Failure	Land
Oily Water Mixture	13,659	CA	01/10/07	Facility	Equipment Failure	Land
Kerosene / Jet Fuel	13,630	AK	10/30/08	Facility	Equipment Failure	Land
Bunker C/IFO/HFO	13,524	WA	04/07/05	Facility	Human Error	Land
Crude Oil	13,500	AK	11/29/09	Facility	Equipment Failure	Land
Oily Water Mixture	13,440	CA	01/21/07	Facility	External Conditions	Land
Mineral/Transf. Oil	13,000	HI	03/22/07	Vessel	Equipment Failure	Marine
Diesel Oil	13,000	HI	07/20/06	Vessel	Equipment Failure	Marine
Asphalt / Creosote	13,000	OR	08/11/04	Vehicle	Equipment Failure	Land
Crude Oil	12,852	CA	06/28/10	Facility	Equipment Failure	Fresh Water
Other/Unknown	12,800	AK	06/18/02	Facility	Unknown	null
Oily Water Mixture	12,684	CA	04/03/08	Facility	Equipment Failure	Land
Oily Water Mixture	12,600	CA	10/12/07	Pipeline	Equipment Failure	Land
Oily Water Mixture	12,600	CA	12/03/09	Facility	Equipment Failure	Land
Asphalt / Creosote	12,600	CA	11/13/09	Facility	Human Error	Land
Crude Oil	12,600	CA	07/15/07	Facility	Equipment Failure	Land
Crude Oil	12,600	CA	11/26/07	Facility	Equipment Failure	Land
Oily Water Mixture	12,600	AK	01/29/07	Facility	Equipment Failure	Land
Diesel Oil	12,500	AK	06/23/02	Vehicle	Equipment Failure	null
Diesel Oil	12,248	AK	04/24/05	Facility	Human Error	Land
Mineral/Transf. Oil	12,096	CA	09/30/07	Pipeline	Equipment Failure	Land
Crude Oil	12,000	CA	03/15/07	Facility	Equipment Failure	Land
Oily Water Mixture	11,970	CA	05/01/07	Pipeline	Equipment Failure	Land
Crude Oil	11,676	CA	03/04/06	Facility	Equipment Failure	Land
Other/Unknown	11,611	AK	02/26/02	Facility	Other	null
Diesel Oil	11,000	AK	11/17/03	Facility	Human Error	Land
Gasoline	11,000	OR	12/02/02	Vehicle	Human Error	Fresh Water
Diesel Oil	11,000	AK	09/16/02	Unknown	Equipment Failure	null
Gasoline	11,000	WA	11/27/03	Vehicle	Unknown	Fresh Water
Gasoline	11,000	WA	03/23/09	Vehicle	Human Error	Land
Diesel Oil	10,584	HI	08/05/05	Pipeline	Equipment Failure	Land
Other	10,500	WA	09/13/07	Facility	Human Error	Land
Oily Water Mixture	10,500	CA	08/12/06	Pipeline	Equipment Failure	Land
Oily Water Mixture	10,500	CA	04/11/08	Facility	Human Error	Land
Oily Water Mixture	10,500	CA	05/29/06	Pipeline	Equipment Failure	Fresh Water
Crude Oil	10,080	CA	07/21/08	Pipeline	Equipment Failure	Land

SUMMARY
2002 - 2010

SUMMARY BY SOURCE:

- Overall, Facilities (51%) and Pipelines (25%) were the major sources of spills during the 9-year period. They were also the major sources of Crude Oil spills. Facilities were the major source of Non-Crude Oil spills.

Non-Crude Oil Spill Sources

Source	Gallons
Facility	3,098,856
Vehicle	920,499
Vessel	800,568
Pipeline	532,027
Other/Unknown	245,827
Total	**5,597,777**

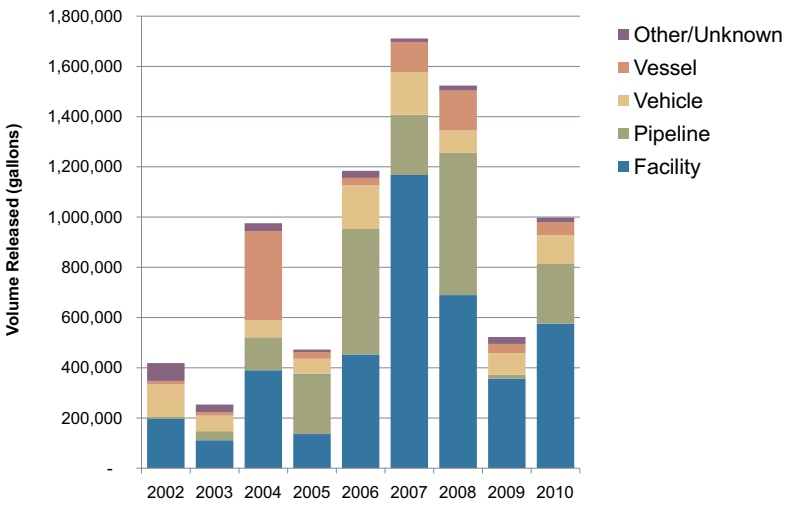
- Facilties were the source of 55% of the Non-Crude spill volume.

Crude Oil Spill Sources

Source	Gallons
Pipeline	1,444,182
Facility	978,749
Vehicle	29,119
Vessel	5,334
Other/Unknown	4,225
Total	**2,461,609**

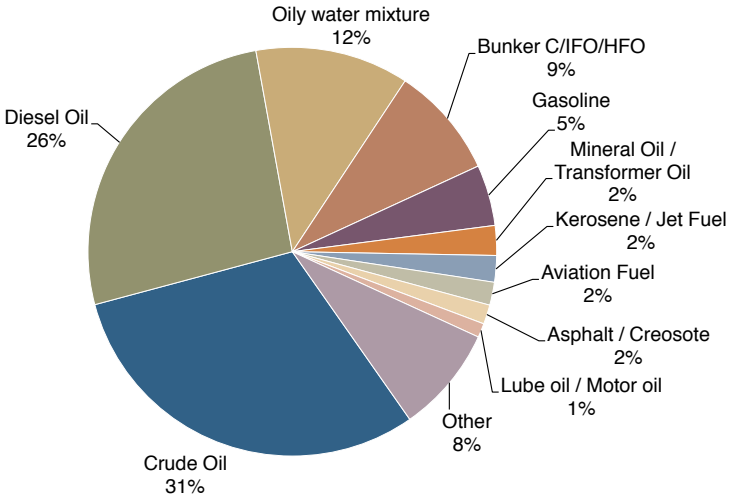
- Pipelines (58%) and Facilities (40%) were the source of 98% of the Crude Oil spill volume.

ANNUAL SPILL VOLUME BY SOURCE (2002 - 2010)

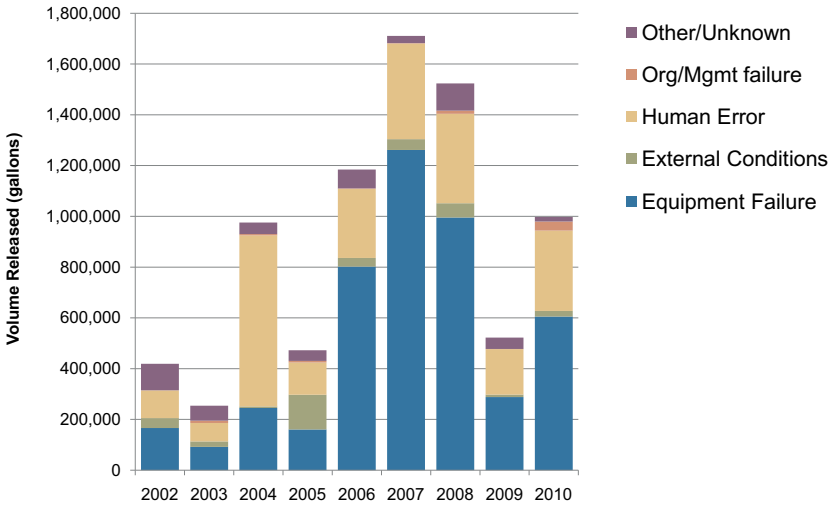


SPILLS BY PRODUCT (2002 - 2010)

(percent total volume)



ANNUAL SPILL VOLUME BY CAUSE (2002 - 2010)



SUMMARY
2002 - 2010

SUMMARY BY CAUSE:

- Overall, Equipment Failure (57%) and Human Error (31%) were the major spill causes.

Non-Crude Oil Spill Sources

Source	Gallons
Equipment Failure	2,569,677
Human Error	2,296,259
Other/Unknown	447,649
External Conditions	215,989
Org./Mgt. Failure	68,203

- Equipment Failure (46%) and Human Error (41%) were the predominant causes for Non-Crude spills.

Crude Oil Spill Sources

Source	Gallons
Equipment Failure	2,045,232
Human Error	183,504
External Conditions	152,698
Other/Unknown	74,274
Org./Mgt. Failure	5,901

- 83% of the total Crude Oil spill volume was due to Equipment Failure

IMPLEMENTING RECOMMENDATIONS FROM OUR FIVE-YEAR REVIEW OF THE STATUS OF THE WEST COAST OFFSHORE VESSEL TRAFFIC RISK MANAGEMENT PROJECT RECOMMENDATIONS

The West Coast Offshore Vessel Traffic Risk Management (WCOVTRM) Project was co-sponsored by the Pacific States/British Columbia Oil Spill Task Force and the U.S. Coast Guard Pacific Area from 1999 to 2002. Rick Holly of the California Office of Spill Prevention and Response served as the Task Force co-chair. USCG Pacific Area co-chairs included CAPT Ed Page, CAPT Frank Whipple, CAPT Glenn Anderson and CDR Stephen Danscuk. The goal of the project was to reduce the risk of collisions or drift groundings caused by vessel traffic transiting 3 to 200 nautical miles off the West Coast between Cook Inlet in the North and San Diego in the South. Vessels of concern included tank, cargo/passenger and fishing vessels of 300 gross tons or larger, as well as tank barges.

The WCOVTRM stakeholder workgroup collected and reviewed data on typical coastwise traffic patterns, traffic volume, existing management measures, weather data and ship drift patterns, historic casualty rates by vessel type, the availability of assist vessels, the environmental sensitivity of the coastlines, socio-economic consequences of a spill and projections of relevant future initiatives. Using the drift and tug availability data, they modeled likely tug response times under both average and severe weather conditions. The Workgroup then developed a Relative Ranking/Risk Indexing Worksheet that evaluated nine factors: volume of oil/vessel design; drift rates; areas of higher collision hazards; distance offshore; weather/season; tug availability; coastal route density; historic casualty rates by vessel type; and coastline sensitivity. Using this tool, they developed and ranked a total of fifty-two casualty scenarios in all the West Coast jurisdictions. These were then extrapolated into 1,296 additional scenarios on the West Coast, a modeling process which defined both average and "higher risk" areas from Alaska to California.

Workgroup members then addressed four risk factors considered most amenable to change: tug availability, collision hazards, historic casualty rates by vessel type and distance offshore. They adopted final Findings and Recommendations focused on these four factors in April of 2002. The WCOVTRM report is available at: http://www.oilspilltaskforce.org/wcovtrm_report.htm

The last recommendation in the 2002 WCOVTRM Project report was to conduct a five-year review on the implementation status and effectiveness of the 2002 Recommendations. Accordingly, in 2007 the Pacific States/British Columbia Oil Spill Task Force worked with Rick Holly of the Office of Spill Prevention and Response (OSPR) of the California Department of Fish and Game, who had served as the initial Project Co-Chair and Mr. Steve Danscuk of the USCG Pacific Area, plus the stakeholders involved in the original project, to conduct a review. After a series of conference calls and an iterative review/comment process, the Workgroup adopted "Recommendations for Further Action" in 2008. Those recommendations covered the following categories:

- Recommendations to improve navigation safety and avoid vessel casualties;
- Recommendations regarding rescue tug availability;
- Steps to track observance of recommended vessel transit distances offshore:
- Recommendations regarding data improvements; and
- Recommendations regarding further implementation reviews.

The final 5-Year Review report and recommendations are posted on the Task Force at: http://www.oilspilltaskforce.org/docs/wcovtrm_5_year_status_review_report_04_09.pdf

Pursuant to these recommendations, Jean Cameron met with the California Harbor Safety Committees (HSCs) in November 2009 and briefed them on the WCOVTRM recommendations which applied to HSCs. They were enthusiastic about our offer to establish a webpage with links to their Harbor Safety Plans, so this was done and the Harbor Safety Committees for Puget Sound and the Columbia River were also advised of the WCOVTRM recommendations and their weblinks included on the page. In addition, the webpage includes information on Best Maritime Practices. In 2010 we added a link for the Hawaii Ocean Safety Team (HOST) and initiated planning for a West Coast Harbor Safety Committee Summit in the Fall of 2011. Please see: http://www.oilspilltaskforce.org/harborsafety.htm.

We have also advocated that HSCs work with their U.S. Coast Guard Sector Commanders to ensure 24/7 access to tug company dispatchers for vessel rescue


Seabulk Pride

purposes. We are also tracking adoption of the Dutch Harbor model emergency towing packages; a towing package for vessels < 50,000 GT has been purchased by U.S. Coast Guard District 13 for the entrance to the Columbia River.

The U.S. Coast Guard Pacific Area has recently begun monitoring vessels transiting coastwise off the West Coast via AIS in order to determine whether they are observing the voluntary offshore transit distances recommended in our 2002 report (50 nautical miles (NM) for laden tank ships and 25 NM for nontank vessels and laden tank barges). They have conducted this review three times so far, as outlined below:

- The first review period was from October 31-Nov 6, 2010. During that time, the total number of vessels transiting the West Coast as identified by AIS was 406. Of those, 95% were observing the recommended offshore distances. For those non-tank vessels running inside 25 nm, the average distance offshore was 18.5 NM. The average distance offshore for non-observant tank vessels was 39.5 NM.
- The second review period was February 7-14 of 2011. During that time, the total number of vessels transiting the west coast was 401 (359 nontank vessels and 42 tankers). During this period, the percentage observing the recommended distances increased to 96%, although the distances from shore for those vessels that were non-observant decreased to 17.8 NM for nontank vessels and 33.8 NM for tankers.
- The third review was conducted May 2-9, 2011. The total number of vessels transiting the west coast during that period was 456. The percentage observing the recommended distances increased to 97%. The average distance offshore for non-tank vessels not observing the recommended distances was 15 NM. The average distance for tank vessels not observing the recommended distances was 36 NM.

Based on the observed high compliance rates in these three reviews the USCG is proposing to conduct only one more analysis/review session, most likely in the middle of the pre-Christmas vessel arrival season (August 2011).

PROMOTING BEST INDUSTRY SPILL PREVENTION PRACTICES FOR VESSELS

Following the Locke vs. Intertanko U.S. Supreme Court decision in March 2000, the 13th Coast Guard District and the Washington Department of Ecology set out to identify gaps between the existing international and federal regulatory regimes for tank vessels and the Washington State standards that were pre-empted by the Supreme Court decision. Once the gaps were identified, they were ranked by Coast Guard marine safety professionals and the licensed mariners at Ecology to determine which practices were most important for reducing the risk of an oil spill. The industry practices for tankers and tank barges were identified and ranked separately and consensus was reached on the relative ranking.

In 2003, the Task Force took this analysis to the next level by enlisting the input of industry leaders in the ranking process. Based on the strong recommendation of the very experienced and respected tanker operators who contributed to the ranking process, the voluntary industry practices for self-propelled tank vessels were expanded to all large commercial vessels. To access our report on this project and the industry rankings, please go to the following site: http://www.oilspilltaskforce.org/docs/project_reports/VesselBipReport.pdf.

Since 2003, the Task Force has communicated these Best Industry Practices to the shipping and towing industry. We recently received specific replies from the American Waterways Operators regarding the recommended Best Industry Practices for Tug and Tank Barge Operators; they indicate that the recommended practices are now covered by either AWO's Responsible Carrier Program, member companies' own management practices, or regulations.

SUPPORTING THE PACIFIC OIL SPILL PREVENTION EDUCATION TEAM

The Pacific Oil Spill Prevention Education Team (POSPET) met in October 2010 and again in April of 2011 to share outreach strategies and plan for collaborative projects. POSPET members represent Washington Sea Grant, Washington's Department of Ecology, the Puget Soundkeeper Alliance, the U.S. Coast Guard and their Marine Safety Auxiliaries in Oregon and Washington, the Washington Department of Natural Resources, the City of Des Moines Marina, the Georgia Strait Alliance, the OceanWatch Boaters Association of British Columbia, the Alaska Department of Environmental Conservation, the Cook Inletkeeper, the British Columbia Ministry of Environment, the Oregon Department of Environmental Quality, the Oregon Marine Board, the Pacific States Marine Fisheries Commission Habitat Education Program, the Pacific Shellfish Institute, the California Coastal Commission and the California Department of Boating and Waterways, the Boat U.S. Foundation, and the California Office of Spill Prevention and Response. POSPET is chaired by Eric Olsson of Washington Sea Grant.

POSPET encourages networking in order to exchange ideas and promote innovative approaches to outreach and education. Through informal collaboration and access to beneficial member review and feedback, POSPET adds value and has improved the quality and reach of individual outreach efforts. POSPET maintains a listserve to facilitate this information exchange in the interims between its Fall and Spring meetings.

POSPET member organizations and agencies have collaborated to design, produce, and distribute placards, decals, brochures, and fuel pump tags with the *Spills Aren't Slick* messages. The Washington Department of Ecology and the Oil Spill Task Force combined funds to purchase materials in 2011.

In addition to this campaign, POSPET also promotes the innovative 1-800-OILS-911 spill reporting number in British Columbia, Washington, Oregon, and California. Using this easy-to-remember number, a boater reporting an oil spill is automatically routed to the correct emergency response call center in any of those jurisdictions. The Pacific States/BC Oil Spill Task Force provides staff support for POSPET and maintains this valuable spill reporting number.

Summary notes from POSPET meetings, photos, a featured POSPET member, a list of all POSPET members with links to their websites, as well as PDFs of the *Spills Aren't Slick* poster, brochure, pump tag, and decals are posted on the POSPET page at: http://www.oilspilltaskforce.org/pospet.htm.

Marina Spill Kit developed by the City of Des Moines, WA

MONITORING THE STATUS OF DOUBLE HULL TANKERS AND VESSELS TRANSITING BETWEEN MEMBER JURISDICTIONS

International double hull requirements for tank vessels are specified in MARPOL 73/78, Annex I, 13 F and 13 G. For U.S. flag tankers and foreign-flag tankers entering U.S. waters, the U.S. Oil Pollution Act of 1990 (OPA 90) requires new tank ships and barges to be of double hull construction. OPA 90 also required that existing single hull tank vessels be retrofitted with a double hull or, beginning in 1995, be phased out of operation by 2015, with the phase-out schedule specified in section 4115 of OPA 90. A true "single hull" tanker must have already been phased out by Jan 1, 2010.

Only existing double-bottomed or double-sided tankers are still allowed to operate in U.S. waters, including our EEZ, until their phase-out date (no later than Jan 1, 2015). As a result of these regulations, double-hulled tankers calling on West Coast ports are now more the rule than the

exception. On the other hand, single hull tank barges that are less than 5000 GT may continue to operate until 2015.

For many years, CAPT Laura Stratton of the Washington Department of Ecology has provided the Task Force agencies with regular updates on the status of the U.S. flag Trans-Alaska Pipeline (TAPS) tankers which transit along the West Coast. These reports covered owner/operator, date of build or scheduled date of build, hull configuration, dead-weight tonnage, conversion date if single hull or double bottom and retirement date. All the TAPS tankers are now double-hulled, so we will no longer track their conversion status. The final report is available at: http://www.oilspilltask force.org/docs/project_reports/2010_TAPS_Trade_Tanker_Report.pdf.

In 2009 we began to track the double-hull conversion status of all tank ships and tank barges serving West Coast ports. Mr. Vince Kelly at the Alaska Department of Environmental Conservation compiled tanker information for Alaska and John Ventjeer of the Marine Information Services of North America (MISNA) compiled tanker data from the Marine Exchanges in other West Coast jurisdictions.

The 2010 tanker data is presented in the table on this page; please note that the numbers represent the number of arrivals, which in most cases involves repeat arrivals by the same tankers. Overall, almost 99% of all tank ships calling on ports in our member jurisdictions are double-hulled.

The Marine Information Services of North America does not track tank barges, so we have worked with the American Waterways Operators (AWO) Pacific Region to track hull status information for tank barges currently operated by AWO member companies in West Coast Ports (not including Alaska and British Columbia). The table on the next page captures this data.

In addition to tracking the double hull status of tank vessels and barges, Task Force member agencies share information among themselves regarding casualties and incidents involving both tank and nontank vessels which are transiting between our member jurisdictions. In addition, we continue to monitor trends in the U.S. Coast Guard's Critical Area Inspection Program for the TAPS tankers.

2010 TANK VESSEL DATA

Port/Area	2010 Tank Vessel Arrivals	Double Hull	Double Bottom	Single Hull	% Double Hull
Valdez, AK	287	287	0	0	100
Cook Inlet, Anchorage, Drift River, AK	119	119	0	0	100
Other AK (Adak, Dutch Harbor, Port Clarence)	6	6	0	0	100
British Columbia (Vancouver & Kitimat)	230	216	14	0	93.9
Puget Sound, WA area ports	427	424	3	0	99.3
Portland, OR area ports	60	58	0	2	96.7
San Francisco, CA area ports	696	693	3	0	99.6
Southern California area ports	1116	1112	4	0	99.6
Honolulu, HI	159	149	8	2	94
TOTALS	**3,100**	**3,064**	**32**	**4**	**98.8**

NOTES:

- Vessel information available through MISNA's tracking system did not differentiate between chemical and petroleum tankers and some tankers can be used to carry either cargo.
- Honolulu does not have a Marine Exchange, so tanker data was taken from AIS data. All tankers calling at the offshore mooring on Oahu, Hawaii are double-hulled; only two smaller refined product tankers serving Hawaii are still single-hulled.

2010 TANK BARGE DATA

Port/Area	Double Hull operating in area in 2011	Single Hull operating in area	% Double Hull Operating in Area (AWO member companies)
Puget Sound, WA area ports	34	2	94%
Portland, OR area ports	34	1	97%
San Francisco, CA area ports	34	1	97%
Southern California area ports	20	1	95%
TOTALS	**122**	**5**	**96%**

NOTES:

- The numbers above may include the same barges operating in multiple ports.
- Most of the single hull tank barges reported by AWO member companies in our 2010 Annual Report are now retired.

PIPELINE SPILL PREVENTION

Pipelines were the source of over 75% of the crude oil spilled in our region in 2010. Our 2002-2010 trend data indicate that pipelines were the source of 58% of crude oil spill volume for that nine-year period. These statistics support the continuing need for a focus on preventing spills from pipelines, as well as improving preparedness and response strategies for this source.

As outlined in our 2010-2011 Annual Work Plan, we hoped to complete a table comparing U.S. and Canadian federal, provincial, and state regulations governing pipelines. Unfortunately, we have not been able to implement this project to date.

MONITORING SPILL PREVENTION TOPICS OF CONCERN

Each year the Coordinating Committee monitors and shares information on selected spill prevention topics. Our spill prevention topics for 2010 - 2011 included:

- Cruise ship operations with regard to spills and other water pollution impacts
- NPDES for vessel wastewater discharges
- Oil spill risks from sunken vessels
- Waste oil dumping by deep draft commercial ships
- Vessel and Facility Oil Transfer regulations
- Spills from trucks and railroads
- Salvage capabilities and regulations (refers to emergency stabilization, firefighting and lightering)
- Liquefied Natural Gas shipping and terminal operations
- Tug escort requirements
- Towing vessel inspection regulations
- Green Ports
- Ballast water regulations preventing spread of invasive aquatic species
- Federal preemption issues
- Spill Prevention Lessons Learned
- Vessel traffic trends and risk assessments or studies.

SPILL PREPAREDNESS AND RESPONSE PROJECTS

REVIEWING U.S./CANADIAN TRANSBOUNDARY SPILL PLANNING AND CAPABILITIES

The Task Force launched a multi-year initiative in 2008 to review U.S. and Canadian Transboundary Spill Planning and Response Issues, with the goal as follows: *Review and document existing U.S./Canadian Transboundary oil spill response plans and capabilities for the British Columbia/Alaska and British Columbia/Washington borders, acknowledging existing authorities and response management systems. Recommend improvements as needed for both joint response and planning efforts, as well as for planning and capacity building within each jurisdiction.* The Project focused on the marine borders between Alaska and British Columbia (CANUSDIX), and between British Columbia and Washington (CANUSPAC). Dave Byers, Response Section manager at the Washington Department of Ecology chairs this Project Workgroup.

The first meeting of the U.S./Canadian Transboundary Spill Planning and Response Project Workgroup was hosted by the Washington Department of Ecology in Lacey, WA in June of 2008. Workgroup members were briefed on existing paradigms and authorities, including the Joint Contingency Plan (JCP) and the CANUSPAC and CANUSDIX annexes to the JCP, the roles of the Joint Response Team, Regional Response Teams, and the Regional Environmental Emergency Team (REET), the Incident Command System and the Response Management System, Mutual Aid agreements between the Task Force member agencies and among the oil spill response organizations covering the boundary areas and the CANUSDIX guidelines for wildlife and resource agency decision-making. Workgroup members also brainstormed a list of topics to be covered, subcommittee membership, the Project Workplan and a Project Timeline. Summary notes from this meeting are available at http://www.oilspilltaskforce.org/docs/June_2008_Workgroup_meeting_notes.pdf.

The Project Workgroup adopted the final Project Work Plan in October of 2008; see (http://www.oilspilltaskforce.org/docs/Transboundary_Project_Workplan.pdf). They chartered five subcommittees to review assigned topics and develop reports; each was chaired by a Workgroup member: Dave Byers of the Washington Department of Ecology chaired the Command subcommittee; Graham Knox of the British Columbia Ministry of Environment chaired the Planning subcommittee; Kevin Gardner of the Western Canada Response Organization chaired the Operations subcommittee; Bob Mattson of the Alaska Department of Environmental Conservation chaired the Logistics Subcommittee; and David Owings of the Southeast Alaska Petroleum Resource Organization (SEAPRO) chaired the Finance subcommittee.

The five subcommittees convened by conference call and worked by email from October 2008 through February 2009 to develop the first draft reports on the topics assigned by the Project Workgroup. Subcommittee members volunteered as "leads" for each topic. The Task Force Executive Coordinator then edited and compiled their topic papers into the First Draft U.S./Canadian Transboundary Spill Project Report. The Subcommittee chairs completed a three-week review/comment on this First draft, and it was also provided to key U.S. and Canadian federal agencies for their review and comment. The Project Workgroup and Subcommittee members, as well as representatives of seventeen tribes in the border areas of Washington and Alaska and five First Nations and Treaty governments in British Columbia, representatives of EPA Region 10, U.S. Coast Guard Headquarters, the Seattle Audubon Society, and the Pacific Merchant Shipping Association were then asked for their review/comment.

From 2009 through the spring of 2010 the Task Force Executive Coordinator made revisions based on their comments as well as additional edits and revisions recommended by subject experts or based on new information. Each Subcommittee then reviewed and commented on their revised Section, which was subsequently sent to the full Project Workgroup and federal agencies for further review and comment.

The Project Workgroup convened in a series of conference calls in 2010 to adopt draft recommendations based on the information in these 2nd draft papers. A public comment draft was then posted on our website for six weeks from December 2010 through January 2011. Revisions were made based on comments received and the Project Workgroup convened in Vancouver, British Columbia March 16-17, 2011 to review the Final Draft. Their final revisions were incorporated and

The *Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on the U.S./ Canadian Transboundary Areas of the Pacific Coast Project Report* was posted on our website in April. The Washington Department of Ecology printed hard copies that were shipped to all members of the Project Workgroup and Sub-committees, as well as to agencies and constituencies to which recommendations were directed. The Department of Ecology and the Alaska Department of Environmental Conservation have released press notices regarding the Report and other Project Workgroup members are conducting outreach to their constituencies.

Thirty-six (36) topic papers in the report focus on analysis of Command, Planning, Operations, Logistics, and Finance issues on the CANUSPAC and CANUSDIX transboundary areas. Among the key findings:

- The Deepwater Horizon oil spill highlighted the importance of involving local, tribal and state (provincial in Canada) governments in federal spill planning, preparedness and response. This is especially applicable for the local and tribal governments on both sides of the U.S./Canadian border. It is also particularly crucial that the Province of British Columbia participate in Canadian federal planning and response efforts. Implementation of many of the Recommendations from this Project Report will provide opportunities to broaden the base of stakeholders involved in improving transboundary planning and response.
- A number of challenges from the 1988 Nestucca spill event remain to this day, including the need for:
  - International coordination of the Port-of-Refuge decisions in Transboundary areas;
  - Coordination of media relations;
  - Enhanced wildlife rehabilitation and volunteer management capacities (volunteer involvement became a main media focus during the Nestucca response);
  - Transboundary waste disposal plans; and
  - Improved response capacities for remote shorelines;
- Although spill response organizations in both transboundary areas have been working together for years and have robust mutual aid agreements, U.S. response organizations will need Transport Canada's designation as an "Approved response organization" in order to qualify for responder immunity when operating in Canada;
- The CANUSDIX and CANUSPAC Joint Response Teams can learn from each other's initiatives – as well as those of the CANUSLANT JRT – and promote consistency on both British Columbia borders in the process; and
- Considering their potential liability as well as their potential role as the Responsible Party if a spill occurs, the shipping and oil industries operating in the transboundary areas should demand a stronger role in transboundary response planning and exercises, since industry will be critical to implementation of the Recommendations in this Report.

The Olympic mountains across the CANUSPAC border

The final *Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on the U.S./Canadian Transboundary Areas of the Pacific Coast Project Report* includes a total of 111 recommendations directed at 14 agencies, organizations, or target constituencies. One recommendation of the Workgroup is for the Pacific States/British Columbia Oil Spill Task Force to lead a review in five years (2016) to determine the implementation status of each of their recommendations.

There was extensive stakeholder involvement in this project. Twenty-seven stakeholders served on the Project Workgroup. They represented Environment Canada, the U.S. Fish and Wildlife Service (Alaska and Washington), the U.S. Department of the Interior's Office of Environmental Policy and Compliance for the Alaska region, the Olympic Coast National Marine Sanctuary, the Makah Tribe Office of Marine Affairs, the British Columbia Chamber of Shipping, the Washington State Maritime Cooperative (WSMC), the Marine Spill Response Corporation (MSRC) for the Pacific/NW Region, the Western Canada Marine Response Corporation, the Bureau of Indian Affairs for the Alaska Region, the Pacific Region of the American Waterways Operators, O'Brien's Oil Pollution Services, the SE Alaska Petroleum Resource Organization (SEAPRO), the National Response Corporation's Environmental Services, ECM Maritime Services LLC, the Georgia Strait Alliance, U.S. Coast Guard Pacific Area Response Division, BP Crises Management and Emergency Response, the Council of Marine Carriers in British Columbia, the Marine Exchange of Puget Sound, People for Puget Sound, NOAA's Office of Response and Restoration and the Task Force member agencies in Alaska, British Columbia and Washington.

In addition to the Project Workgroup members, thirty-six subject matter experts also worked on the Subcommittees; they represented NOAA's Assessment and Restoration Division, the Western Canada Marine Response Corporation, SEAPRO, the Washington Department of Fish and Wildlife, the Makah Office of Marine Affairs, the 13th U.S. Coast Guard District, the Canadian Wildlife Service, the Canada Border Services Agency Pacific Region, U.S. Customs and Border Protection, attorneys from Vancouver, British Columbia and Seattle, Washington who represent various protection and indemnity (P&I) clubs and the Task Force member agencies in Alaska, British Columbia and Washington.

The Pacific States/British Columbia Oil Spill Task Force Members extend their deep gratitude to all of these Workgroup and Subcommittee members and acknowledge that this report and its valuable recommendations would not have been possible without their efforts.

INCREASING THE U.S. LIMITS OF LIABILITY

In November, 2005 the Pacific States/British Columbia Oil Spill Task Force petitioned the U.S. Coast Guard to adjust the Limits of Liability for tank vessels, tank barges, nontank vessels, and appropriate facilities by the Consumer Price Index (CPI) increase since the Oil Pollution Act (OPA) was passed in 1990. That petition for rulemaking and response are located at http://www.regulations.gov. The complete docket number is USCG-2005-23163. Documents on this site include our 11/7/2005 letter of petition and the National Pollution Funds Center's replies of 12/8/2005 and 12/4/2006.

The Delaware River Protection Act of 2006 amended and increased liability limits under OPA for all vessel types – i.e. all tank vessels, which includes tank barges, as well as other nontank vessels. The increases to limits were approximately 50%, which roughly corresponds to the consumer price index increases since OPA 90 was enacted. Increases to liability limits for single hull tank vessels (approximately 150%) exceeded consumer price index increases.

OPA section 1004(d)(4) states that *"The President shall, by regulations issued not less often than every 3 years, adjust the limits of liability specified in subsection (a) to reflect significant increase in the Consumer Price Index (CPI)."* The 2006 Act amended the provision authorizing further increases to limits based on consumer price index increases to begin from the date of enactment of the Act. Authority for future rulemaking to increase vessel limits of liability is limited to consumer price increases.

Regarding facilities, a letter from Jan Lane, Director of the National Pollution Funds Center (NPFC), sent on 12/4/2006 in response to our continued request that the USCG Limits of Liability for facilities be increased by the CPI, stated that "For those oil handling facilities falling within the responsibility of the Coast Guard…the NPFC will initiate rulemaking to adjust limits for significant CPI increases

consistent with OPA section 1004(d) (4)." Ms. Lane also explained that the following agencies are responsible for OPA facility limits of liability:

- EPA for non-transportation related onshore facilities;
- DOI (BOEMRE) for offshore facilities and related pipelines, except deepwater ports;
- DOT for onshore pipelines, motor carriers and railroads; and
- The USCG for transportation-related onshore facilities and deepwater ports, except onshore pipelines, motor carriers and railroads

Our 2008-2009 Preparedness/Response Objective called for us to petition EPA, BOEMRE and DOT to initiate rulemaking to adjust the limits of liability for the oil-handling facilities which they regulate. In preparation for doing so, we contacted these agencies to inquire whether they have increased the limits of liability for the oil-handling facilities which they regulate. No reply was received from EPA, but both DOT and BOEMRE replied that they have not done so. Consequently, the Task Force plans to submit petitions for increases to facility limits of liability to EPA (if needed), BOEMRE and DOT.

On January 6, 2010 the U.S. Coast Guard adopted a rule adjusting Limits of Liability for vessels and deepwater ports. The new Limits of Liability for vessels are as follows:

- For a single-hull tank vessel greater than 3,000 gross tons, the greater of $3,200 per gross ton or 23,496,000;
- For a tank vessel greater than 3,000 gross tons, other than a single-hull tank vessel, the greater of $2,000 per gross ton or $17,088,000;
- For a single-hull tank vessel less than or equal to 3,000 gross tons, the greater of $3,200 per gross ton or $6,408,000;
- For a tank vessel less than or equal to 3,000 gross tons, other than a single-hull tank vessel, the greater of $2,000 per gross ton or $4,272,000; and
- For any other vessel the greater of $1,000 per gross ton or $854,400.

The following statement was in the rule: *"…to ensure future consistency in inflation adjustments to the limits of liability for all OPA 90 oil spill source categories, the Coast Guard has coordinated the CPI adjustment methodology with DOT, EPA and DOI. In addition, the Coast Guard, DOT, EPA and DOI have agreed to coordinate the CPI inflation adjustments to the limits of liability for facilities (i.e., for MTR onshore facilities regulated by Coast Guard, NMTR onshore facilities regulated by DOT, NTR onshore facilities regulated by EPA and offshore facilities regulated by DOI), as part of the next cycle of inflation adjustments to the limits of liability. This phased approach will allow adequate time for the additional interagency coordination necessary to ensure consistency in implementing the CPI adjustments to the OPA 90 limits of liability for all onshore and offshore facilities."*

We contacted the National Pollution Funds Center (NPFC) and asked when the next cycle of inflation adjustments to limits of liability was scheduled to occur. No specific time has been set, but it is possible that the Deepwater Horizon oil spill will result in legislative mandates to increase Limits of Liability, at least for offshore drilling and exploration. We will monitor the ongoing need for rulemaking petitions to increase the Limits of Liability for other types of facilities.

In the National Pollution Funds Center's 2010 Report on Oil Pollution Act Liability Limits to Congress (see http://www.uscg.mil/npfc/ and click on "Liability Limits Report" on the home page) it is stated on page 11 that "Roughly half of the removal costs in Figure 11 (Total Fund Expenditures) are for facility discharges; liability limits for facilities, as previously discussed, are more than adequate at this time." Since our oil spill data consistently shows facilities as a major source of spills (73% of total non-crude volume and 23% of crude volume in 2010, and 51% total volume for the past nine years) we believe that the aging infrastructure in facilities represents sufficient risk (equipment failure accounted for 48% of the non-crude volume and 90% of the crude volume in 2010 and 46% of the total volume for 2002-2010) to justify at least increasing their limits of liability by the CPI since 1990 and will continue to advocate that this be done.

Regarding vessels, it is stated in the Executive Summary of the 2010 NPFC report that *"…the overall trend continues to be toward an increasing average annual potential Fund liability for vessel discharges despite the amended limits…the available data continue to suggest that existing liability limits for certain vessel types, notably tank barges and cargo vessels with substantial fuel oil, may not sufficiently account for the historic costs incurred as a result of oil discharges from these vessel*

types….[and] indicate that increasing liability limits for [these vessel types] would result in a more balanced cost share" – i.e., the Fund vis-à-vis Responsible Parties. The Pacific States/British Columbia Oil Spill Task Force will support increased limits of liability as needed to protect the integrity of the Fund.

TRACKING ICS GUIDANCE, FORMS AND APPLICATIONS

Another initiative under our Preparedness/Response objective has been the establishment of a standing project workgroup to track changes to Incident Command System (ICS) guidance, forms and practices for oil spill response. Larry Iwamoto of the Alaska Department of Environmental Conservation chairs this workgroup; other member agency representatives include: Mike Zollitsch of Oregon DEQ, Elin Storey of the Washington Department of Ecology, D'Arcy Sego of the British Columbia Ministry of Environment, Chris Klumpp from California OSPR and Curtis Martin from the Hawaii Department of Environmental Health.

The ICS Workgroup will continue to monitor any proposals to amend ICS protocols following the Deepwater Horizon response.

MAINTAINING THE 1-800-OILS-911 SPILL REPORTING SYSTEM

The Task Force maintains this toll-free spill reporting number in California, Oregon, Washington and British Columbia. The number automatically reaches the 24-hour emergency reporting center in each of these four jurisdictions as a function of the location from which the call originates. For example, a call made to 1-800-OILS-911 from anywhere in Washington will automatically be routed to Washington's emergency reporting center.

Although it is available for anyone to use, information regarding the number is targeted at recreational boaters and fishermen by members of the Pacific Oil Spill Prevention Education Team (POSPET). Usage analysis for July 2010 through May of 2011 shows that 348 spills were reported using 1-800-OILS-911 during that period.

The Environmental Unit at work (CANUSDIX 2009)

MONITORING MUTUAL AID ISSUES

Our 2010-2011 Work Plan calls for the Task Force Coordinating Committee to review both the 1993 and 1996 Mutual Aid Agreements "with the goal of defining and implementing a regional response capability for a Spill of National Significance." Each member jurisdiction is currently reviewing their resident, "non-cascadable" equipment requirements in the 1996 Agreement and will determine – in collaboration with key stakeholders and federal agencies in their jurisdictions – whether any changes are needed. If so, the Task Force Members will be asked to sign an updated Mutual Aid Agreement at their 2011 Annual Meeting.

MONITORING OIL SPILL RESEARCH AND DEVELOPMENT

Judd Muskat of the California Office of Spill Prevention and Response (OSPR) chairs an R&D Workgroup which the Task Force established this year. Other members include Dianne Munson, the Alaska Department of Environmental Conservation; Curtis Martin, the Hawaii Department of Health; Laurie Boyle, the British Columbia Ministry of Environment; Myola Martinez, the Washington Department of Ecology; Don Pettit, the Oregon Department of Environmental Quality; Joy Lavin-Jones, the California Department of Fish and Game, OSPR; Joe Mullin, the U.S. Bureau of Ocean Energy Management; Kurt Hansen, the U.S. Coast Guard; Ruth Yender and Dr. Amy Merten, NOAA; Dr. Carl Brown and Patrick Lambert, Environment Canada; Richard Knudsen, the Florida Fish and Wildlife Research Institute; Chuck Katz, the Space and Naval Warfare Systems Center Pacific; Steve Lehman, NOAA SSC and Chair of the National Response Team's Science & Technology Committee; and Dr.

Nancy Kinner, the Coastal Response Research Center.

The Workgroup first convened by conference call in December 2009 and then again in December of 2010 to share information on current oil spill R&D projects. Summary notes from their calls, which include links to numerous oil spill R&D project reports, are available at: http://www.oilspilltaskforce.org/projectreports.htm.

There was considerable discussion on the last conference call about the need for uniform GIS standards so that various response software programs may be more easily integrated. Amy Merten of NOAA, Judd Muskat of OSPR and Don Pettit of Oregon's DEQ are providing leadership in various forums to address this issue.

MONITORING SPILL PREPAREDNESS/RESPONSE TOPICS OF CONCERN

The Coordinating Committee has monitored and shared information on the following oil spill preparedness/response "topics of concern" throughout the past year:

- Volunteer planning and management
- Oil spill drill programs
- Applied response technologies and regulations
- Oil Spill research and development, including BAT and BAP
- Oil Spill Response Organization (OSRO) certifications, mergers, mutual aid, and response capabilities
- Joint Information Center (JIC) planning, training, and guidelines
- Natural Resource Damage Assessment (NRDA) initiatives, issues, and activities, including NRDA assessments and collections
- Coordination of inter-jurisdictional wildlife care
- West Coast sea bird and other vulnerable marine populations threatened by oil spills
- Development of remote sensing capabilities, application of RADARSAT, and implementation of 24-hour response operations where it would be safe and effective
- Preparedness/Response Lessons Learned
- Contingency plan regulations and preparedness/response issues re: nontank vessels
- Planning for Potential Places of Refuge (POR) and applications of POR decision-making guidelines
- Status of the Oil Spill Liability Trust Fund
- Lessons learned from the Deepwater Horizon Spill of National Significance

Pursuant to the last item on that topic list, the Task Force Coordinating Committee has reviewed the recommendations in the report from the National Commission on the Deepwater Horizon Spill. They agreed that key policy themes for the Pacific States/British Columbia Oil Spill Task Force going forward include:

- Continued state access to planning through the Area Contingency Planning process;
- Continued state access to decision-making during a response through Unified Command and the Incident Command System;
- Coordinating industry contingency planning with Area Plans in order to ensure that sufficient response equipment is available for both offshore and near shore response to a Worst Case Discharge; and
- Ensuring that each coastal region – including our Pacific Coast area – has adequate response capacity for mutual aid at the regional level.

We are fortunate that Larry Dietrick of the Alaska Department of Environmental Conservation served as a member of the U.S. Coast Guard's Deepwater Horizon Incident Specific Preparedness Review (ISPR) Team, with Dale Jensen of the Washington Department of Ecology serving as his Alternate. Their participation in our Deepwater Horizon discussions has provided valuable insights.

Now that the report of the Deepwater Horizon Incident Specific Preparedness Review (ISPR) Team is published *(http://www.uscg.mil/foia/docs/DWH/BPDWH.pdf)* we plan to organize a conference call for coastal states and provinces to discuss its recommendations.

COMMUNICATIONS PROJECTS AND ACTIVITIES

THE 2010 ANNUAL MEETING

Our 2010 Annual Meeting was hosted by the Hawaii Department of Health in Honolulu on October 6th. Seventy-five persons participated, eager to hear from various speakers who addressed the theme "What the Deepwater Horizon Spill of National Significance

Can Teach Us."

Our first panel focused on "Organizing for a Spill of National Significance" and featured Roland Guidry, the Louisiana Oil Spill Coordinator; CAPT John Caplis, Chief of the U.S. Coast Guard Office of Incident Management and Preparedness; and John Tarpley, a Regional Operations Branch Chief for NOAA's Office of Response and Restoration.

The next panel addressed "Response Technologies Used for the Deepwater Horizon Response" with presentations from Alan Allen of Spilltec regarding the use of In-situ Burning; from Ann Hayward Walker of Scientific and Environmental Associates regarding dispersant use; and from Brian Parscal of the Clean Islands Council, who spoke on the SMART protocols.

Ed Owens of Polaris Applied Sciences discussed Shoreline Assessment and Cleanup during the Deepwater Horizon event, and we closed with a presentation by Arthur J. "Skip" Volkle, Jr., of the Marine Resources Group on "Public Policy Implications of the Deepwater Horizon Oil Spill."

In addition, representatives from our member agencies provided jurisdictional updates and we also reviewed current Task Force initiatives. You can view videos of all the presentations at this link: http://oilspilltaskforce.org/2010conference/index.htm.

Feedback from participants at the 2010 Annual Meeting was very positive. Ranking each session on a scale of 1 (low) to 5 (high), the average for "useful information" was 4.11 and the average for "interesting presentations" was 4.09. Their program recommendations for our 2011 Annual Meeting were to continue a focus on lessons learned from the Deepwater Horizon response, which we plan to do.

THE CLEAN PACIFIC CONFERENCE

Based on our biennial schedule for the Clean Pacific Conferences, we had planned to host the 2011 event in Long Beach, California. However, feedback to the TradeFair Group (who organizes the Clean Pacific Conferences) from potential exhibitors indicated that they could not participate in two West Coast events in the same year (the International Oil Spill Conference in May 2011 and a Clean Pacific Conference in September 2011), so we agreed to reschedule the next Clean Pacific Conference to May 15-17, 2012 at the Long Beach Convention Center.

The 2012 Clean Pacific Conference will be our next opportunity to give Legacy Awards to individuals and groups in our Pacific region who have made outstanding contributions to oil spill prevention, preparedness, and response. Information about the Legacy Award nomination process will be posted on our website.

ONGOING STAKEHOLDER OUTREACH

Stakeholders monitor Task Force activities through our web site and can also participate in Task Force sponsored events or project workgroups. We host several public events, including our Annual

Annual Meeting in Hawaii

Meetings which alternate with the Clean Pacific Conferences, plus topic-specific roundtables.

The Task Force web site

The Task Force website (www.oilspilltaskforce.org) offers the following features:

- The OVERVIEW provides background on the Task Force as well as bios and photos of all Task Force Members;
- CURRENT INTERESTS is where we post event and award announcements, our Events Calendar, and reports from recent Task Force meetings or projects;
- WHAT WE DO includes our current Strategic Plan and Annual Work Plan, our Memoranda of Cooperation and Resolutions and Agreements signed by the Task Force Members since 1993;
- The LEGACY AWARD HONOR ROLL lists all the Task Force Legacy Award Winners since 1999;
- NOTES & REPORTS features our Annual Reports (which contain the spill data reports) as well as Task Force comments on federal rulemaking, noteworthy correspondence, meeting notes and project reports;
- CONTACT INFORMATION provides contact details for the Task Force's Coordinating Committee and Executive Coordinator;
- LINKS provides links to the Task Force member agencies, other state and provincial agencies on the West, Gulf and East Coasts, plus key U.S. and Canadian federal agencies;
- The SPILLS AREN'T SLICK page provides information on POSPET and its activities; and
- A new page covers West Coast HARBOR SAFETY COMMITTEES AND BEST MARITIME PRACTICES.

The website has received a total of 2,424,894 "requests" since it was initiated in the 3rd quarter of 2003 (a "request" is any visit to the site or to any page on the site). Here's a breakdown by year:

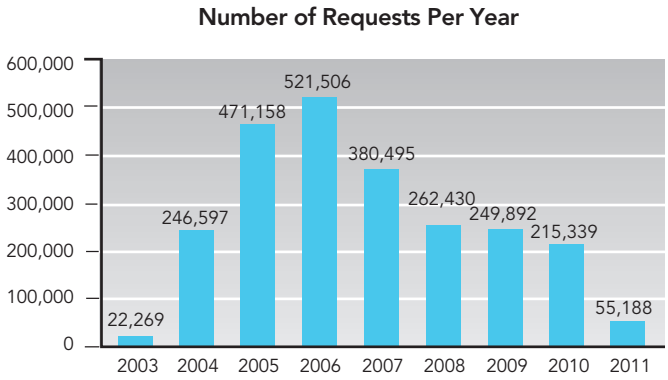
MAINTAINING OUR PARTNERSHIP WITH THE U.S. COAST GUARD PACIFIC AREA

The Pacific Area Coast Guard and its member Districts have a track record of collaboration with the Oil Spill Task Force on projects of regional interest over the past 15 years. Such projects included the Integrated Vessel Response Guidelines (1997), the Oil Spill Field Operations Guide Update (2000), the Best Industry Practices for Vessels and Tank Barges (2003), the West Coast Offshore Vessel Traffic Risk Management Project (2002) and its Five-year Review (2007), Places of Refuge Guidelines (2005), the Clean Pacific Conference (2007) and the Pacific Oil Spill Prevention Education Team (ongoing).

In May of 2008 Vice Admiral Charles D. Wurster, Commander, Coast Guard Pacific Area and Jean Cameron, Executive Coordinator of the Pacific States/British Columbia Oil Spill Task Force, signed a Memorandum of Understanding that recognized this 15-year cooperative partnership and the shared goals of both the U.S. Coast Guard and the Oil Spill Task Force in preparing for and preventing spills, in seeking cooperative methods to foster greater environmental awareness and compliance, and by ensuring that appropriate cleanups are conducted.

The Task Force Coordinating Committee met with representatives of the U.S. Coast Guard Pacific Area and Districts 11, 13, 14, and 17 on January 21st, 2009 to form a Steering Committee to implement this MOU.

The second of these annual Steering Committee meetings was held in Bellevue, WA on April 14, 2010 and the 2011 meeting was held on May 27th, following the International Oil Spill Conference in Portland, Oregon. Representatives from EPA Regions 9 and 10 were invited to join the meetings in 2010 and 2011 to provide updates on their activities. Summary notes from these meetings are available on our website.



ONGOING OUTREACH TO OTHER COASTAL STATES AND PROVINCES

We currently interface with Points of Contact in the oil spill agencies of Texas, Louisiana, Mississippi, Alabama, Florida, Maine, New Brunswick, New Jersey, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Virginia, the Northwest Territories, Nunavut, the Yukon and South Carolina as follows:

- They receive our news clippings and informational emails;
- They are invited to join the information sharing at the Coordinating Committee meetings in person or by speaker phone;
- We advise them of federal rulemakings of interest, and when the Task Force submits comments, we give them an opportunity to sign on;
- Their agency links are added to our web site;
- They can contact our Coordinating Committee members anytime on any topic, and vice versa; and
- As Points of Contact (POCs) for this information sharing, they are also our POCs for mutual aid requests.

OTHER TASK FORCE COMMUNICATIONS AND OUTREACH ACTIVITIES

- Pursuant to our focus on submitting Task Force consensus comments on federal initiatives, the Executive Coordinator tracks rulemaking activities and notifies member agencies of opportunities for comment on relevant proposals. In January 2011 the Task Force submitted comments on the National Response Team's (NRT) initiative to review/revise dispersant use policies based on the Deepwater Horizon experience. The Task Force has also submitted comments to the West Coast Governor's Agreement on Ocean Health as they have developed various policy statements.
- The Coordinating Committee of the Task Force held its fall 2010 meeting in Hawaii following the Annual Meeting. The British Columbia Ministry of Environment hosted their spring 2011 meeting in Vancouver. The Coordinating Committee conducted their winter and summer 2011 meetings by conference calls. These meetings provide opportunities for information exchange as well as decisions on administration issues and implementation of projects outlined in our Annual Work Plan. Summary notes for the Coordinating Committee meetings are posted on our website.
- In addition to travel associated with the activities described above, Jean Cameron, the Executive Coordinator, represented the Task Force at the following events this past work-year:
  - the Clean Gulf Conference in Tampa, Florida in October 2010;
  - the API Spills Advisory Group meeting after the Clean Gulf Conference;
  - the West Coast Joint Assessment Team meeting, October 2010;
  - the American Waterways Operators/U.S. Coast Guard Pacific Region Quality Steering Committee meeting in February, 2011;
  - Liaison and ICS training in preparation for the NPREP drill in Washington state, June 2011; and
  - The International Oil Spill Conference in May 2011.
- Ms. Cameron responds to information requests as needed. Requests this past year covered such topics as vessel traffic information needed to mitigate conflict in the siting process for marine wind and wave energy projects; a request for a copy of the Task Force's 1990 Report; several requests from CBS News regarding spill data; a request for assistance with a college campus oil spill campaign; and requests for statistics and information on the Deepwater Horizon response.
- With regard to "internal communications" among member agencies, the Executive Coordinator provides a summary of news clippings on events and issues of interest to the Task Force. She also maintains a Contact List of Task Force and Coordinating Committee members and produces a Mid-Term Report to the Task Force Members. In addition, all member agencies regularly exchange information on their initiatives and activities.
- The Executive Coordinator and Coordinating Committee are developing an Annual Work Plan for 2011-2012, to be adopted by the Task Force Members at their Annual Meeting in August 2011 and then posted on our website.

In addition to their dedication of staff and resources to Oil Spill Task Force projects, our member agencies have been involved in a wide range of initiatives in their own jurisdictions, as outlined below:

Alaska

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC), DIVISION OF SPILL PREVENTION AND RESPONSE

The mission of the Division of Spill Prevention and Response (SPAR) is to prevent, respond and ensure the cleanup of unauthorized discharges of oil and hazardous substances. The Alaska Department of Environmental Conservation's SPAR division is responsible for protecting Alaska's land, waters and air from oil and hazardous substance spills. Alaskans have made a concerted effort to prevent and clean up spills. Significant progress has been made in the safe handling, storage and transportation of oil and chemicals and the cleanup of historic contamination. While we will never totally eliminate the risk of spills we are constantly learning how to better manage that risk.

In the past 20 years there has been a significant and continuing advancement in Alaska's spill prevention and response capability. The State established new regulations and substantially upgraded the requirements for contingency plans and the review process for the state's oil producers, added non-tank vessel compliance programs and established response depots throughout Alaska, including in some of the most remote regions of the state. In partnership with federal agencies and the City of Unalaska the State established emergency towing packages in the Aleutian Islands area and in Kodiak, has developed Geographic Response Strategies (GRS) for sensitive portions of the state's coastlines as well as Potential Places of Refuge (PPOR) guidelines around the State. Both GRS and PPOR work is continuing as are other projects including an Aleutian Island Risk Assessment study, a Cook Inlet Vessel Traffic Risk Assessment study, the Alaska Risk Assessment of Oil & Gas Infrastructure, a Clean Harbors Program and updates of the various contingency plans.

In the future, the State may face significant challenges resulting from an increase in vessel traffic and potential offshore development in the Arctic areas of Alaska. The possibility of a new gas pipeline from Prudhoe Bay to Canada will also add to the State's spill response workload. New exploration and drilling technologies may permit close-in offshore as well as onshore oil development in areas that are not now accessible for various reasons. Increases in oil and gas exploration will obviously add to the State's workload in both the response and prevention areas.

SPILL RESPONSE

ADEC received reports of 1,378 oil spills, 44 brine spills and 402 hazardous substance spills in 2010. ADEC conducted 207 field responses to oil spills, nine field responses to brine spills, and 50 field responses to hazardous substance spills. ADEC estimates that 366,556 gallons of oil, 319,099 gallons of brine and 160,615 gallons of hazardous substances were spilled in 2010. Of the 186 oil spills exceeding the Task Force data threshold of one barrel to land or water, 136 were from facilities, 14 from vessels, 11 from vehicles, and 25 were from other sources.

In 2010, ADEC initiated emergency responses to 18 significant or potentially significant discharges of oil and hazardous substance statewide; ADEC continues to monitor ongoing cleanup and recovery activities for these incidents. The releases involved commercial and fishing vessel groundings, tank truck rollovers, overfills, and process water spills due to corrosion of piping. ADEC responders actively worked 1,824 spill cleanups throughout the state and removed the risk by cleaning up contaminants at sites and then closing or issuing "no further action" letters for 1,610 spills. Twenty-nine (29) cases were transferred to ADEC's Contaminated Sites Program for long-term cleanup and monitoring and two cases to the Department of Law for enforcement action. The state's response depots were activated for several spills, including the depots in Bethel and Dillingham.

MAJOR RESPONSES IN 2010

ADAK PETROLEUM DIESEL SPILL: On January 11, 2010, Adak Petroleum reported an estimated 3,400 barrels (142,800 gallons) of diesel released from a storage tank at their facility in Adak as it was being filled from the tank ship *Al Amerat*. The spill occurred as the fuel was being pumped to underground storage tank N-7 in the Helmet Creek Tank Farm. Fuel escaped from the tank into secondary containment surrounding the tank, from which valves were open to a drainage system leading to Helmet Creek. The fuel overwhelmed the system's oil/water separator, resulting in a fuel release to Helmet Creek and the small boat harbor at its terminus. An estimated 1,000 gallons of fuel entered the small boat harbor.

Diesel accumulating behind first row of boom (Photo courtesy of U.S. Fish and Wildlife Service)

Response crews placed containment boom and absorbents in the creek and conducted skimming operations in the small boat harbor. Monitoring and cleanup of the upper section of Helmet Creek was delayed for a short period of time due to the discovery and eventual removal of unexploded ordnance in the area. The responsible party, Aleut Enterprise, LLC, estimated approximately 6,174 gallons of fuel were recovered. The final volume estimate is that 1,637 barrels (68,746 gallons) of diesel were discharged during this incident.

PUMP STATION 9 TANK 190 CRUDE SPILL: During a scheduled testing of the fire command system at Alyeska's Pump Station 9 on May 25, 2010, the station experienced a power failure which caused the tank relief valves to open. Subsequently, Tank 190 overflowed and crude oil was released to secondary containment. ADEC received the spill report from the Alyeska Operations Control Center and was notified that an Incident Management Team (IMT) was activated. ADEC responders were then deployed to Pump Station 9 and to the Alyeska Fairbanks Emergency Operation Center. The IMT was active for the first eight days until the response transitioned into a cleanup project on June 1. During the initial response, the Trans-Alaska Pipeline remained shut down for a total of 79 hours and 40 minutes until it was determined that it could safely be restarted.

Spill responders recovered the oil through a filter metering skid to provide defensible volume reports to shareholders and regulatory agencies. After the oil was metered, it was either injected into the pipeline or trucked down to the Valdez Marine Terminal for sale. On June 22, the reported volume of recovered oil was 61,374 gallons. By mid-October 2010, Alyeska had removed all contaminated fill from secondary containment and replaced all of the secondary containment liner that came in contact with the oil. Because numerous existing pinhole and larger breaches were discovered during that project, ADEC has required Alyeska to replace the remaining original secondary containment liner in 2011.

View of Tank 190

***F/V ZIMOVIA* GROUNDING:** On September 20, 2010, the operator of the fishing vessel *Zimovia* broadcast a distress call over the marine radio – the vessel had struck a charted rock near Kulichkof Rock in Sitka Sound, about six miles southwest of Sitka. A Sitka Mountain Rescue team removed the operator from the vessel at approximately midnight, shortly before it capsized and sank in 106 feet of water with an estimated 500 gallons of fuel onboard. The Sitka Mountain Rescue team treated the operator for cold exposure and transported him to Sitka, where a breathalyzer test administered by Sitka police

showed he had a blood alcohol level of 0.16 percent (four times the USCG standard of intoxication, twice the state standard). Personnel from the Coast Guard Air Station Sitka flew over the incident site on September 21 and 22 and observed sheens in the vicinity, but the Coast Guard, with ADEC concurrence, determined that the vessel's location in deep water at the edge of a steep drop-off would preclude removal of the fuel remaining on board or salvage of the vessel. ADEC referred this case to the Environmental Crimes Unit and the Department of Law for possible criminal enforcement proceedings. Because the vessel sank on state submerged lands, ADEC also briefed the Department of Natural Resources on the incident.

F/V Zimovia moments before it rolled over and sank. (Photo courtesy of Don Kluting, Sitka Mountain Rescue)

BIG STATE LOGISTICS: The Alaska State Troopers notified ADEC on October 7, 2010, that a tank truck had overturned on the Glenn Highway, near milepost 78. The tractor-trailer, operated by Big State Logistics, had come to rest on its side against the guard rail of the eastbound lane. More than 2,400 gallons of its 8,800 gallon cargo of diesel fuel spilled onto the road shoulder and down the adjacent slope toward the confluence of the Chickaloon and Matanuska Rivers. Responders recovered the remaining fuel from the damaged trailer and removed fuel-contaminated snow and over 500 cubic yards of contaminated soil from the roadside during the ensuing cleanup operation. Big State Logistics' environmental contractor recently submitted a plan to install wells below the spill area to monitor for migration of fuel to the rivers. ADEC is reviewing the proposal and will make recommendations in the near future.

On November 4, 2010, another Big State Logistics truck (hauling a 9,100-gallon tank trailer and a 5,000-gallon pup tank) slid off the road north on the Parks Highway and jackknifed in the shoulder swale approximately 33 miles south of Cantwell. The entire

Big State Logistic tanker truck rolled over on its side

rig remained upright, but one of the tractor's saddle tanks ruptured and the tongue between the trailers detached and punctured the forward compartment of the pup tank, resulting in a spill of approximately 2,540 gallons of diesel fuel. Responders removed the remaining fuel in the trailers and the tractor's saddle tanks and collected an estimated 1,800 gallons of fuel that had pooled on the ground. Contaminated snow and soil were removed after the rig was pulled from the swale; ADEC required additional site assessment this spring to determine whether further cleanup was needed.

***M/V GOLDEN SEAS* RESPONSE:** Shortly after midnight on December 3, 2010, the crew of the *M/V Golden Seas* reported to the Coast Guard that the turbocharger on the vessel's only propulsion engine had failed and the vessel was adrift north of Adak Island in the Aleutian chain. The 738-foot-long bulk freighter, en route from Vancouver, BC, to the United Arab Emirates with a cargo of rapeseed, had a combined volume of more than 473,000 gallons of intermediate fuel oil, diesel fuel and lube oil on board. The Coast Guard notified ADEC of the incident at 8:05 a.m., and the agencies quickly established a Unified Command with representatives of the ship's Greek operator, Allseas Marine, SA. Initially, the vessel was unable to hold its position or make headway against the severe weather in the Bering Sea and drifted toward Atka Island. The storm abated at approximately 4:00 p.m., and the vessel was able to begin moving slowly to the northeast, away from shore. Allseas Marine contracted the ocean-going tug *Tor Viking II*, stationed in Dutch Harbor for work with Shell Exploration, to assist the *Golden Seas*. The tug left port around 5:00 p.m. on December 3rd with an

ADEC 10-inch Emergency Towing System on board to tow the stricken vessel to a place of refuge.

On December 4, north of Atka Island, the crews of the *Tor Viking II* and *Golden Seas* succeeded in securing a towline between the vessels. The vessels transited south through Amukta Pass (between Seguam and Amukta Islands) to the lee side of the islands to gain protection from high wind and waves in the Bering Sea. After a tow of more than 500 miles, the *Golden Seas* dropped anchor in Broad Bay in Unalaska Bay on December 7. The Unified Command had determined through the Potential Places of Refuge decision-making process - which included consultation with marine pilots, local governments, tribes, Native corporations, and state and federal resource trustees - that this was the most favorable anchorage for making repairs to the vessel. Following Coast Guard approval of the completed engine repairs on December 13, the *Golden Seas* completed sea trials and departed Dutch Harbor for her original destination.

SPILL RESPONSE INITIATIVES

Emergency Towing System Workgroup

ADEC completed the purchase of two 10-inch Emergency Towing Systems for the State of Alaska in 2010. The Emergency Towing System packages are air deployable. One of the packages is pre-positioned at Coast Guard Air Station Sitka, while the other package is pre-staged at the Navy Supervisor of Salvage warehouse located on Fort Richardson (Anchorage). The Emergency Towing System packages are designed for rapid deployment by vessel or air to a support vessel which will then initiate a tow to a disabled vessel. ADEC staff and the Coast Guard are planning to conduct an Emergency Towing System exercise in July 2011 in Juneau. The purpose of the exercise is to train Coast Guard, State, and industry responders on the capabilities and proper deployment of the system. This overall Emergency Towing System initiative is funded through the Coastal Impact Assistance Program (CIAP) grant provided by the Bureau of Ocean and Energy Management, Regulation and Enforcement and administered by the Alaska Department of Natural Resources. The recent *M/V Golden Seas* incident highlighted the value of this system and a major oil spill was averted in the Aleutians.

Community Spill Response Agreements

ADEC also received CIAP funding for the purchase of six additional spill response containers over the next three years. The initial two containers are destined for Homer and Pilot Point. Local response agreements have been finalized between ADEC and the local communities. The spill response containers provide an immediate local spill response capability at strategic locations throughout the State. Under the provisions of the agreement, ADEC will reimburse the local community for their time and resources expended in responding to a spill in their local jurisdiction.

Aleutian Island Risk Assessment Scoping Project

The Risk Analysis Team completed final reports for the semi-quantitative traffic study, marine spill frequency and size study and baseline spill study in September 2010. The Advisory Panel met in September to identify and develop an initial list of risk reduction measures, assign frequency and consequence categories, assign risk numbers and review accident scenarios. The panel met again in October to review scenario ranking information and the list of risk reduction measures developed at the September meeting, and to consider the impact, consequence, severity, and risk associated with recommended risk reduction measures. Building on the results of these meetings, the Risk Analysis Team released draft Consequence Analysis and Accident Causality reports for review by the Advisory Panel, Technical Peer Review Panel, Management Team and the public on December 14, 2010.

The Advisory Panel met in March 2011 to complete work on evaluating the risk reduction options. The Management Team will then review the recommendations from the Advisory Panel, identifying those risk reduction options that can be implemented immediately and those that will require additional study in Phase B of the risk assessment.

Cook Inlet Vessel Traffic Risk Assessment Project

This project was initiated to conduct a detailed vessel risk assessment for the Cook Inlet area of operations focused on vessel traffic and the potential for major accidents or incidents, with the added potential of a major oil or hazardous substance release. On April 16, 2010, a MOU between ADEC and the Kenai Peninsula Borough (KPB) was executed for the purpose of funding the Cook Inlet Marine Vessel Traffic Risk Assessment. On June 10,

2010, the KPB executed a grant agreement with the Cook Inlet Regional Citizens Advisory Council (CIRCAC) to complete the study. The purpose of the study is to support and enhance spill prevention, safe navigation, and advance the level of planning and preparedness for oil and hazardous substance releases in Cook Inlet. The study is scheduled to be completed no later than June 30, 2012. As of December 31, 2010, no funding had been expended from the MOU, as CIRCAC is in the early stages of compiling information and data for the draft study.

Disaster Assistance

The ADEC PERP Preparedness Section maintains and publishes the ADEC Disaster Response Plan for natural disasters. This plan establishes the policies and procedures used in assisting the Division of Homeland Security and Emergency Management in responding to natural disaster emergencies. The Preparedness Section has an individual designated as the "Disaster Response Coordinator," who is responsible for the overall coordination of all ADEC programs involved in a disaster response. During 2010, ADEC responded and provided assistance during three natural disasters. These included:

- May 2010: Marshall Flooding
- May 2010: Buckland Flooding
- December 2010: Savoonga Winter Storm Event

SPILL RESPONSE INITIATIVES

Inspections

ADEC Industry Preparedness staff conducted 115 inspections of oil terminal/tank farms, exploration, production and refinery facilities, crude oil transmission pipelines (TAPS), tankers, non-tank vessels, and tank barges.

Industry Contingency Plans

Industry Preparedness staff reviewed and approved 75 new, renewal, or amended oil discharge prevention and contingency plans for facilities and vessels other than non-tank vessels. Staff also reviewed and approved, as necessary, 205 non-tank vessel contingency plans.

Statewide Hazmat Workgroup

The Statewide Hazmat Workgroup met four times during 2010. The *Preparedness, Safe Handling and Emergency Response to Anhydrous Ammonia* training course was conducted in Kenai in May 2010. Workgroup members also participated in the FBI's Comprehensive Integrated Training and Exercise Conference held in Anchorage in November 2010.

Alaska Risk Assessment

In May 2007, the Alaska Legislature approved funding for the comprehensive Alaska Risk Assessment of Oil and Gas Infrastructure. The Alaska Risk Assessment Project has reached a major milestone with the release of three reports:

- The Final Report on North Slope Spills Analysis and Expert Panel Recommendations on Mitigation Measures by Nuka Research and Planning Group, LLC;
- A Review of Select Foreign and Domestic Approaches to Oversight and Management of Risk and Recommendations for Candidate Changes to the Oversight Approach for the Alaska Petroleum Transportation Infrastructure by CYCLA Corporation; and
- A Summary of Phase 1 Alaska Risk Assessment, Accomplishments and Challenges by Alaska Department of Environmental Conservation

The State of Alaska initiated the Alaska Risk Assessment (ARA) project to provide a baseline risk assessment of the oil and gas infrastructure in Alaska. The goal of the ARA project as authorized by the State Legislature was to conduct a system-wide risk assessment that evaluates the risks associated with the system and to assess the reliability of the existing infrastructure to operate for another generation. These reports are a noteworthy step toward that goal.

SPILL PREPAREDNESS INITIATIVES

Clean Harbors Initiative

Phase I of the Clean Harbor Initiative culminated with the publication of the *Alaska Clean Harbors Guidebook* in June 2010 (www.nukaresearch.com/projects/cleanharbor/phase1.shtml). With funding from ADEC, project contractor Nuka Research and Planning is now moving forward with Phase II. This phase has four main objectives:

(1) design a pilot voluntary Clean Harbor Certification Program using a certification process based on the Best Management Practices outlined in

the *Guidebook*;

(2) develop outreach and education materials for this program to make it attractive and accessible to diverse Alaskan harbors;

(3) implement the certification process as a pilot in Homer and Seldovia Harbors; and

(4) assess the transferability of the pilot Clean Harbor Certification Program to a long-term statewide program.

Drills & Exercises

ADEC staff participated and evaluated 48 oil spill exercises conducted throughout the state involving oil terminals and tank farms, exploration, production and refinery facilities, the Trans-Alaska Pipeline, crude and non-crude tankers, tank barges, non-tank vessels and the Alaska Railroad. The major drills were the CANUS North 2010 Table Top and Seminar, PWS Polar Tanker drill, Chevron (Union Oil) Swanson River Field Deployment, Kenai Pipeline-Tesoro Salamatof Beach Table Top Exercise, TAPS Toolik-Kuparuk River Mutual Aid Drill, the ECM Maritime Drill, TAPS Lowe River Response Exercise, Valdez Marine Terminal IMT Exercise, TAPS Klutina River Response Exercise, and TAPS Kanuti River Response Exercise.

SPILL PLANNING

Unified/Subarea Plans

Administrative updates that include the Potential Places of Refuge (PPOR) guidance documents were incorporated into the Cook Inlet Subarea Contingency Plan (SCP). An update to the North Slope SCP is underway and will primarily focus on an update of the worst case discharge scenario based on future outer continental shelf development in the Beaufort Sea. Efforts to develop Change 1 to the Northwest Arctic SCP, Bristol Bay SCP and Western Alaska SCP continue. Change 2 to the Southeast Alaska SCP is also under development. Geographic Response Strategies are also under development for the Northwest Arctic subarea, with an estimated completion date of June 30, 2011

Potential Places of Refuge

ADEC staff continued to address PPOR issues during 2010. The pre-identified PPOR and supporting documents are designed to identify possible locations to move a vessel needing assistance where actions can be taken to stabilize and/or repair the vessel, in order to protect human life, reduce hazards to navigation, and/or protect natural resources and other uses of an area. The documents contain maps, aerial photos, and information on site considerations, operational characteristics, and local knowledge. PPOR project for Southeast Alaska was completed in December 2010. ADEC staff also initiated PPOR projects for the North Slope and Northwest Arctic subareas. Preliminary outreach meetings were held in Kotzebue and Nome in September 2010. Workgroup meetings will be held throughout 2011.

ADJUDICATION HIGHLIGHTS

BP's Prince William Sound Oil Discharge Prevention and Contingency Plan Adjudicatory Hearing Request

On December 18, 2009, a concerned citizen filed a request for an adjudicatory hearing concerning the 2009 approval of BP's (independent) spot charter tanker oil discharge prevention and contingency plan. His request was still under review at the end of the year.

PROGRAM INFORMATION

- ADEC SPAR Program: http://dec.alaska.gov/spar/index.htm
- ADEC Disaster Response Plan: http://www.dec.state.ak.us/spar/perp/plans/adec_disaster.pdf
- Statewide Hazmat Response Work Group: http://www.dec.state.ak.us/spar/perp/hazmat.htm
- Emergency Towing System: http://www.dec.state.ak.us/spar/perp/aiets/home.htm
- Alaska Geographic Response Strategies: http://www.dec.state.ak.us/spar/perp/grs/home.htm
- Potential Places of Refuge: http://www.dec.state.ak.us/spar/perp/ppor/home.htm
- Alaska Risk Assessment (ARA) of Oil and Gas Infrastructure: http://www.dec.state.ak.us/spar/ipp/ara/

British Columbia

ENVIRONMENTAL EMERGENCY PROGRAM, THE BRITISH COLUMBIA MINISTRY OF ENVIRONMENT

PROGRAM MISSION

The Ministry of Environment works to protect people, property and the environment from spill hazards through its Environmental Emergency Program. The program's mission statement is: Exemplary Environmental Emergency Management through Leadership, Organization, Teamwork and Shared Responsibility.

On average, 3,000 to 4,000 spills are reported to the ministry annually - most are accidental oil and hazardous material releases. Highly trained Environmental Emergency Response Officers located in regional offices throughout the Province are available to respond to these spills. For large and complex spill incidents, the Ministry can also activate its Incident Management Team. The team is tasked with the Provincial delivery of the BC Marine Oil Spill Response Plan, the BC Inland Spill Response Plan and the BC Hazardous Material Response Plan. The team functions according to the international and provincial adopted Incident Command System which includes the application of Unified Command with the Responsible Party (spiller) and other responding jurisdictions.

The Environmental Management Branch in Victoria (Headquarters) undertakes environmental emergency planning for both the regional Environmental Emergency Response Officers and the Provincial Incident Management Team.

PROGRAM RESTRUCTURING

The Environmental Emergency Program restructured in May of 2010 to realize efficiencies, improve consistency in program delivery and enable the program to devote more effort to prevention, preparedness and recovery activities. The new centralized structure converted a number of staff to full-time positions within the program, while also maintaining a number of backup response officers to

Oil spill shoreline workforce table-top exercise

retain solid geographic coverage around the province. As the first year of the new structure came to a close in May 2011 there are strong indications of a successful transition with improved morale of program staff, deployment of standardized equipment and the on-going revision of policies and procedures to ensure province-wide consistency in program and response delivery.

The program is currently in the process of reviewing the structure, membership and training for the provincial IMT, for both oil spills and hazardous material incidents. The primary goal is to ensure that the IMT has the required scope and depth of trained technical specialists and incident command system positions to address provincial-scale incidents. A planned recruitment for new technical specialist and incident command staff will ensure that the province is appropriately positioned to handle large incidents.

SIGNIFICANT SPILLS

The province did not experience any significant marine spills during the last year, although many moderate and small spills were reported and addressed by our partners in the Canadian Coast Guard.

One incident of note concerned a cargo vessel in transit from Vancouver, British Columbia to China transporting yellow cake uranium. The vessel met with rough seas shortly after it began its crossing of the Pacific and some damage occurred to the yellow cake shipping containers stowed in the ship's hold. The vessel returned to Vancouver to assess the condition of the cargo, to make certain that the vessel and crew were safe and to ensure that any spilled yellow cake was appropriately managed. A plan was developed and reviewed with the responsible party, lead agencies, program staff and other stakeholders to ensure that this fairly low risk product was appropriately handled. Upon activation of the plan, once the vessel arrived in Vancouver, there was found to be some spillage of the material within the ship's hold and the Responsible Party and their contractor completed a successful cleanup.

The province also dealt with a number of notable hazardous material releases around the province. One incident resulted from the collapse of an old earthen dam that created a mud and debris torrent that impacted several properties and orchards below; fortunately no one was injured in the incident. The hazmat-related concern resulted from the potential release of pesticides used in the orchards and farm operations that were being stored in the area that was covered by the debris flow.

Another significant incident involved a fire at a pesticide storage warehouse. Although fire crews had believed all runoff was being contained, a non-conforming attachment to the storm system resulted in a mix of chemicals and pesticides entering an important fish stream and subsequently into Okanagan Lake. A variety of water sports competitions - as well as a lakeside festival - were threatened with closure due to health concerns resulting from the spill.

Contaminated water from pesticide warehouse fire

NEW LEGISLATION

The Environmental Emergency Program completed a review of the existing environmental emergency legislation and developed a list of recommended changes for government to consider in 2008/09. The list of potential changes focus on addressing current gaps identified by ministry staff, ensuring that transporters and users of hazardous materials are appropriately prepared to respond to their spills and improving environmental protection and public safety overall. Due to changes in government during the last year, the review of potential legislative changes was delayed pending the appointment of a new Premier and Cabinet. Premier Christy Clark and her new Cabinet were sworn in to office in March 2011. It is anticipated that the legislative proposals will be reviewed and that decisions made on those to be pursued will occur this year (2011).

OILED WILDLIFE

Efforts to improve oiled wildlife response continue to move forward. The program staff has been working with our federal partners at the Canadian Wildlife Service and the Department of Fisheries and Ocean (Marine Mammal group). Progress includes steps towards signing-off on the terms of reference for an inter-governmental oiled wildlife working group as well as providing review and comment on an Oiled Wildlife Field Operations Guide.

The Oiled Wildlife Field Operations Guide (FOG) was drafted by the Western Canada Marine Response Corporation and based on previous work done by the BC Ministry of Environment staff. They also had input from the oiled wildlife working group; this group includes both industry and various wildlife response and rehabilitation organizations represented under the umbrella of the Oiled Wildlife Trust. If work on the FOG progresses as hoped there may be an opportunity to test it at the CANUSPAC trans-boundary oil spill exercise planned for Oak Harbor, Washington in June 2011.

The province wishes to acknowledge the renewed engagement with our federal partners at the Canadian Wildlife Service and the Department of Fisheries and Oceans on the issue of oiled wildlife. In particular, the Canadian Wildlife Service which has now identified a dedicated oiled wildlife coordinator in their organization who will be a tremendous asset in our combined efforts to build capacity and capability for oiled wildlife response on Canada's west coast in partnership with industry partners and the Oiled Wildlife Trust.

ANNUAL TRAINING

Incident Management Team

The 2010 Annual Incident Management Team (IMT) training was held in Richmond, BC on November 2nd and 3rd, 2010. The two-day session included a number of updates on program activities and developments, presentations from other agencies and response organizations, and a one day table-top exercise.

The table-top exercise involved a simulated Incident Command Post and used the Incident Command System according to the BC Marine Oil Spill Response Plan. The focus was on the operations, planning, logistics and administration of a large shoreline workforce and cleanup. Team members were challenged to address the complexities of managing a large shoreline workforce operating in a

Environmental Emergency Response Officers practicing with chemical id kits

remote and rugged west coast environment. The Western Canada Marine Response Corporation and several other response contractors (including Quantum and Hazco) participated in the table-top to bring increased realism to the exercise and help improve the ministry's understanding of their capabilities in providing the required manpower and expertise for a shoreline workforce. BC Ministry of Forests staff provided exercise evaluators as well as information on the resources available through their Wildfire Management Branch that could be called upon during a major marine oil spill (including air operations expertise, fully equipped mobile field camps, and additional ICS trained staff).

The two days of IMT training also included presentations by program staff on various incidents that were responded to during the year, response contractor capabilities and structure, and a presentation from the Oiled Wildlife Trust (an association of six wildlife rehabilitation and response organizations including the Oiled Wildlife Society of BC, the BC Society for the Prevention of Cruelty to Animals, the Vancouver Aquarium - Marine Mammal Rescue, the Wildlife Rehabilitators' Network of BC and the Wildlife Rescue Association of BC) on their organization and capabilities.

IMT members and our response officers also participated in a number of individual training activities and exercises over the course of the year. These included a couple of Kinder Morgan pipeline spill exercises, a Western Canada Marine Response Corporation 1000-ton exercise, and the U.S. Coast Guard's ICS 341 incident planning workshop in Alameda, California, among others.

Environmental Emergency Response Officer (EERO) Refresher Training

The Interior region hosted the 2011 Environmental Emergency Response Officer (EERO) training in Salmon Arm during the last week of March 2011. The training included the use of self-contained breathing apparatus and fully encapsulating hazmat suits (level A), review and practice with a variety of sampling and monitoring equipment, and practice in the use of chemical identification hazardous materials kits for the identification of unknown chemicals at spills.

The week-long training also included a multi-incident full-scale exercise conducted in partnership with the Columbia Shuswap Regional District's emergency program. The exercise included both a train derailment resulting in the release of a persistent hydrocarbon product from a rail tanker, as well as a multi-casualty accident involving a collision between a helicopter and a school bus. The exercise was designed to test the local emergency program's Emergency Operations Center's ability to address multiple incidents. For the Ministry of Environment, the exercise presented an opportunity to collaborate with local response agencies, build important relationships with participating industry and response contractors, and meet staff training requirements.

Oil spill boom deployment exercise

PROGRAM INFORMATION

Further Information on the province's Environmental Emergency Program can be found at our internet site at the following address: http://www.env.gov.bc.ca/eemp/

California

THE CALIFORNIA DEPARTMENT OF FISH AND GAME'S OFFICE OF SPILL PREVENTION AND RESPONSE (OSPR)

MISSION STATEMENT

The mission of the Office of Spill Prevention and Response (OSPR) is to provide best achievable protection of California's natural resources by preventing, preparing for and responding to spills of oil and other deleterious materials and through restoring and enhancing affected resources.

OSPR, a division of the California Department of Fish and Game (DFG), is the lead state agency for spill response in California. OSPR was established by the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 (Act). The Act provides the OSPR Administrator with authority to direct spill response, cleanup and natural resource damage assessment (NRDA) and restoration.

OSPR'S SHARED VISION

We have an organization that:

- Is the Premier Agency for all aspects of spill prevention, response and restoration;
- Operates with integrity;
- Is transparent and open;
- Values one another;
- Communicates and creates connections;
- Anticipates needs and is proactive;
- Inspires confidence and creativity; and
- Provides great service.

NEW TASK FORCE MEMBER

After 26 years of service to the State of California, Mr. Steve Edinger, OSPR Administrator, decided to retire in November of 2010. OSPR's Deputy Administrator, Captain Scott D. Schaefer, became OSPR's Acting Administrator effective December 1, 2010. In addition to her duties as Chief of OSPR's Scientific Branch, Dr. Julie Yamamoto is now serving as OSPR's Acting Deputy Administrator.

FROM THE OSPR EXECUTIVE

"April 20th marked the one-year anniversary of the Deepwater Horizon oil spill in the Gulf of Mexico. Releasing more than 200 million gallons of oil into the ocean, Deepwater Horizon is the largest oil spill in U.S. history. This unprecedented disaster required a massive response including our spill response experts at OSPR. Over 70 California Department of Fish and Game personnel participated in the Deepwater response. The response clearly demonstrated California's expertise in oil spill response. The response also showed that the Incident Command System (ICS) works regardless of the size of the spill," stated Captain Scott Schaefer. "Spill responders from California filled critical roles throughout the Deepwater Horizon response organization. Captain Roger Laferrierre, LA/LB Sector Commander, served as the Incident Commander in Houma, Louisiana while I was recalled to active duty with the U.S. Coast Guard and served as the Deputy Incident Commander in Mobile. OSPR's Josh Curtis, also recalled to active duty, served as Operations Section Chief in Houma. Several OSPR Environmental Scientists participated in SCAT, GIS and applied response technology efforts. Dr. Mike Ziccardi from California's Oiled Wildlife Care Network led sea turtle rescue and rehabilitation efforts. Several Oil Spill Response Organization personnel from California played key roles in the response efforts. I am very proud to say that when the Gulf Coast needed help to respond to the largest oil spill in our nation's history, California was ready to respond and answered the call to duty!"

SPILL DATA 2010

OSPR's Spill Tracking Analysis Unit received and reviewed 7,997 California Emergency Management Agency (CalEMA) Hazardous Material Spill Reports for the 2010 calendar year. From these, OSPR received 2,092 petroleum related spill incident reports. Of the reports received, 1,062 were identified as inland petroleum incidents and 1,030 were identified as marine petroleum incidents. OSPR Field Response Teams, consisting of Fish and Game Wardens (Law Enforcement), Environmental Scientists and Oil Spill Prevention Specialists responded to all 1,030 reported marine petroleum incidents. Fish and Game Wardens also responded

to 506 of the 1,062 inland petroleum incidents reported (the remaining 556 reported inland petroleum spills did not impact a state waterway, which defines DFG's jurisdiction).

For the 2011 calendar year to mid-May, OSPR has received and reviewed 3,054 CalEMA Hazardous Material Spill Reports. Of these reported spills, 304 were petroleum spills impacting the marine environment. Four of these reported spills met the Pacific States/British Columbia Task Force reporting threshold of one barrel. For the same period, 325 inland petroleum incidents were reported with 150 of these spills meeting the reporting threshold. Of the reported inland spills that met the threshold, 31 impacted a state waterway.

2010/2011 MAJOR INCIDENTS

California Tsunami Response (March 2011)

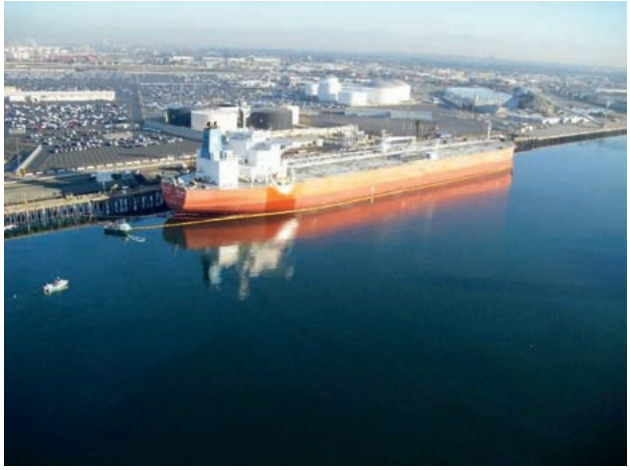
On March 11, 2011, a magnitude 8.9 earthquake hit Japan's northeastern coast, causing a massive tsunami that in turn generated a smaller tsunami event along the California coastline. The resulting large wave surges caused damage to ports, harbors and infrastructure in California, particularly in the Santa Cruz and Crescent City harbors, where numerous sunken and otherwise damaged vessels posed serious pollution threats.

In preparation for the tsunami event on the California Coast, the U.S. Coast Guard (USCG), California Emergency Management Agency, the Department of Fish and Game (DFG) and local governments mobilized and prepared for responding to human health, pollution, and other emergencies. The DFG's Law Enforcement Division and OSPR worked with the USCG within a coordinated Incident Command structure to manage the pollution and salvage responses required in Santa Cruz and Crescent City Harbors. At the peak of the response, 77 DFG and OSPR personnel were involved with the response at one time. Crescent City sustained extensive damage to vessels and port infrastructure, requiring an extended month long response on the part of USCG, DFG and local agencies. Although some fuel releases occurred as a result of damage to vessels, field staff did not observe any oil-impacted wildlife or sensitive habitat. In addition, DFG staff attempted to minimize disruption of fisheries (mainly crab) activities at Crescent City Harbor during the response effort.

Due to shoreline and property damage, California Governor Jerry Brown issued an emergency proclamation for Del Norte, Humboldt, San Mateo and Santa Cruz Counties. Estimated monetary damages in California totaled $48 million, qualifying this disaster for FEMA funding.

T/V Al Jalaa, Long Beach Harbor Spill (February 2011)

On Feb. 21, 2011, the *T/V Al Jalaa* experienced a release of diesel fuel while docked at Long Beach Harbor, Berth 84. The ship overfilled a tank in the process of moving fuel between internal tanks. Diesel fuel spilled onto the deck of the ship and then



into the water. The vessel had been boomed prior to the fuel transfer, but due to the shape of the ship, its deck is wider than its hull, which allowed the diesel to fall from the deck and outside of the boomed area. The amount of fuel spilled was estimated at 840 gallons. During the spill response 15,000 feet of boom was deployed and14 vessels were on scene including 5 skimmers.

T/V Da Tang, Long Beach (November 2010)

The vessel *Da Tang* 18 spilled bunker fuel into the Long Beach harbor at Anchorage B-11 during a bunkering operation late on Nov. 7, 2010. It was estimated that more than 6000 gallons of bunker fuel was released. The U.S. Coast Guard and the Department of Fish and Game supervised cleanup operations. The spill resulted in a fishery closure in the harbor area. The investigation and case are still pending.

T/V Matilla, Petaluma River (September 2010)

The Tug Boat *Matilla* was towed into the Petaluma River from San Pablo Bay by a salvor, where it was beached on shore near Ellis Creek/Slough. On Sept. 6, a member of the public reported seeing an oil sheen. Responding officers confirmed the occurrence of an oil spill that covered approximately four miles of the river with sheen and several pockets of black oil. Because the waterway was tidally influenced, oil and sheen were pushed both above and below the vessel. The tug was being cut up for salvage and an estimated 400 gallons bilge oil, waste oil and related lubricants had been spilled during the operation. Responders used vacuum trucks and sorbents to remove the material. Crews then cut the tug apart and used a crane to remove it for disposal.

Donner Lake Diesel Spill (May 2010)

DFG and Nevada County Environmental Health (NCEH) responded to a diesel spill that occurred on May 26 when a tanker truck overturned and spilled as much as 3,000 gallons of diesel fuel along I-80 on the west side of Donner Lake. Some of the material washed over the side of the interstate into the soil and into the watershed of Billy Mack and Summit Creeks. Crews completed all spill related work in the median along Interstate-80 near the Donner Summit.

Dominguez Channel, Long Beach (2010)

Over a period of several months, the Department of Fish and Game, OSPR was notified of – and responded to – numerous reports of oils sheen and oil in the Dominguez Channel, in southern Los Angeles County. Oil was frequently entering the local storm water sump near the Dominguez Channel. OSPR dispatched Field Response Teams to various locations to investigate several sites. One site was identified where oil was flowing out of the ground near a set of railroad tracks adjacent to the sump. Oil pipeline industry personnel were notified as it was suspected that oil was leaking from pipelines in the area into the ground and sump which eventually pumped it into the Dominguez Channel. The channel flows directly into the Long Beach Harbor. Trucks vacuumed the oily water out of the sump for an extended period of time. Due to the extensive industrial and residential development in the area, locating the source of the oil has been difficult; the investigation continues.

OTHER SIGNIFICANT POLLUTION MATTERS

The *SS Montebello* Assessment Task Force is assessing the likelihood of an oil release, as well as potential environmental and economic impacts of both a chronic and a catastrophic release, from the *SS Montebello*. A Japanese submarine sank the *T/V SS Montebello* 6 miles off the California Coast on Dec. 23, 1941. The *Montebello* had loaded 73,571 bbls (3,089,982 gallons) of crude oil and 2,477 bbls (104,034 gallons) of bunker fuel the day before at the Unocal Avila Beach Pier. The taskforce believes that the entire cargo and fuel remains on board. The vessel lies approximately 900 feet down in an upright position.

Task Force members include OSPR, the U.S. Coast Guard, NOAA, CalTrans, the Monterey Bay Aquarium Research Institute and Assemblyman Sam Blakeslee's office. The Task Force proposed conducting three phased assessment studies. Phase I has been completed: a side scan sonar dive of the Montebello utilized an Autonomous Underwater Vehicle (AUV) to determine the characteristics of the surrounding area. This survey included the seabed ½ mile around the wreck, plus the (henceforth to be known as) Montebello Submarine Canyon to the north. The resulting sonar images showed that the shipwreck is still upright and slightly skewed; there is also evidence of sea floor scour around the vessel. Phase II and III (described below) are expected to be completed in the fall of 2011.

Phase II will consist of using an untethered Remotely Operated Vehicle (ROV) to conduct another detailed video survey of the vessel for comparison to the 1996 and 2003 dives. In addition to providing detailed information on the wreck condition and location of nets, etc., it will document the location and condition of cargo tanks, piping and vent systems wherever visible/assessable. This information will be important for monitoring the structural integrity of the *Montebello*, which will assist in the sampling operation phase of the assessment.

Phase III of the assessment will focus on assessing the status of each of the *Montebello's* oil cargo and bunker fuel oil tanks. This work will be done with an ROV outfitted with a tapping and sampling tool. There are a total of 18 main cargo tanks; as the vessel is sitting upright on the bottom, the ROV should have good access to the sideshell of each main cargo tank in order to tap and sample each

tank for the presence of oil. Soil samples will also be taken at four locations on both the port and starboard sides of the shipwreck to test for the presence of either oil or oil-eating bacteria in the seabed floor. A Task Force report will summarize the results and findings and make recommendations for the next steps depending on the results.

LEGISLATION

Pending Legislation (Introduced in the 2011/12 Session, but not passed as of mid-May 2011)

AB 1112 (Huffman)

This bill would require OSPR to conduct a risk assessment of vessels engaged in oil transfer operations, along with increased monitoring and inspections. It would also raise the Oil Spill Prevention and Administration Fee, from $0.05 per barrel, up to $0.08 per barrel, and the biennial nontank vessel fee from $2,500 to $3,000.

SB 584 (Evans)

This draft bill authorizes the use of the Oil Spill Prevention and Administration Fund for the Oiled Wildlife Care Network, which is currently funded by interest from the Oil Spill Response Trust Fund.

AB 971 (Monning)

This bill would extend the sunset date for the California Sea Otter Fund tax check-off on the state tax form to Jan. 1, 2016.

SB 935 (Committee on Environmental Quality)

This bill would amend the Public Resources Code relating to the Marine Invasive Species Act, to include ballast water treatment performance standards. Previously, these performance standards were interim. This bill also extends the approval cutoff date from 2008 to 2016 for installation of an experimental ballast water treatment system and defines terms related to the cleaning of vessel hulls.

AB 731 (Jeffries)

This bill would annually appropriate $1.03 million currently received by the state from specified tax and fee revenue sources for firefighting and emergency response purposes, including, but not limited to, the purchase of firefighting and rescue vehicles and equipment. The bill specifically mentions appropriating $25,000 from the Oil Spill Response Trust Fund.

SB 80 (Committee on Budget and Fiscal Review, Chapter 11, Statutes of 2011):

This legislation would authorize a loan from the Oil Spill Response Trust Fund (OSRTF) to the General Fund under specified conditions.

SB 84 (Committee on Budget and Fiscal Review, Chapter 13, Statutes of 2011):

This bill would amends the 2010 Budget Act to appropriate up to $40 million from the OSTRF to the General Fund to implement the loan authorized in SB 80 (2011).

NEW RULEMAKING

Reasonable Worst Case Spill Volume for Offshore Platforms

In light of the Deepwater Horizon platform spill, which was an uncontrolled release for several months, California issued Executive Order #S-16-10 on Oct. 12, 2010 requiring that contingency plans for offshore platforms accommodate longer uncontrolled oil releases that could result from any natural or man-made incident. The order requires revised response plans for a worst case discharge scenario that includes a 30-day uncontrolled oil spill. The Reasonable Worst Case Spill Volume calculation for offshore platforms has been amended to increase the daily production volume factor in the calculation from seven days to 30 days. The regulations went into effect on Apr. 11, 2011.

Oil Spill Contingency Plans

The package focused primarily on due-process changes so that vessel Plan Holders could not submit plans at the last minute for approval. It includes steps to transition to an "electronic" submittal, removal of the "post spill review" requirement and several minor changes/corrections. The regulations go into effect June 2, 2011.

Certificates of Financial Responsibility (COFR)

These amendments clarify when all evidence of COFR renewals needs to be submitted to OSPR. Following the need to make some changes after the review and comment period, OSPR will resubmit the package to the Office of Administrative Law (OAL) in late May and anticipates approval in late June.

Local Government Grant Regulations

Local government Contingency Plan regulation amendments make local plans more usable by aligning them with specific information that may be needed by the different Incident Command Sections (i.e., Command, Operations, Planning, Logistics and Finance) during a spill response. The Notice of Proposed changes was mailed in February, with the end of the 45-day comment period on April 19, 2011. Additional changes were made which resulted in an additional 15-Day comment period which ended on May 23, 2011. OSPR will resubmit to OAL in late May and anticipates approval in late June, 2011.

SPILL PREPAREDNESS

In 2010/2011, OSPR conducted six unannounced Oil Spill Response Organization (OSRO) rating drills in various marine locations along the California coast. The drills demonstrate an OSRO's ability to meet requirements of oil spill response in a skillful and timely manner. This year's drills focused on the immediate and two-hour containment and skimming plan holder requirements. Numerous Oil Pollution Risk Area (OPRA) sites were also included in the unannounced drills. OSPR maintains a reliable and thorough unannounced OSRO drill exercise program, the results of which are practiced on a daily basis by the rated OSROs required to protect California's marine waters.

Contingency Plans

OSPR has authority to conduct announced or unannounced drills to ensure that a plan will work in an oil spill emergency. OSPR's Readiness Unit conducted 31 unannounced plan-holder notification drills along with two facility-owned equipment deployments. OSPR processed 4,329 contingency plan revisions and approved 458 new plans.

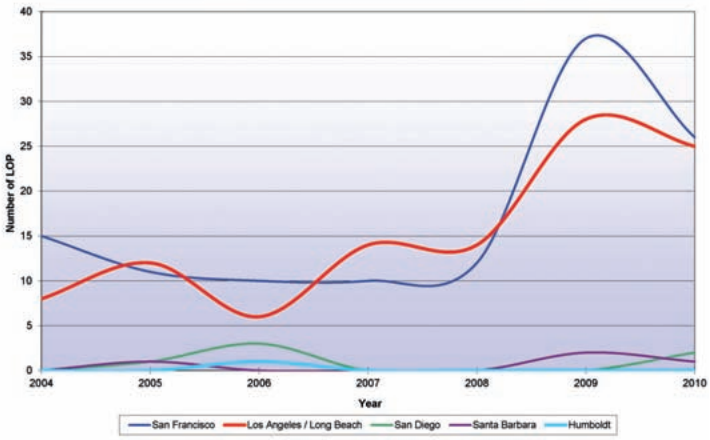
SPILL PREVENTION

Loss of Propulsion Incidents

Vessels coming into California marine waters continue to experience loss of propulsion (LOP) incidents at numbers that are far higher than those realized prior to the 2009 implementation of California's Low Sulfur Distillate Fuel (LSDF) regulations. For the five years prior to implementation of the LSDF requirement (2004 – 2008), an average of 23.6 LOP incidents were reported annually with no year realizing less than 20 nor more than 26 LOP incidents. In 2009, California recorded 67 LOP incidents, and in 2010, there were 54. Through the month of April 2011, California has already recorded 25 LOP incidents.

OSPR and the California Harbor Safety Committees (HSCs) are monitoring how the LSDF regulations affect vessel operations, while the California Air Resources Board (CARB) considers amending their regulations in an attempt to minimize vessel traffic through the Navy's Pacific Missile Test Range. Best Maritime Practices for LSDF transition from heavy fuel are being considered in one HSC as is verbiage in the Coast Pilot and B.A. Sailing Directions. OSPR, the U.S. Coast Guard and the maritime community are fully engaged in looking for solutions to reduce the rate of LOP incidents attributed to LSDF usage.

LOSS OF PROPULSION INCIDENTS



Bunkering Operations

OSPR has increased its monitoring of bunkering operations occurring at anchorages in San Francisco Bay and Los Angeles – Long Beach Harbors. While legislative statutory measures are being considered to minimize the risk of pollution incidents occurring from bunkering at anchorage, OSPR has taken an active position in reducing that risk by performing anchorage bunkering monitorings. OSPR has also been proactive in reaching the smaller ports and harbors of California to bring spill prevention awareness to local maritime operations. Two mobile transfer fueling companies in the Fort Bragg area were visited and brought under compliance for over-the-water fuel transfers. In addition, Port Hueneme vessels have come under a regular boarding program to ensure regulatory compliance.

Vessel Risk Evaluations

OSPR continues to conduct risk evaluations of commercial vessels over 300 gross tons entering California marine waters. OSPR targeted and boarded 58 vessels identified through its Risk Data Analysis Model in 2010. No oil pollution resulted from any vessel that was targeted as "at risk" and boarded by OSPR.

SPILL READINESS

Traditional OSPR spill readiness reports look at Oil Spill Response Organization (OSRO) drills and equipment deployments, plus Contingency plan holders' drills and exercises. In 2010 and early 2011, OSPR demonstrated its organizational readiness through responses to the Deepwater Horizon Gulf of Mexico (GOM) spill and the California Tsunami Event. OSPR allowed OSRO equipment to be cascaded to the GOM while ensuring response coverage in California remained satisfactory. OSPR personnel augmented the GOM response through April 2011 and gained invaluable experience. During the 2011 tsunami response, OSPR staffed two full incident command posts, an area command post and an operations support center for an extended period. Both incidents served as true tests of readiness. OSPR also participated in numerous drills around the state, including the large Sea River Drill in San Francisco, the Polar Tanker drill in Berkeley and the industry-led (Chevron) NPREP in San Diego in May 2011. Volunteer coordination and NRDA issues, as well as salvage operations, featured prominently in these drills.

NATURAL RESOURCE DAMAGE ASSESSMENT (2010 - 2011)

COSCO Busan Spill, San Francisco Bay

State and federal trustee agencies have concluded the injury quantification phase and plan to publish a draft damage assessment and restoration plan (DARP) shortly. Updates and documents related to the NRDA effort can be found at: http://www.dfg.ca.gov/ospr/Science/cosco_busan_spill.aspx.

T/V Dubai Star Spill, San Francisco Bay

The state and federal trustees have completed their estimate of bird and shoreline habitat injuries and human recreational use losses resulting from the spill. Settlement negotiations with the responsible party are ongoing. Updates and documents related to this NRDA effort can be found at: http://www.dfg.ca.gov/ospr/NRDA/Dubai-Star.aspx.

Kinder Morgan Spill, Suisun Marsh

The Final Damage Assessment and Restoration Plan (DARP) for the Suisun Marsh Pipeline Spill was released in April 2010. Planning and implementation of the two restoration projects detailed in the DARP is now underway. The trustee agencies (USFWS and OSPR) are contributing $950,000 to two projects designed to compensate for environmental injuries caused by the spill. The first project is the Hill Slough Management Area Restoration near Suisun Bay, which will restore tidal wetlands and moist grassland habitat to approximately 950 acres of diked seasonal and perennial wetlands. The second project targets invasive weed control at the Grizzly

Island Wildlife Area in Suisun Bay with a goal to provide funds for ongoing control measures of perennial pepperweed in managed marsh land within the wildlife area. Updates and documents related to the NRDA effort can be found at: http://www.dfg.ca.gov/ospr/NRDA/Kinder-Morgan.aspx.

Luckenbach Oil Spill, Northern California

The trustee agencies have received their final adjudication from the National Pollution Fund Center, totaling $22.7 million for NRDAR; they currently have 11 of 14 restoration projects underway. Updates and documents related to the restoration projects can be found at: http://www.dfg.ca.gov/ospr/Science/Luckenbach.aspx.

PROGRAM INFORMATION

For more information about OSPR's activities, please visit: www.dfg.ca.gov/ospr/

- NRDA Spill updates:
  http://www.dfg.ca.gov/ospr/NRDA/
- Spill response website:
  http://calspillwatch.dfg.ca.gov

Hawaii

HAZARD EVALUATION & EMERGENCY RESPONSE OFFICE OF THE ENVIRONMENTAL HEALTH ADMINISTRATION IN THE HAWAII DEPARTMENT OF HEALTH (HEER)

PROGRAM MISSION

The Hazardous Evaluation and Emergency Response (HEER) Office serves the people of the State of Hawaii by addressing all aspects of releases of hazardous substances - including oil - into the environment. Our work includes preventing, planning for and responding to hazardous substance releases or risks of releases. The HEER Office accomplishes this mission by addressing contaminated sites with the highest risk to human health and the environment first, preventing contamination rather than cleaning up after the fact and basing decisions on sound scientific principles and common sense.

The office is comprised of three operating sections, each addressing an important aspect of its mission. The implementing sections are organized as follows: 1) Emergency Preparedness and Response; 2) Site Discovery, Assessment and Remediation; and 3) Hazard Evaluation.

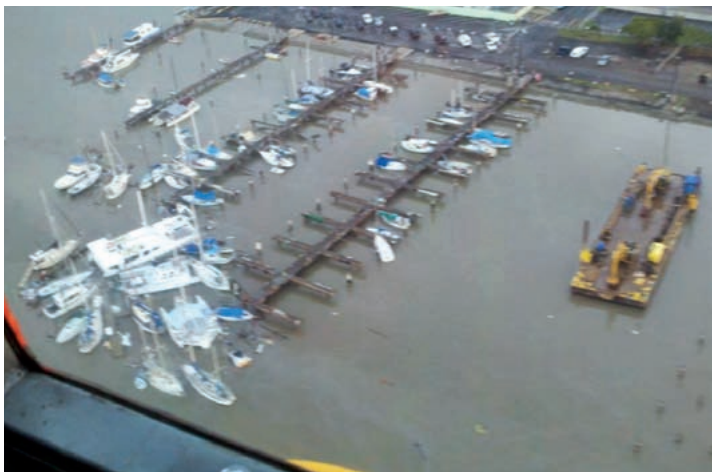
The HEER Office Emergency Preparedness and Response Section (EP&R), along with the State On-Scene Coordinators (SOSCs), are responsible for planning and preparing for, and responding to releases of a hazardous substance and/or oil that may cause immediate and substantial threat to human health or the environment. The SOSCs have been trained to enter hazardous atmospheres in self-contained breathing apparatus (SCBA) and various types of personal protective equipment. As back-up personnel for first responder County HAZMAT teams, SOSCs are on 24-hour call. The number of HEER's SOSCs were reduced from four to two this year as a budget-cutting move.

SIGNIFICANT EVENT SUMMARIES

During FY 2010, the HEER Office received 331 notifications that were directly concerned with the release of hazardous chemicals or oil spills. Of the 331 notifications reported, 208 were oil-related and required a site response by a State On-Scene-Coordinator (SOSC) and/or a major off-scene coordination and response effort. Notable among the spill responses during FY 2010-2011 are the following:

Japanese Earthquake and Tsunami

Coordinators relocated with equipment to the State Department of Health Operations Center. Tsunami damage was limited to small boat and harbor damage. The Keehi Boat Harbor on Oahu was the worst hit; 200 small boats were damaged or sunk and docks were broken loose. Damages were set at $3.3 million statewide. Only minor oil sheens resulted.



Chevron Crude Oil Release

On December 20, 2010, the Hawaii Chevron Refinery reported a 2,100 gallon release from an above ground storage tank containing crude oil. Action was taken immediately to transfer all remaining oil from the damaged tank to other tank storage. The tank was then removed from service for bottom floor repairs, an all impacted soil was removed.

C&F Trucking Naphtha Spill

On July 21, 2010, a truck and its fuel tank rolled on its side releasing 9,025 gallons of naphtha. The cargo was being transported to a power plant on the Big Island of Hawaii. The highway was closed for 9 hours due to hazardous vapors. Cleanup required soil excavation along the roadway and down a gulch.

OIL SPILL PREPAREDNESS

As of February 2010 the Oceania Regional Response Team (ORRT) has pre-approved the use of dispersants at the off-shore moorings for night-time use. The MSRC vessel Hawaii Responder and CIC vessel Clean Islands now carry dispersant on board and have ability to conduct night operations.

NPREP Oil Spill Exercise

On Thursday 14 April 2011, a joint TESORO and NAVY full-scale exercise was conducted to test Hawaii's Area Contingency Plan and agency Emergency Response Plans. The NPREP spanned a two-week period of training and instruction covering in-water equipment deployment, air operations, ICS, SCAT and SMART protocols.

PROGRAM INFORMATION

Additional information about the environmental program and available documents can be obtained at: http://hawaii.gov/health/environmental/hazard/index.html.

Oregon

EMERGENCY RESPONSE PROGRAM, OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

PROGRAM MISSION

The Emergency Response Program at the Oregon Department of Environmental Quality (ODEQ) supports the agency's strategic direction to protect human health and the environment from toxics by preventing, preparing for, and minimizing the danger posed by catastrophic and other significant releases of dangerous chemicals.

ODEQ staff at the agency's headquarters in Portland carries out oil spill planning and preparedness responsibilities, augmented by response personnel in ODEQ's three regional offices. This program is responsible for facility and vessel oil spill contingency and prevention plan review, drills and exercises, geographic response planning and general coordination of emergency response planning activities. ODEQ provides leadership to the Northwest Area Committee and the Region 10 Response Team and associated committees, work groups and task forces. ODEQ response personnel and State On-Scene Coordinators in Portland, Bend and Eugene carry out response activities. Staff from several other ODEQ programs support this work, providing after-hours coordination and being able to fill various incident command positions.

The Oregon Oil Spill Prevention Act, passed by the Oregon Legislature in 1991, directs ODEQ to develop rules to provide for the prevention, preparedness and response to oil spills from large facilities, vessels and petroleum transportation industries. After the rules were developed and approved by the Oregon Environmental Quality Commission, ODEQ received its first facility and vessel plans for review in July 1993. Geographic response plans (GRPs) and the statewide Oil and Hazardous Materials Emergency Response Plan were also developed at this time. In addition, ODEQ conducted several studies, including the "West Coast Oil Transfer Locations" to identify high-risk operations and areas vulnerable to oil spills. ODEQ worked with the marine transportation and petroleum-handling industries to develop a coordinated approach to oil spill prevention, preparedness and response. Eventually the GRPs and the Oil and Hazardous Materials Emergency Response Plan were incorporated into the Northwest Area Contingency Plan.

SPILL STATISTICS

ODEQ received 2,695 notifications from the Oregon Emergency Response System in 2010. Further investigation of these notifications resulted in 357 active spill projects. Of these 357 incidents, 206 involved spilled petroleum products, up from 177 the previous year. The petroleum spills included 58 releases to freshwater and 10 to marine waters.

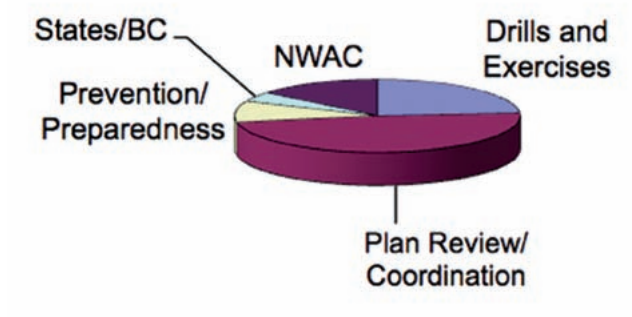
In 2010, 84 petroleum spills larger than 42 gallons occurred. Sources for these spills included 46 from commercial trucks and six from trains. Further analysis shows there were 21 spills of petroleum over 200 gallons and six spills over 1,000 gallons. There were only three vessel-related spills over 42 gallons; however, there were 19 smaller spills attributed to vessels of various classes, including recreational and fishing vessels.

PREPAREDNESS

ODEQ is responsible for preparedness activities as listed in Oregon Revised Statutes 468B.300 through 468B.500. These regulations require ensuring that all regulated vessels and facilities have prepared oil spill contingency plans and that those plans meet specific requirements to protect Oregon's navigable waterways. These regulations also require that verification of all equipment listed in oil spill contingency plans is available and adequately maintained, that personnel listed in the plans are trained and that drills and exercises are conducted. Activities conducted under DEQ's preparedness program include:

- Contingency Plan Review and plan holder coordination;
- Drills and exercises

PROGRAM ACTIVITIES (% OF TIME)



- Geographic Response Plan (GRP) development; and
- Northwest Area Committee (NWAC) participation.

In 2010 ODEQ completed plan reviews for Chevron Terminals, Harley Marine Services, Chevron Shipping and ConocoPhillips terminals. Another 10 plans are currently under review.

ODEQ also participated extensively in several exercises with industry and agency counterparts to train and prepare for spills. These exercises provided an opportunity to exercise Unified Command with the Washington Department of Ecology and the U.S. Coast Guard (USCG) Sector Columbia River. These events used the Northwest Area Contingency Plan and its protocols extensively. ODEQ staffed positions in the Unified Command, Joint Information Center, Liaison, Planning Section, Environmental Unit and Documentation Unit. Drills and exercises that ODEQ participated in during the year included:

- Worst-case discharge exercises at both Vigor Industrial and the KinderMorgan Pipeline company in Portland;
- Tabletop exercises at nine facilities; and
- Government-Initiated Unannounced Exercises (GIUE) at four facilities.

REGIONAL RESPONSE TEAM AND NORTHWEST AREA COMMITTEE

ODEQ fully participates in the Region 10 Regional Response Team and Northwest Area Committee. The Northwest Area Committee is responsible for continual development of the Northwest Area Contingency Plan. ODEQ serves as a co-vice chair of the committee (as does a representative of each state) and provides leadership through the steering committee. ODEQ also co-chairs the Geographic Response Plan Workgroup and participates in the Science and Technology Workgroup, Logistics Workgroup and Public Affairs Workgroup. Significant activities for the Northwest Area Committee during the year include:

- Updating the In-Situ Burn policy and associated guidance;
- Updating the structure and format of the Northwest Area Contingency Plan; and
- Continued development of the Places of Refuge guidance and information tool.

GEOGRAPHIC RESPONSE PLAN DEVELOPMENT

ODEQ develops and maintains emergency response plans to cover the first 12 to 24 hours following a significant release to the coastal shorelines and bays, as well as major river systems. These plans identify resources to be protected and describe strategies to both protect these resources and to recover released oils. Response contractors use these plans to provide a coordinated initial response until a Unified Command can be implemented. ODEQ periodically updates the plans as information changes or new resource information becomes available. In 2010, ODEQ conducted the following activities regarding Geographic Response Plan development/maintenance:

- Prioritized and initiated an update cycle for the Lower and Middle Columbia River GRPs in partnership with the Washington Department of Ecology, the USCG and EPA;
- Verified Geographic Response Plan strategy locations and required boom lengths (for example, along the Columbia River in the Bachelor Island and Ridgefield Wildlife areas);
- Identified resources requiring protection, updated shoreline types and incorporated new data collected by other agencies/response partnerships as a part of updating the OR-Incident Response Information System;
- Created an updated GIS layer displaying footprints of all existing GRPs in Oregon; and
- Began discussions regarding creating a common GIS file structure and consistent mapping products among West Coast Geographic Response Plan-producing agencies (e.g., ODEQ, Washington Department of Ecology, California Department of Fish and Game, EPA, USCG and NOAA).

RESPONSE

DEQ responded to more than 30 Level 3 (most severe) incidents during the past year. A few of the response projects include:

The MV Transcenden Time

On March 18, 2011 the MV Transcenden Time released over 900 gallons of IFO 380 fuel oil while bunkering on the Willamette River near Portland. Most of the oil overflowed onto the deck and about 500 gallons were recovered using a vacuum truck. Additional oil was recovered using sorbents on deck. Some fuel did reach the Willamette River and on-water recovery operations were conducted.

Tank Trucks

Tank Trucks continue to be a source of challenging response efforts. Tank truck incidents make up the majority of our Type 3 responses.

Commercial Trucks

Commercial trucks, while not carrying as much volume as tank trucks, can represent environmental risks, as demonstrated by the incident depicted in the photo to the right along Klamath Lake. The truck spilled approximately 200 gallons of diesel fuel right at a fish habitat mitigation project.

Tank Truck incident

Commercial Truck incident

The MV Transcenden Time

The MV Transcenden Time

Barge Davy Crockett

ODEQ, the Washington Department of Ecology and the USCG have worked together since late January of 2011 to address pollution problems on the Columbia River caused by the barge Davy Crockett, which partially sank on the north side of the Columbia River between Vancouver and Camas, Washington. Oil released during an illegal salvage operation led to containment and response activities. The barge has been ballasted to the shoreline in order to remove oil and hazardous materials. The exact volume of oil onboard is still unknown and the barge has presented challenging safety and access problems. Responders have used on-water resources consisting of oil recovery barges and skimmer vessels since discovering the problem. Final plans for the barge are to dismantle it in place.

Barge Davy Crockett

Tug Adriatic Sea and Barge DBL 77

On March 2, 2011, ODEQ received notification that the tug Adriatic Sea was experiencing intermittent problems with one of its engines. The tug was transporting the barge DBL 77 from the Puget Sound to San Francisco with 80,000 barrels of gasoline-blend stock. K-Sea Transportation requested that the tug and barge be allowed to make port in Coos Bay and give the engine a thorough examination. Arrangements were made for a tug escort to meet the Adriatic Sea and Barge DBL 77 at the Coos Bay sea buoy along with a Coos Bay pilot. The Coos Bay Response Cooperative provided oil spill coverage.

March 11, 2011 Tsunami

The March 11, 2011 earthquake in Japan generated a tsunami that damaged Brookings Harbor in southern Oregon. Several vessels sunk in the commercial boat basin, where the USCG, ODEQ and private contractors undertook pollution response and salvage efforts. Most boats in the sport basin came through the incident with little damage, although seaworthy vessels needed to be moved to stable docks. At least six vessels were swept out to sea, with three eventually recovered. At least two boats ended up hard aground both north and south of the harbor entrance.

Abandoned and Derelict Vessels in Oregon

Since initial response activities for the Davy Crockett began, ODEQ is working with the USCG to identify and monitor other potentially abandoned and derelict vessels in Oregon waters. Abandoned vessels are those where the previous owner has relinquished ownership of the vessel; derelict vessels refer more generally to vessels in poor or failing conditions.

ODEQ has identified eight vessels of various size and class that could present pollution problems if not addressed. These ships pose risks due to their oil and hazardous materials on board and could also become a risk to navigation. One such vessel is the tug Manzanillo which broke free of its moorings and was found floating in the Columbia River. ODEQ is working with the Oregon Department of State Lands and the Oregon Marine Board to develop a plan of action for the tug. The USCG has put several vessels on its watch list to ensure that dismantling in place or unpermitted salvage operations do not take place.

OREGON EMERGENCY RESPONSE WEBSITE

For more information on the emergency response programs at DEQ, please go to: http://www.deq.state.or.us/lq/cu/emergency/index.htm

Tsunami damage at Brooking Harbor

Washington

THE SPILL PREVENTION, PREPAREDNESS AND RESPONSE PROGRAM OF THE WASHINGTON DEPARTMENT OF ECOLOGY

PROGRAM OVERVIEW

The mission of the Department of Ecology's Spill Prevention, Preparedness and Response Program is to protect Washington's environment and economy, as well as public health and safety, through a comprehensive spill prevention, preparedness, and response program. The Program focuses on the prevention of oil spills to Washington waters and land, as well as planning for and conducting an effective response to oil and hazardous substance spills whenever they occur. The Program carries out a broad scope of activities, including:

- Oil spill prevention actions including vessel and facility inspections, as well as overseeing state oil transfer pre-booming requirements;
- Oil spill contingency plan review and approval, oil spill contingency plan drills, participation in the Northwest Area Committee and development of geographic response plans;
- Acting as the state's lead organization for environmental emergency response. This work focuses on providing a rapid, aggressive and well coordinated response 24/7 to oil and hazardous materials spills statewide from our four regional and two smaller field offices;
- Leading the state oil spill Natural Resource Damage Assessment and restoration (NRDAR) efforts; and
- Working with the Washington Department of Fish and Wildlife in planning for and managing oiled wildlife care.

Change as a Constant

Environmental, technological and societal change appears to be accelerating around the globe and in Washington State. Our Spill Prevention, Preparedness and Response Program prides itself in being collaborative, action oriented and adaptable. Dale Jensen, Ecology's Spill Program Manager and Task Force member, believes that *"in this era of dynamic change, our program will continue to place a high value on listening to its stakeholders, paying close attention to lessons learned from spills and using this knowledge to ensure our program has a culture that values good communication, adaptive management, spill prevention and rapid response to environmental threats."*

PROGRAM GOALS

Strategic Planning

The 2004 ConocoPhillips Polar Texas oil spill in Dalco Passage near Tacoma and the Deepwater Horizon oil spill informed the program's strategic plan and the 2011 legislative legislation. Lessons learned from these spills were captured by the Department of Ecology. For example, lessons learned from the Polar Texas spill focused on improving oil assessment and recovery during the early hours of significant spills and in inclement weather. Lessons learned from the Deepwater Horizon spill focused on improving response management and oil containment/recovery systems. Improving early assessment of and oil recovery turn out to be two of the central issues addressed during the 2011 legislative session.

These recommendations are reflected in the program's 2009-2015 Strategic Plan and eventually 2011 legislation. The strategic plan focuses on five major strategic initiatives:

- Obtain the funding necessary for the Program to meet legislative and public expectations;
- Fulfill the promise of a strong collaborative partnership with the U.S. Coast Guard;
- Improve maritime safety to continue progress toward the legislature's zero spill goal;
- Conduct twenty-four-hour oil spill recovery operations; and
- Ensure the response to significant spills and incidents is rapid, aggressive and well-coordinated.

The Spills Program made excellent progress on these strategic initiatives during the past year. The 2011 legislature resolved the program's long-time funding problem by providing a permanent appropriation from the State Toxics Control Account to cover an on-going shortfall in oil spill funding. In addition to

resolving the funding problem, passage of Engrossed Second Substitute House Bill 1186 will ensure steady continuing progress toward instituting "twenty-four-hour oil spill recovery operations" and ensuring "the response to significant spills and incidents is rapid, aggressive and well coordinated."

To further our strategic goals, the program also worked with U.S. Senator Maria Cantwell during the 2009 and 2010 Congressional sessions to strengthen and refine oil spill provisions in H.R. 3619, the Coast Guard Authorization Act of 2010. Among other issues, the legislation included provisions to improve the safety of vessel oil transfer operations, required a study of the comparability of U.S. and Canadian standards, strengthened the Olympic Coast National Marine Sanctuary Area to be Avoided, improved coordination with tribal governments, extended the federal Higher Volume Port Area designation from Port Angeles to Neah Bay, and authorized Washington State to maintain tug escort standards for laden oil tankers. The Spills Program will continue to track and participate in implementation of this legislation.

THE DEEPWATER HORIZON OIL SPILL

On April 20, 2010, the offshore drilling unit *Deepwater Horizon* explosion, fire and subsequent sinking in the Gulf of Mexico led to the deaths of 11 people, a number of serious injuries and a catastrophic oil spill. The spill was the most challenging and complex the nation has ever mobilized[2]. During the international response to the Gulf spill, the Washington Spill Program offered and provided mutual aid to support the cleanup effort. The program also actively monitored the personnel, equipment and other resources that the state and private sector redirected to the response. Our goal was to provide as much mutual aid as possible without seriously compromising Washington's ability to muster an in-state response.

NEW LEGISLATION

During the 2011 legislative session, the Spills Program worked with a broad range of stakeholders and legislators to pass House bill 1186[3]. This landmark legislative package passed with strong bipartisan support. The bill addressed oil spill response planning standards, vessels of opportunity, volunteer coordination, joint large-scale drills, oil spill contingency plan approval, umbrella oil spill contingency plans, incident notification, Natural Resource Damage Compensation and other issues.

The legislation is effective on July 22, 2011 and sections 2 and 3 require Ecology to complete rulemaking by December 31, 2012. The bill affects operators of oil tankers, oil barges, cargo and passenger ships, umbrella oil spill contingency plan holders, entities spilling oil and the Department of Ecology. Vessel contingency plan holders are also required to provide the best achievable protection, *"to respond to a worst case spill and provide for continuous operation of oil spill response activities to the maximum extent practicable and without jeopardizing crew safety."* Section 3 requires the development of a "vessel of opportunity" spill response program.

Governor Christine Gregoire signed the oil spill legislation on the one-year anniversary of the catastrophic April 20, 2010, Deepwater Horizon oil spill in the Gulf of Mexico. The Governor's press release emphasized the importance of the legislation in the following statement: *"Our state is already recognized for having one of the strongest spill prevention and response programs in the nation," Gregoire said. "But the BP Deepwater Horizon disaster illustrates the importance of being as well prepared as possible for a major spill. This bill helps ensure that Washington gets the best tools and equipment to mount an aggressive, rapid and well coordinated response in the event of a major spill in Puget Sound and other waters of our state."*

SPILL PREVENTION ACCOMPLISHMENTS

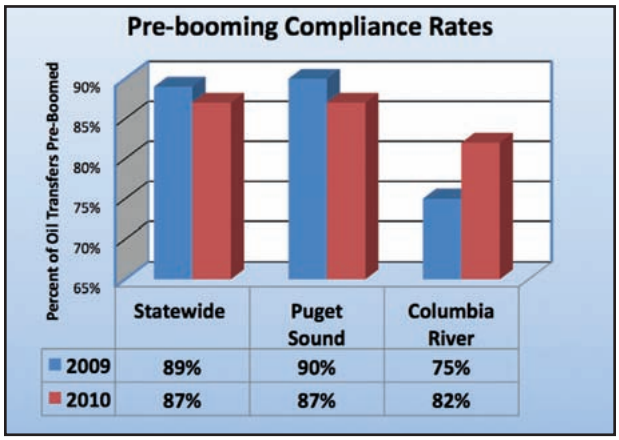
Pre-Booming Oil Transfers Protects State Waters

High-rate oil transfer operations occurring over water pose a high risk of oil spills. Washington State requires pre-booming of oil transfer operations in order to immediately contain oil should a spill occur. Analysis has shown that upwards of 80% of oil can

1 http://www.govtrack.us/congress/billtext.xpd?bill=h111-3619

2 Incident Specific Preparedness Review (ISPR) Final Action Memorandum from USCG Admiral R.J. Papp, Commandant dated March 18th, 2011.

3 See - http://apps.leg.wa.gov/documents/billdocs/2011-12/Pdf/Bills/Session%20Law%202011/1186-S2.SL.pdf



be recovered if boom is in the water versus only about 5% if the vessel is not pre-boomed.

Since inception of Washington's pre-booming requirements in 2007, industry has demonstrated excellent progress towards compliance. In 2008, only a year into implementation, almost 80% of all high rate transfers required to be pre-boomed throughout the state were pre-boomed. In 2009 and 2010 statewide compliance rates improved to 89% and 87% respectively.

These are good compliance rates considering the short time period that the rule has been in place and the great variability in weather and currents that often make pre-booming difficult or unsafe.

Measuring Performance of Oil Spill Prevention Efforts

Since 2007 the Prevention Section within the Spills Program has actively assessed performance to evaluate the program's use of available resources and to better target the highest risk vessels and oil transfers for our oil spill prevention efforts. One of our goals has been to increase the percentage of ships boarded. This has been accomplished by establishing a clear target and measuring our performance on a monthly basis. The percentage of boardings that include a compliance inspection has increased from 20% in 2008 to over 50% in early 2011. Compliance inspections provide the best method to achieving the following desired outcomes:

- Effectively assess cargo and passenger vessels' compliance with Washington rules;
- Reduce the risk of substandard vessels calling at Washington ports;
- Reduce the number and volume of oil spills to Washington waters from regulated vessels;
- Reduce or maintain low vessel incident rates; and
- Increase spill readiness by testing a vessel crew's ability to activate their response plan.

Emergency Response Tug at Neah Bay

Since 1999, the state-funded emergency response tug stationed at Neah Bay has provided an important safety net to prevent disabled ships and barges from grounding in the western Strait of Juan de Fuca or off the outer coast. In 2009, Governor Christine Gregoire signed legislation that shifted responsibility for the emergency response tug from the state to the maritime industry. During 2010 and 2011 vessel owners and operators updated their contingency plans and fulfilled their commitment to deploying the tug by having the tug on station as of July 1, 2010.

SPILL PREPAREDNESS ACCOMPLISHMENTS

Incident Management Team Qualification and Credentialing

During the past year, the program focused on developing an Incident Command System (ICS) qualification and credentialing program for the incident management team. The program is equivalent to FEMA's guidance, yet has adapted the content to the unique interests and authorities of the state. The Spill Program also revised the State-On-Scene Coordinator checklist, the incident typing system and provided program-wide training on ICS. In June 2011, the program will participate in a National Oil Spill Preparedness drill during which Program staff will demonstrate their ability to respond with the Coast Guard and EPA to an orphan spill scenario in waters shared with our Canadian partners.

Response Equipment Inspection and Verification

Ecology's goal is to inspect 100% of the dedicated response equipment by December 2013 – both publicly and privately owned equipment - in order to confirm its readiness. This verification is taking place through spills, drills, randomly scheduled inspections and during confirmation of preventative maintenance procedures.

Response Operating Environment, Plan Review and Drill Design

In 2010, agency budget cuts caused a number of shifts in the state preparedness program. All industry tabletop drills became self-certified by the planholders, rather than being evaluated by Ecology. In addition, Ecology also dramatically reduced the number of unannounced drills. Larger equipment deployment drills continue to be a primary focus of the Program, with a particular focus on the efficacy of response equipment in different operating environments. In 2010 and during the first quarter of 2011 Ecology approved eight oil spill contingency plans; four industry contingency plans have not received final approval.

Two enhanced skimming systems are staggered one behind the other: two vessels of opportunity are towing boom for a barge with a drum skimmer; and two more vessels of opportunity are towing boom for the MSRC response vessel Widegon.

Geographic Response Plans (GRPS)

Currently, there are over 1,200 GRP strategies covering all marine areas of Washington State and many inland locations. GRPs have been developed in Washington State since the mid-1990s to guide the response community during the first hours of an oil spill. They provide advance information on where sensitive natural, cultural, and certain economic resources are located as well as guidance on how the response community should place oil containment boom to minimize spilled oil's impact on those resources. GRPs describe the geographic area, shoreline countermeasures, resources at risk, and logistics.

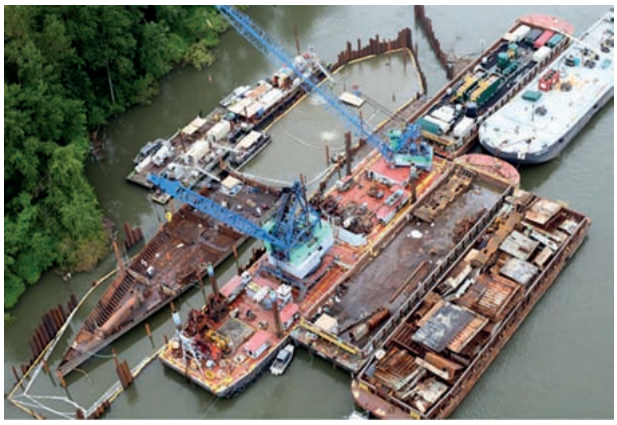
SPILL RESPONSE ACCOMPLISHMENTS

The Program's spill response goal is to embrace our responsibilities as Washington's representative during spills and incidents, and to ensure that these incidents receive a rapid, aggressive and well coordinated response.

Davy Crockett Oil Spill

The 431-foot *Davy Crockett* is a former U.S. Navy Liberty Ship that had been converted to a flat-deck barge. As with many aging vessels, ownership of the vessel changed several times throughout the years. The vessel was anchored illegally on the Columbia River, on Washington State owned aquatic lands, when it partially sank on the shoreline near Camas, Washington approximately three miles upstream of the Interstate 205 Bridge.

In April 2009, in response to an oil sheen from the leaking vessel and the instability of its moorings, the U.S. Coast Guard issued a Captain of the Port Order for removal of bulk oil, contaminated water and other hazardous materials. The order also required



Davy Crockett April 17, 2011

the vessel to be adequately secured to the shoreline to prevent it from becoming a hazard to navigation. The materials removed from the vessel included 2,200 gallons of a diesel/water mixture, 800 gallons of ballast water and 2,800 gallons of fuel oil.

On the morning of January 27, 2011 Ecology investigated reports from boaters of a large sheen on the Columbia River. Ecology spill responders found an oil sheen stretching nearly 9-miles downriver, and identified the Davy Crockett as the source. As of April 2011, major response activities for this incident have included:

- Immediately encircling the vessel with 3 layers of containment boom;
- Deploying work barges and anchors to stabilize the fractured vessel;
- Recovering oil from the water with oil skimmers and oil collection boom;
- Protecting downriver shoreline with adsorbent boom;
- Conducting a dive survey of the stable portion of the vessel;
- Positioning a 550,000 gallon oil/water storage barge and skimmer immediately downriver of the vessel to recover and store collected oil;
- Analyzing the oil for other potentially toxic components, which detected PCBs at a concentration of 3.4 parts per million; and
- Construction of a sheet-pile coffer dam around the vessel to perform vessel demolition and destruction.

As of June 6, 2011, over 1.7 million gallons of oily water has been removed and treated off-site; over 3 million pounds of debris has also been removed. The removal action is currently being funded by the Federal Oil Spill Liability Trust Fund and the Washington State Oil Spill Response Account. The U.S. Coast Guard has requested a $15.5 million dollar project ceiling. Ecology plans to recover state agency expenses from the federal fund. For more information, see: http://www.ecy.wa.gov/programs/spills/incidents/DavyCrockett/DavyCrockett.html.

Nestucca Barge 2010

On Wednesday, May 19, 2010 The Washington State Department of Ecology and the U.S. Coast Guard closely monitored a barge that broke loose from the tug *Miki Hana* owned by Sause Brothers. The tow line to the cargo barge Nestucca broke about seven miles off shore from the mouth of the Columbia River. The barge drifted north in rough weather, with winds at 30 knots and in 24 foot waves. The tug *Navaho* was dispatched and stood by to render assistance for two days until the *Miki Hana* regained its tow.

Burlington Northern Santa Fe (BNSF) Chambers Bay Train Derailment

On February 26, 2011, a northbound freight train derailed and sideswiped a southbound train, derailing 14 rail cars. Four of the derailed tank cars each contained 15,000 gallons of sodium hydroxide. Three of the tank cars ended up on the shore of Puget Sound and the fourth was on the bank beneath two damaged boxcars. Fortunately, only one of the tank cars leaked an estimated 50 gallons onto the beach before a response crew could plug and secure the leak. A Unified Command comprised of the Coast Guard, the Department of Ecology and BNSF managed the response to the derailment and removal of the tank cars from the shore. Cleanup of the impacted beach area involved removing standing liquid and neutralizing the remaining chemical in the sand.

The ConocoPhillips Refinery Spill

On October 27, 2010 an estimated 10,500 gallons of diesel fuel leaked from an underground pipeline at the ConocoPhillips Ferndale Refinery. The spill ran through ditches and into a storm water retention pond on refinery property. The pond collects storm water runoff from facility roadways and undeveloped wooded areas and drains directly to the Strait of Georgia; however, no diesel spilled into marine waters during the incident. Ecology issued an administrative order to ConocoPhillips requiring the refinery to:

- Review the incident to see where improvements to response and preparedness could be made;
- Review the contingency plan to determine if it should be revised;
- Retrain staff; and
- Participate in a spill readiness drill in the future.

Oil recovery effort at the refinery stormwater pond

Pettit Oil Truck Spill

On the morning of February 23, 2011, a Pettit Oil fuel truck-trailer overturned near milepost 167 on U.S. 101. Diesel fuel spilled from the trailer into a ditch, adjacent road shoulders, and some flowed underneath the highway into a creek and wetland. Contaminated soils on both sides of U.S. 101 were

removed and backfilled. Environmental contractors estimated that most of the fuel was recovered. The long term response will focus on water quality monitoring of Chalaat Creek, since its upper reach was impacted by the fuel spill. The creek supplies water to the Hoh Tribe fish hatchery, 2.5 miles downstream from the spill site. Pettit Oil and its contractors worked closely with the Hoh Tribe Natural Resources Department to ensure that their concerns were addressed during the response process. The Washington Department of Ecology and Jefferson County Public Health oversaw the cleanup.

Diesel spill from Pettit tank truck

NATURAL RESOURCE DAMAGE ASSESSMENT AND RESTORATION

Cooperative Planning

Ecology worked with the oil industry, natural resource agencies and the U.S. Navy to cooperatively develop three facility-based "Ephemeral Data Collection Plans" designed to facilitate the rapid initiation of the damage assessment process following a spill. Restoration plans were also developed for:

- Tesoro Port Angeles;
- the Tesoro Anacortes Refinery at March Point; and
- the U.S. Navy Manchester Fuel Depot.

Washington state (Ecology, WDFW and the Department of Natural Resources) and Federal and Tribal Natural Resource Trustees continue to oversee the implementation of several million dollars of habitat restoration projects for three major oil spill cases: the Puget Sound Energy Spill, Foss Maritime Spill and the Texaco Spills.

Salmon Creek, Jefferson County project to restore the estuary to a more natural state

Forage Fish Beach Restoration Funded with Texaco Oil Spill Settlement

In October 2010, the Skagit River System Cooperative completed the first phases of a beach restoration project designed to improve habitat for forage fish at the Fidalgo Bay Aquatic Reserve along March Point in Anacortes. Over 7600 cubic yards of new sand and pea gravel were placed along 2000 feet of intertidal beach to replace naturally occurring sediment that has been lost due to modifications made to the shoreline. Forage fish, a primary component of the marine food web, use shoreline sediment as spawning grounds and rearing habitat. This project was paid for with restoration settlement funds from a series of oil spills that occurred in Fidalgo Bay in the 1990's.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

The Washington Department of Fish and Wildlife (WDFW) Oil Spill Team receives funding through the State's Oil Spill Prevention Account and plays a strong supporting role in spill preparedness, response and damage assessment. As an integral part of the state's Spill Program, the mission of the WDFW Oil Spill Team (OST) is to *protect and restore fish and wildlife and their habitats from the impacts of oil spills.* The Department provides technical

expertise for spill response planning and plays a leading role in protecting and restoring fish, wildlife and their habitats from the impacts of oil spills. To accomplish this mission, OST planning, preparedness and response goals and activities are focused on four main, interrelated areas:

- Respond immediately and aggressively to oil spills to minimize impacts and to assess injuries to fish, wildlife, and their habitats;
- Ensure that the best possible and most appropriate response strategies are implemented to protect and minimize fish, wildlife and habitat impacts from oil spills;
- Manage oiled wildlife rescue and rehabilitation activities to minimize impacts to wildlife resources and ensure that proper equipment, personnel and response strategies are available to rescue and rehabilitate Washington's wildlife resources during oil spill response.
- Identify and quantify injuries to natural resources and ensure that fish, wildlife and habitats impacted by oil spills are fully restored.

In addition to participating in the projects described above, 2010 accomplishments included continued improvement of the Washington State GRPs and working closely with Ecology and other organizations to plan for and manage oiled wildlife care in the state. A second mobile oiled wildlife response unit was developed by the National Response Corporation Environmental Services (NRCES). The unit was designed to meet the rehabilitation needs of as many as 100 birds. There are now two similar mobile wildlife response units located in Washington State.

Significant advancements were also made in 2010 relative to Washington's ability to respond to oil spills involving killer whales. The best response option for minimizing killer whale impact is to haze (i.e., scare) them away from an oil spill. WDFW worked together with NOAA National Marine Fisheries Service to develop procedures that will allow responders to quickly determine if killer whales are present and then to implement hazing activities.

PROGRAM INFORMATION

For more information on the Washington Department of Ecology, please visit: www.ecy.wa.gov.

Ecology's Spill Prevention, Preparedness and Response Program website is: http://www.ecy.wa.gov/programs/spills/spills.html

Wildlife Branch at the SeaRiver Worst Case Oil Spill Drill

www.oilspilltaskforce.org