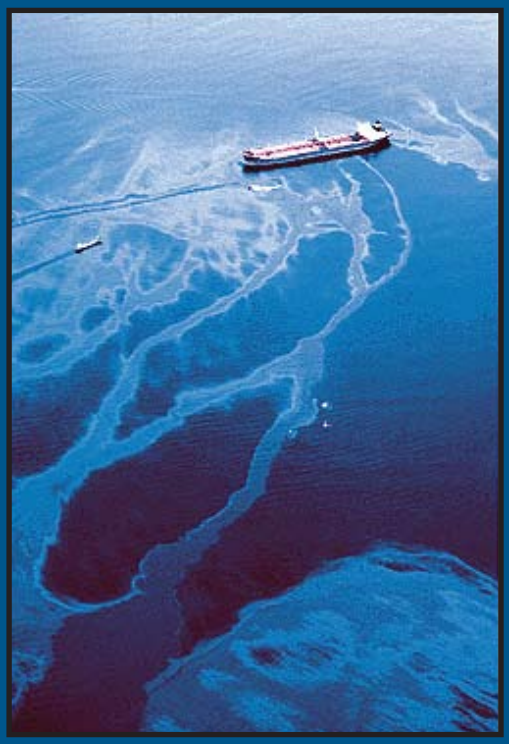

The Imperative to Maintain the Currently Utilized Dual Escort Vessel Marine Safety System for Double-Hulled Oil Laden Tankers in Prince William Sound, Alaska

BACKGROUND INFORMATION ON:

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TAB 1

Overview:
The Exxon Valdez Oil Spill and Response

- The Problem and the Solution

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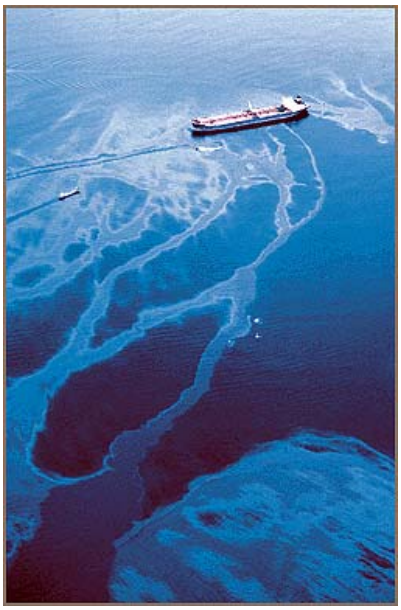
Overview: The Problem and the Solution



President George H.W. Bush described the *Exxon Valdez* oil spill as "the worst marine environmental disaster this nation has ever experienced." On March 24, 1989, the fully loaded oil tanker *Exxon Valdez* hit an underwater reef, rupturing the ship's hull and spilling some 11 million gallons of crude oil into the pristine waters of Prince William Sound, Alaska. The oil spill was caused by major, tragic human errors. The event also highlighted a broader problem in the U.S. oil transportation industry and with the public – complacency.

The Prince William Sound dual escort system for oil-laden tankers was established after the Exxon Valdez oil spill to provide a key layer of safety and prevention for tankers carrying crude oil from the terminus of the Trans-Alaska Pipeline in Valdez, Alaska to domestic and foreign ports and refineries.

The current dual escort vessel system for tankers is operated by the oil industry as described in the Prince William Sound Vessel Escort and Response Plan (VERP). Under the current system, at least two high-powered, state-of-the-art towing vessels escort all oil-laden tankers through Prince William Sound, ready to provide assistance to a tanker in trouble, before a spill can occur. The escort vessels serve as lookouts for dangerous conditions, are available to assist the tanker if it should run into problems, and can provide ready response in the event that an oil spill does occur.

The dual (two tug) escort system has been in place for nearly two decades; during that time, there have been no major oil tanker spills in Prince William Sound. The current dual tug escort system, required by the Oil Pollution Act of 1990 (OPA90), is a proven oil spill prevention system. OPA90 mandates dual tug escorts for all single-hull oil tankers. Therefore, the tug escort requirements will no longer apply after single-hull tankers are replaced by double-hull tankers. OPA90 does require tugs for oil spill response, and those requirements do not sunset. Without Congressional action to make dual tug escorts a permanent requirement, the continued use of tug escorts for double-hull tankers would hinge on voluntary compliance once the sunset provisions of OPA90 have taken effect. The sunset provisions could take effect as early as 2010, depending upon the makeup of the tanker fleet loading oil at the Valdez Marine Terminal.

Dual tug escorts provide a critically important safety measure for double-hull tankers. Double-hull tankers, in and of themselves, do not guarantee the prevention of another highly destructive oil spill. Even the newest double-hull tankers with redundant propulsion and steering systems are not indestructible. As evidenced by shipping accidents that continue to occur around the world each year, humans that operate oil tankers are not infallible. Double hulls can reduce the amount of oil lost once a spill occurs; however, improved technologies, redundant systems, and enhanced automation cannot eliminate oil spills caused by human errors, failure of major engineered systems, aberrant weather, or other unforeseen events. And, not all of the double-hull tankers operating in Prince William Sound are equipped with

the newer, redundant propulsion and steering systems, so they have an even narrower margin for error.

The dual tug escort system provides an irreplaceable component of oil spill prevention that cannot be peeled away without exposing the fragile, slowly recovering communities, fisheries, and ecosystems of Prince William Sound and the rest of the 1989 oil spill region to an increased risk of another catastrophic environmental insult, from which they may never recover. With the 20th anniversary of the Exxon Valdez oil spill (EVOS), in March 2009, the United States was reminded of the need to be ever vigilant in protecting the waters of Prince William Sound and the rest of the oil spill region through oil spill prevention. Helping to ensure that the dual tug escort system continues to protect Prince William Sound and the rest of the oil spill region is a responsibility of the Prince William Sound Regional Citizens' Advisory Council and is critical to the Council's mission of "citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers."

The Exxon Valdez oil spill provided an indelible reminder of the damage that marine oil spills can cause. The oil coated beaches, killed fish, birds, and other wildlife, injured fish and wildlife habitat, and sent local economies into a tailspin. The oil spill ruined lives and livelihoods, and interrupted the transport of a key source of oil in the United States. The oil spill seriously damaged fisheries, subsistence, tourism, and recreation and devastated the many Alaska Native and non-Native communities. Oiled populations of birds, otter, fish and shellfish species have taken years to recover. Some still have not come back.

The Exxon Valdez oil spill region cannot tolerate another major oil spill. Yet, the critical safety and prevention system that has been in place for the last twenty years is in danger of being reduced or eliminated. In order ensure that the Prince William Sound dual escort vessel system remains in place beyond 2010, Congress needs to amend the Oil Pollution Act of 1990. In October 2009, the House of Representatives passed H.R. 3619, the Coast Guard Authorization Bill, which includes a provision to amend the Oil Pollution Act of 1990 to require that ***all laden oil tankers***, including those with double hulls, be accompanied by two escort vessels through Prince William Sound.

Now, the Senate must also take action. The bill S.1041 was introduced by U.S. Senators Lisa Murkowski and Mark Begich on May 14, 2009 to ensure that dual escort vessels will *continue* to accompany all oil-laden tankers, including double-hull tankers, in Prince William Sound. The passage of S. 1041 is essential to maintaining the dual escort marine vessel safety system currently utilized in Prince William Sound.

This briefing booklet provides background information on how the dual escort vessel system operates and why its continuation is so critically important to protecting Alaska's people, its natural resources, and the continued safe transport of its oil supply, as well as the rest of our nation, from the debilitating effects of another catastrophic oil spill.

TAB 2

Existing Dual Escort Vessel System in Prince William Sound

- Origins of the Present System
- Key Escort System Improvements since 1989
- Map of Northern Sound, Central Sound, Hinchinbrook Entrance
- Operating Procedures
- Escort Vessel Functions and Capabilities

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Existing Dual Escort Vessel System in Prince William Sound

Origins of the Present System

Within one year after the worst oil spill in U.S. history, Congress enacted the Oil Pollution Act of 1990, "OPA 90" (PL 101-380), to improve our nation's capabilities for oil spill prevention and response. The Oil Pollution Act amended the Clean Water Act and created a national framework for oil spill preparedness, mitigation, and clean-up.

OPA 90 included several provisions that were specific to Prince William Sound, Alaska, where the *Exxon Valdez* oil spill had served as a national wake-up call about the risks of oil tanker operations. One of the most significant oil spill prevention measures in the Act was the requirement that all single-hull, laden oil tankers traveling through Prince William Sound be accompanied by two escort vessels (See statutory provision at Tab 6).

When the first laden oil tanker sailed from the Valdez Marine Terminal in 1977, it was escorted by a single tug until it had traveled through Valdez Narrows. This system remained in place until the *Exxon Valdez* oil spill spurred the Coast Guard to require that the escort system be enhanced to help prevent future accidents. As the nation witnessed in 1989, there are no good remedies once oil has spilled in the marine environment. So ***prevention*** must be the priority.

Key Escort System Improvements Since 1989

The currently utilized Prince William Sound dual escort system has evolved over the past two decades to become the cornerstone of oil spill prevention and preparedness in Prince William Sound. It was developed through efforts of industry, the U.S. Coast Guard, the State of Alaska, and the Prince William Sound Regional Citizens' Advisory Council. The currently utilized tanker escort system improves on the pre-*Exxon Valdez* single tug escort system in many ways, including these four:

1. At least two vessels now escort each single ***and*** double-hull oil-laden tanker.

2. New and better escort vessels – tugs and oil spill response vessels – have been custom built for the Prince William Sound trade.

3. Procedures have been improved to increase the odds of saving a tanker in trouble.

4. The escort path now extends through Prince William Sound out to Hinchinbrook Entrance (and a tug is on stand-by until the tanker has traveled 17 miles out to sea).

The Vessel Escort and Response Plan (VERP), prepared by industry, sets out operating procedures for the Prince William Sound Escort Vessel System. The VERP divides the Sound into three areas of operation: (1) Northern Sound Operating Area, (2) Central Sound Operating Area, and (3) Hinchinbrook entrance. These zones are shown on the map on the following page.

Escort Vessel Functions and Capabilities

At the heart of the Prince William Sound Tanker Escort System is the fleet of high technology prevention and response tugs and enhanced tractor tugs that function as escort vessels. Thanks to years of study and work by industry, government, and stakeholder groups, and considerable investment by the shipping industry, this safety and oil spill prevention system is considered to be among the best in the world. The two high-powered tugs that escort each laden tanker perform several important functions:

- The escort vessels monitor conditions in the Sound and alert the tanker of any potential problems or dangers.

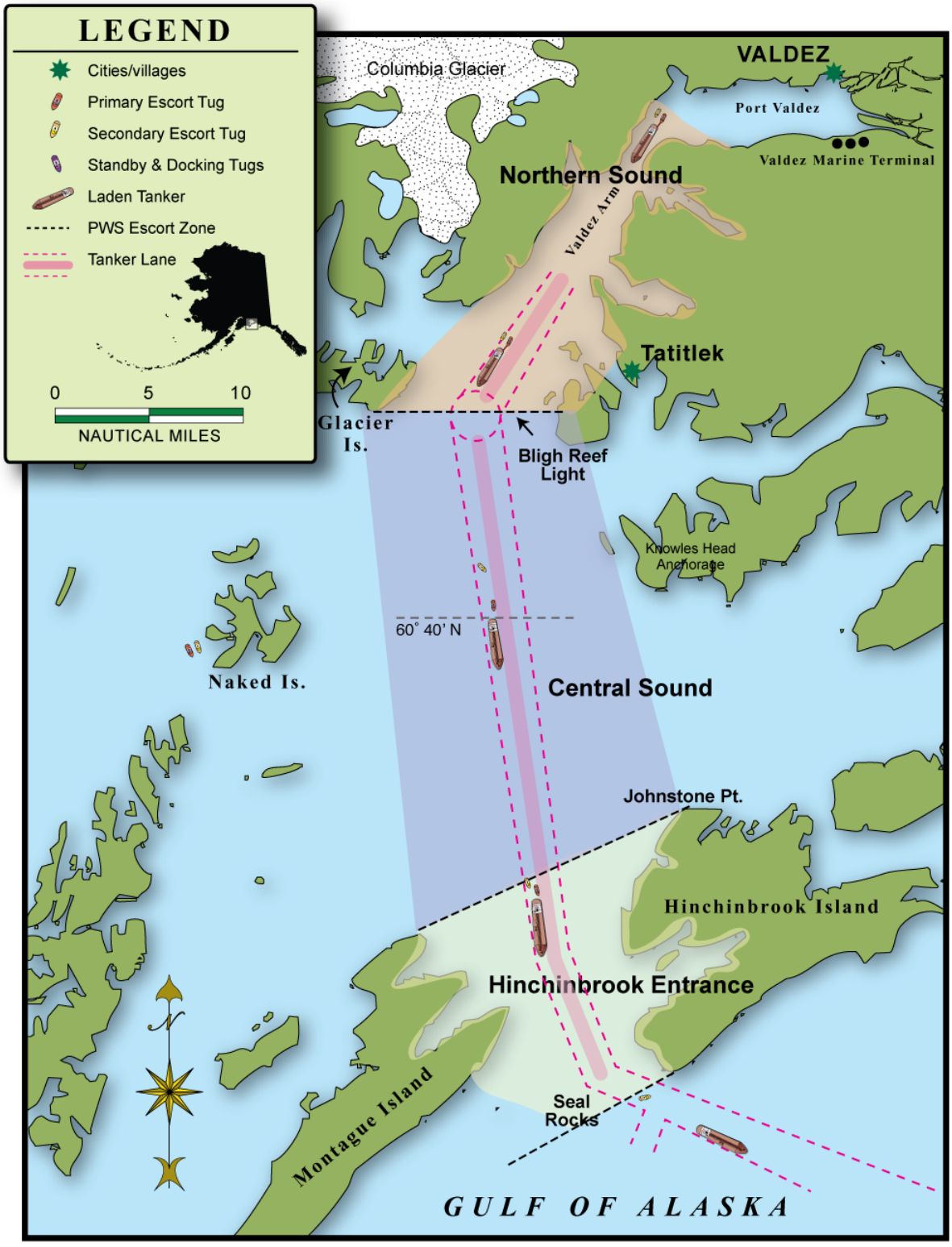
- The escort vessels are available to provide immediate assistance to a tanker should it experience any problems with navigational or safety systems.

- The escort vessels are capable of assisting a large tanker in distress under a range of adverse conditions and possible scenarios.

- Should an incident occur, the escort vessels provide initial oil spill ready response capabilities that may help to contain a spill and reduce environmental damages. The tugs can also be used to tow oil spill response barges, which have been strategically placed at locations throughout Prince William Sound.

- All of the escort vessels have significant firefighting capabilities that can be used to suppress a shipboard fire.

Map of Northern Sound, Central Sound, and Hinchinbrook Entrance Operating Areas

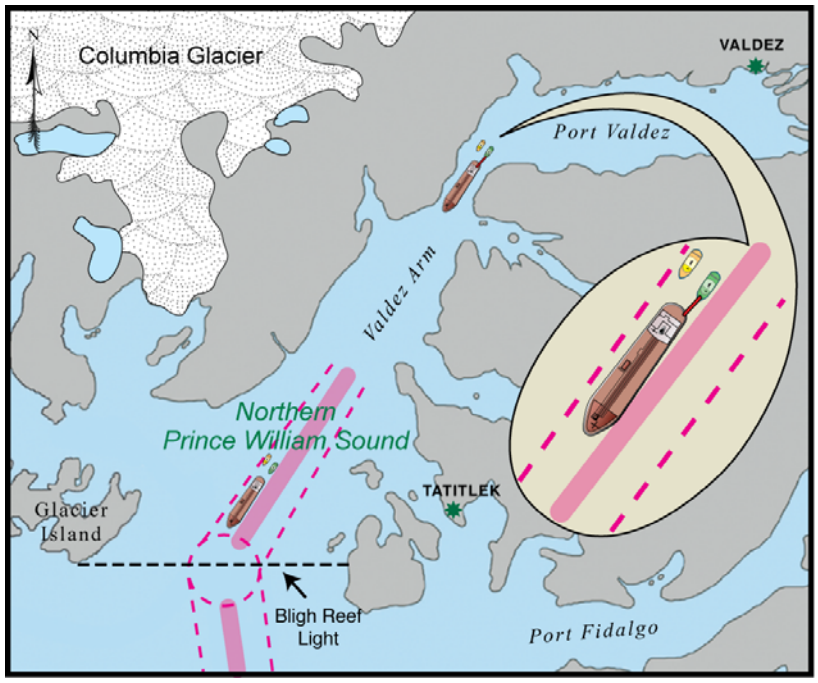


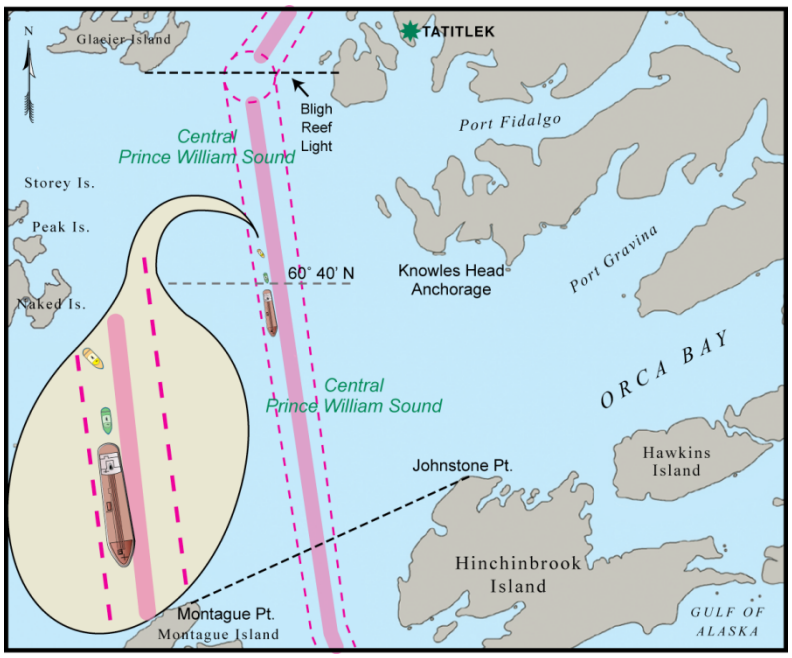
This illustration depicts a single tanker passage, with dual escorts, through the three operating areas of the Sound.

Operating Procedures

The VERP calls for two escort vessels to accompany all oil--laden tankers from the Valdez Marine Terminal out to Hinchinbrook Entrance. The configuration and type of escort vessels differs in each of the three Operating Areas, based on the operating environment and the navigational safety risks.

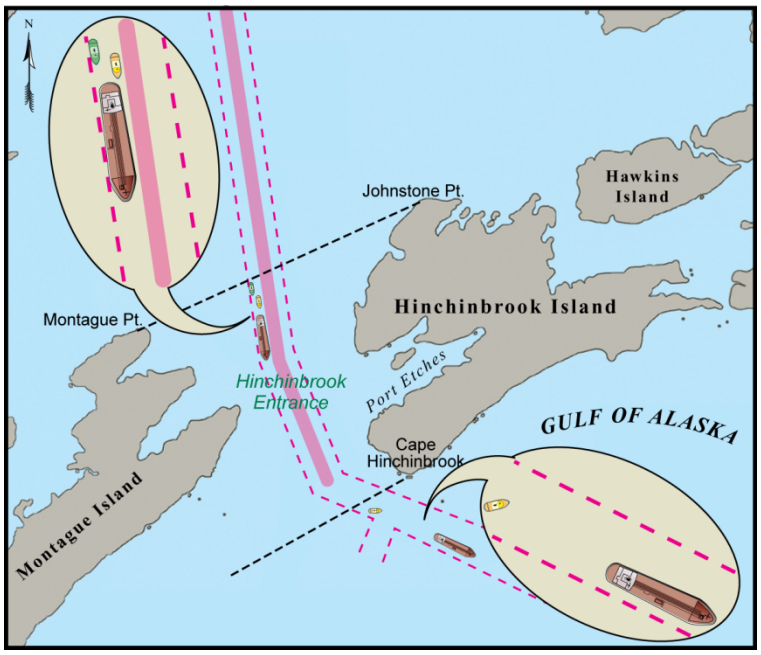
Northern Sound Operating Area of Prince William Sound includes the Valdez Marine Terminal, Valdez Narrows, and Valdez Arm, and extends out to Bligh Reef. Two tugs escort the tanker through the Northern Sound Operating Area. From the Valdez Marine Terminal through Valdez Arm to a point just past Buoy 9, a primary tug is tethered to the tanker. A secondary tug remains within ¼ nautical mile, except when ice scouting. The Valdez Narrows is a special navigation zone where only one-way tanker traffic is allowed.





Central Sound Operating Area of Prince William Sound starts at Bligh Reef and continues to Hinchinbrook Entrance Area. No tugs are tethered to the tanker in this area. The primary tug remains within ¼ nautical mile of the tanker. A second tug acts as a sentinel, typically dispatched from Naked Island, Port Etches, or the Valdez Marine Terminal, and must be underway and ready to assist the tanker, should the need arise

Hinchinbrook Entrance Operating Area of Prince William Sound starts at a point defined by a line drawn through Montague Point and Johnstone Point. Both the primary and secondary tugs remain within ¼ nautical mile of the tanker through the entire Hinchinbrook Entrance Operating Area. As the tanker exits the Hinchinbrook Area and heads into the Gulf of Alaska, one sentinel tug remains at Cape Hinchinbrook until the tanker is 17 nautical miles seaward from Cape Hinchinbrook.



All inbound (un-laden or empty) tankers are escorted by one sentinel vessel. All tankers, laden and empty, must follow a vessel traffic scheme and must adhere to speed limits within Prince William Sound. Laden tankers may not exceed the maximum speed at which the escort vessels can be reasonably expected to safely bring the tanker under control.

The dual escort practice has proven its prevention and safety value over the last twenty years. Yet, from time to time a few industry representatives have questioned whether the presence of two escort vessels in the Valdez Narrows and may create "congestion." It has been suggested that a scenario might occur where both tugs could become simultaneously incapacitated and therefore they might make it more difficult for the tanker to safely navigate through these narrow channels. This is extremely far-fetched. It is much more likely that the presence of a second tug would provide an ***additional*** safety measure in the instance that one of the tugs or the tanker suffered a casualty – the second tug would be there to render assistance until additional response vessels could arrive on-scene. The two-tug system does not create crowding or congestion; it enhances safety by providing an additional layer of safety by ensuring that two tugs are available to provide immediate assistance in those areas where the margin for error is slim and the need for ready response is critical.

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TAB 3

Need for Dual Escort Vessels

- Reasons to Retain Dual Escort Vessel System
- Prince William Sound Weather Conditions
- Escorts as Ice Scouts
- Examples of Tanker Assists by Escort Vessels
- Prince William Sound Oil Spill Response Gap
- Oil Spill Prevention is a Reasonable and Prudent Investment

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Need for Dual Escort Vessels

Reasons to Retain the Dual Escort Vessel System

To the citizens and stakeholders in the Prince William Sound and larger oil spill region, there is no question that the dual escort vessel system is a proven safety system that must remain in effect for ***all*** laden oil tankers – including those with double hulls. Here are just a few of the reasons for keeping this dual escort vessel system in place:

- A laden double-hull oil tanker may carry 50 million gallons or more of crude oil onboard. This is more than ***four times*** the amount of oil spilled by the *Exxon Valdez*. And the trend has been to continue to build larger ships with additional oil capacity.

- The weather conditions and navigational challenges within Prince William Sound leave little margin for error if a tanker experiences a loss of steering or propulsion, or another emergency.

- When needed, escort vessels act as Ice Scouts, reporting back to the tanker on ice conditions and potential hazards.

- The Prince William Sound Dual Escort Vessel System is already in place, with robust operating procedures and a proven track record of preventing oil spills and accidents.

- Studies have shown that the harsh environmental conditions in Prince William Sound make oil spill response or clean-up difficult and at times potentially ineffective, especially during winter months. The key to protecting not only Prince William Sound but the entire *Exxon Valdez* oil spill region – fish and wildlife, habitat, people, their livelihoods, and our shared national interest in maintaining uninterrupted oil transportation – is to ***prevent*** oil spills from occurring at all.

- The cost of operating the extra escort vessel for the Prince William Sound dual escort vessel system (funded by the oil industry) is extremely small in comparison to the extraordinary damages that an oil spill may cause and the staggering costs associated with cleaning up and restoring an area that has been impacted by an oil spill.

- In many respects, double hulls are a major improvement over single hulls for oil tankers, but double hulls, in and of themselves, are not a guarantee against accidents that can cause great harm.

Prince William Sound Weather Conditions

Prince William Sound can be a harsh, dynamic, and unforgiving operating environment, especially for a laden tanker navigating the narrow passages, icebergs, and rocky shoals within the Sound.

In some areas of the Sound, winter storms may produce wave heights in excess of 30 feet. Wind speeds may approach 100 miles per hour. "Williwaw" winds and "barrier jets" can create sudden, unpredicted gusts in excess of 100 miles per hour, which means that even with precautions in place to limit tanker movements during periods of rough weather, isolated and unpredictable wind phenomena can still cause serious problems for an oil-laden tanker.

Escorts as Ice Scouts

The two-tug escort system has been configured so that one of the escorts can act as an Ice Scout during times when sea ice and icebergs may be present in the vessel traffic lanes.

Tanker navigating through icebergs in Prince William Sound.

Sea ice in recent years has been present in Prince William Sound throughout the entire year. However, the most hazardous ice conditions occur from March through May, when the winter ice begins to melt and large icebergs calve off from the glaciers. The use of Ice Scouts reduces the risk of tanker collisions or accidents by providing immediate and timely information to the tanker about the ice conditions, so that the tanker can steer clear of those hazards. The Ice Scouts also provide updates on local ice conditions to the Coast Guard.

Examples of Tanker Assists by Escort Vessels

There have been a number of instances when Prince William Sound escort vessels have successfully provided assistance to tankers in distress. Here are several examples:

- The tanker *Polar Enterprise* experienced an engineering casualty while making its approach to the Valdez Marine Terminal. An emergency fuel shut-off valve malfunction caused the port main engine to stall. Two escorts were already alongside the vessel at the time of the casualty, and the escorts were able to provide the necessary assistance. (April 20, 2009)

- The tanker *Kenai* suffered an engineering casualty to its main propulsion system. The vessel's master requested escort vessel assistance prior to shutting down the vessel's main engines. (October 10, 2002)

- The tanker *Kenai* experienced a casualty to its steering system and drifted to within 100 yards of Middle Rock in Valdez Narrows. The vessel was towed back on course by an escort vessel. (October 20, 1992)

- The tanker *Exxon North Slope* experienced an engineering casualty (shaft vibration) while departing Prince William Sound. The vessel radioed for escort assistance and returned under escort to Knowles Head anchorage. (March 4, 1992)

- The tanker *Arco Prudhoe Bay* experienced a gyrocompass casualty in Port Valdez. The vessel was escorted to the container terminal for repairs. (November 14, 1990)

- The tanker *Atigun Pass* experienced a complete engineering casualty near Bligh Reef. The escort tug held the vessel in the shipping lanes until the engineering casualty was corrected. (September 20, 1989)

Prince William Sound Oil Spill Response Gap

Technological advances in oil spill response systems have contributed to more proficient oil spill response operations. Yet, there are still times when existing technologies may not be able to operate, because of the limitations of environmental conditions. The term "***response gap***" refers to the period of time during which activities that cause an oil spill are conducted (for example, tanker transits), ***while conditions would preclude the safe or effective deployment of oil spill response systems.***

A response gap analysis was recently completed for two points on the Prince William Sound tanker transit route. Data sets on wind, sea state, temperature, and visibility were built using weather buoy observations from the past five years. The operating limits of the mechanical oil spill response equipment in use in the region were estimated based on published literature, manufacturer ratings, and best professional judgment. These limits were then applied to the historical data sets in three categories – response possible, response impaired, and response impossible. Limiting factors were considered both in terms of independent and cumulative impacts. When two or more factors existed to make a response impaired, then response was considered impossible for that period of time.

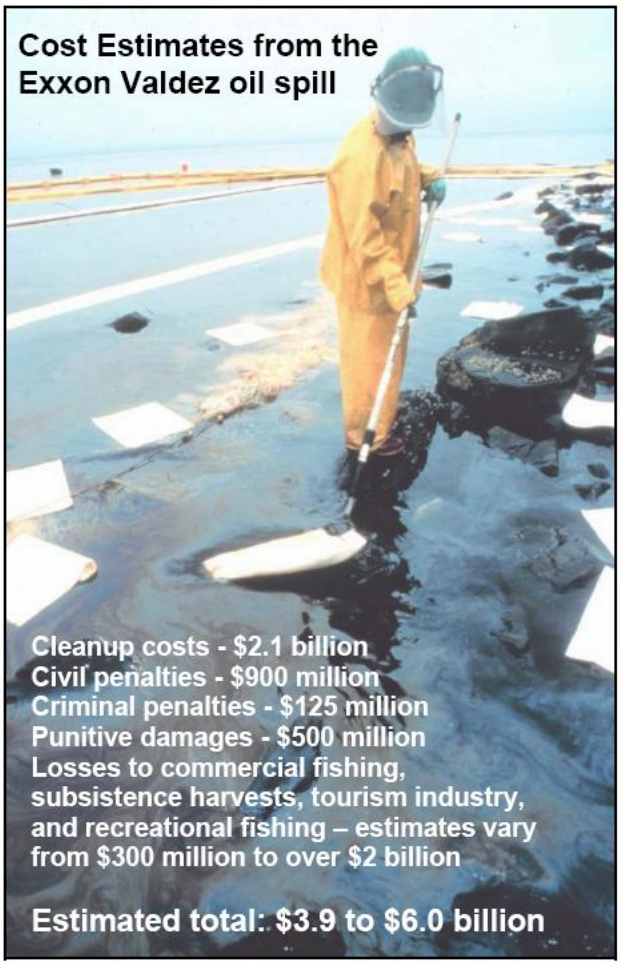
The Prince William Sound response gap analysis found that a response gap – during which no oil spill response activities would be safe or feasible – ***existed in parts of the Sound 38% of the time on average. During the winter season, the response gap existed 65% of the time at one location.***

This means that there are significant time periods during which laden tankers are moving oil through Prince William Sound under conditions where, if a spill should occur, existing technologies would not be able to effectively contain or clean up the oil. This gap underscores the need for dual escort vessels, as they provide a critical prevention function during times when spill response is not feasible.

The response gap analysis ***did not*** consider ice conditions, which could exacerbate the response gap in areas where sea ice is present, because it is extremely challenging to clean up an oil spill in the presence of sea ice.

Oil Spill Prevention is a Reasonable and Prudent Investment

Based on estimates published by the *Exxon Valdez* Oil Spill Trustee Council, the 1989 oil spill cost well over 3 billion dollars in cleanup costs, damages, and civil and criminal penalties. Losses to commercial fishing, tourism, subsistence use, and sports fishing are much harder to estimate, but were significant. Add in punitive damages along with interest and the total cost lies somewhere between $3.9 and $6.0 billion. The bottom line is that oil spills are extraordinarily expensive, and the monetary costs are only one aspect of this expense.



There are ongoing costs associated with oil spill planning and response that will continue as tankers are used to transport oil – regardless of whether those tankers are single- or double-hull. In light of these ongoing oil spill prevention and response costs, and in comparison with the price tag for another major oil spill, the incremental costs associated with maintaining the dual escort vessel system are minimal. In fact, the Prince William Sound dual escort vessel system is probably the least costly, and most effective, insurance available to prevent future spills in the Exxon Valdez oil spill region.

TAB 4

Escort Vessels Add to Safety of Single and Double-Hulled Vessels

- Double Hull Design Improves Safety but Isn't a Panacea for Oil Spills from Tankers
- Double Hull Structural and Design Problems
- Increased Corrosion of Double-Hulled Vessels
- Oil Spills and Accident Trends for Single and Double-Hulled Tankers
- Double Hulls Don't Prevent Human-Caused Oil Spills
- Red Herring: Any Call for Another Risk Assessment in Prince William Sound

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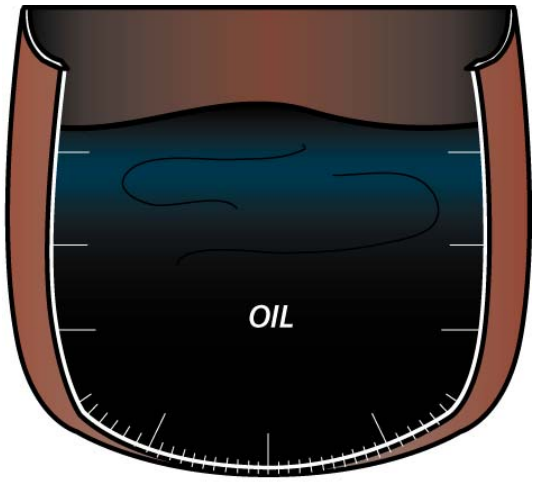
Escort Vessels Add to Safety of Single and Double-hull Tankers

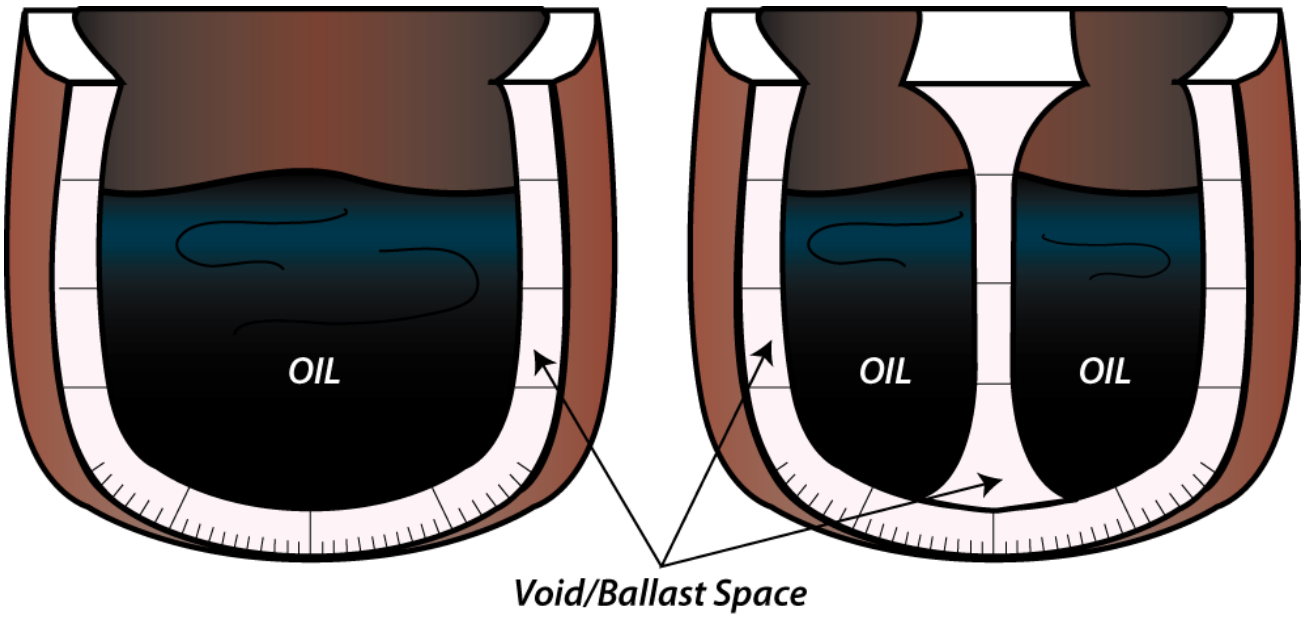
Double-Hull Design Improves Safety But Isn't a Panacea for Oil Spills from Tankers

Since the *Exxon Valdez* oil spill, many nations, including the U.S., have enacted policies that require all new oil tankers to be constructed with ***double hulls.*** In the U.S., the Oil Pollution Act of 1990 sets out a schedule for the tanker and tank barge fleet to gradually phase out all single-hull vessels and replace them with double-hull vessels. Phase-in schedules vary by vessel type and location, but according to industry estimates, the Alaska tanker trade could be 100% double-hull by as early as 2010, and no later than 2012.



A single-hulled tanker carries oil directly within the hull structure.

A single-hull tanker carries oil directly within the hull structure, while a double-hull tanker has separate tanks within the hull structure. In a double-hull tanker, the cargo space that carries oil is surrounded by a ballast water space, which provides a buffer between the oil storage container and the outer hull. In order for a double-hull vessel to spill oil from its containers, both the outer and inner hulls must be punctured or damaged.



A double-hulled tanker has one or more tanks within the hull; there is a space between the tank wall (inner hull) and the ship's hull.

A double-hull design may provide an additional safety benefit over a single-hull design during certain types of accidents, because with double hulls there are two layers of enclosures that must be punctured before oil can be released into the environment. But double hulls alone cannot prevent gigantic oil spills.

In August 1989, the Coast Guard testified to Congress that double hulls on the Exxon Valdez would have reduced the size of the spill by 60 percent at most, and perhaps by only 25 percent. Even in the most optimistic case—a 60 percent reduction—double hulls would have allowed 4.4 million gallons of oil to escape into Prince William Sound, still a catastrophic spill. A 25 percent reduction would have meant an even bigger release of 8.3 million gallons of oil.

There are both pros and cons associated with double-hull tanker designs:

- Double-hull tankers may spill less oil than single-hull tankers during incidents where the vessel runs aground at low speeds.
- Double-hull tankers are typically ***less effective*** at preventing or minimizing oil spills that occur during high-speed groundings or during collisions.
- Double-hull tankers have no added prevention value for oil spills that occur during transfer or loading operations.
- The configuration of the tanks within a double-hull tanker is an important factor in determining how much oil would spill during a hull breach.

Double-Hull Structural and Design Problems

While double hulls may reduce the amount of oil spilled from a tanker, there are aspects of double-hull design, construction, operations, and maintenance that may actually ***increase*** their risk of involvement in an accident or oil spill. The complex design and structure of double-hull tankers can make them more susceptible to maintenance and operations problems. Double-hull tankers can be prone to catastrophic structural failures, particularly if they are not maintained and operated to regulated standards.

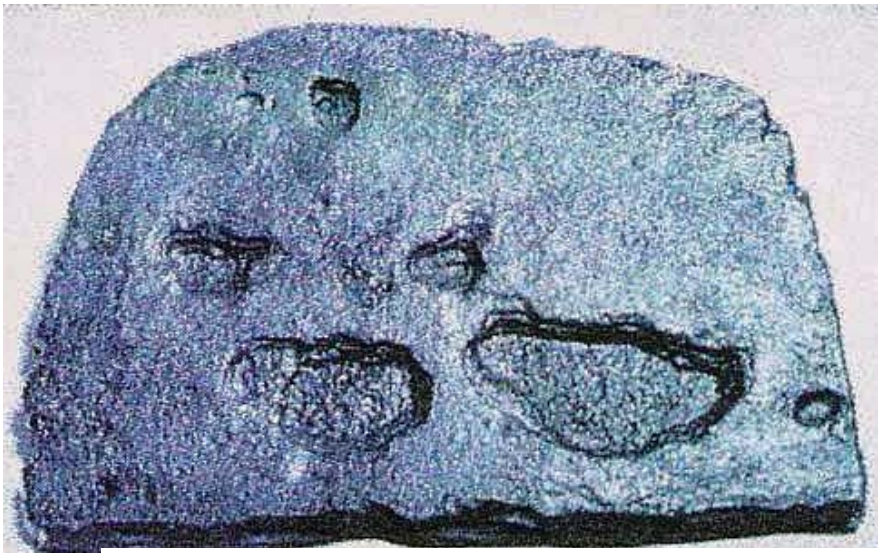
A 1998 National Research Council report highlighted some of the stability, structural, and safety concerns for double-hull tankers. Because of their design and construction, double-hull tankers may operate with global stress levels ***30% higher than single-hull vessels***. These higher stresses ***increase the risk*** of buckling failure, and this risk increases over the life of the vessel because of corresponding reductions in plate thickness caused by corrosion. The higher stresses can also increase the likelihood of developing small fatigue cracks. Fatigue cracks, which may occur in all types of vessels, can propagate over time and if no action is taken (repairs, etc.), then a major structural failure may occur.

The Center for Tankship Excellence, which compiles data on oil spills from tankers and analyzes this data for trends in causality, reports that hull structural failure is responsible for the majority of oil spilled during tanker casualties. For the Alaska Class double-hull tankers, fatigue cracks and fractures have been observed in deck plate covers, anchors, and mooring bits.

Increased Corrosion of Double-hull Vessels

A double-hull tanker may be subject to accelerated corrosion in the space between the hulls. This space is used to carry ballast water, typically seawater, that stabilizes the tanker during trips when the cargo tanks are empty. When these ballast spaces are empty, condensation may also form. In any type of vessel, sea water or condensation against bare metal is corrosive. To manage this type of corrosion, the space between the hulls is covered with a protective coating. This coating minimizes corrosion as long as it stays intact, but as it ages, it may chip or fail and allow for corrosion to occur.

New International Maritime Organization (IMO) performance standards for ballast tank coating went into effect in 2008; however, the improper tank coating may continue to cause corrosion in all vessels. Consequently, the ballast space in a double-hull tanker requires timely inspection for coating failures and timely repair as indicated by the inspection.



Steel plating taken from a cargo tank in double-hulled tanker showing corrosion caused by microbes.

Oil Spill and Accident Trends for Single and Double-hull Tankers

Double hulls are not an absolute prevention measure because they cannot protect against spillage under all circumstances…nothing can. While double hulls can reduce the severity of an oil spill, they cannot interrupt the chain of events that may cause the accident to occur in the first place.

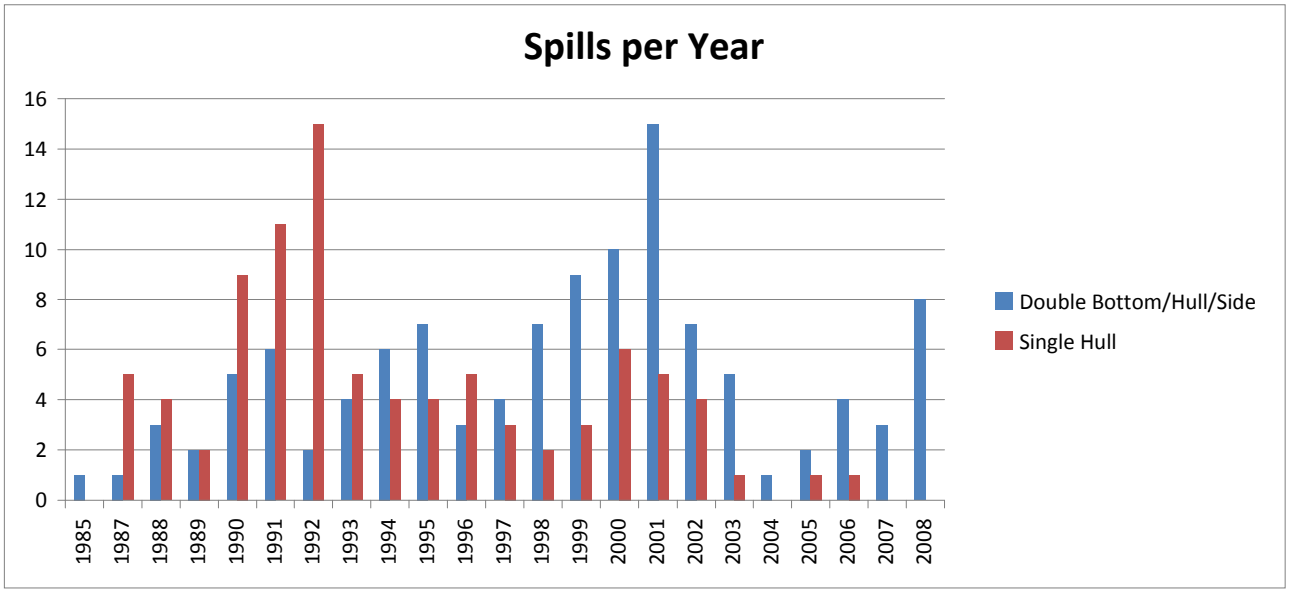
Several factors may actually ***increase*** the likelihood that a double-hull tanker will experience problems that could lead to an accident or oil spill:

- Double-hull tankers are more susceptible to hull fatigue, corrosion, stability issues, and a range of other design flaws.

- Because of their complex design and structure, double-hull tankers are potentially more susceptible to problems associated with poor maintenance and operation.

Undetected corrosion caused one of the more spectacular structural failures of a ***double-hulled*** tanker when the Greek tanker *Kirki* lost its bow and caught fire off the coast of Western Australia in 1991, spilling about 5.4 million gallons of crude oil.

To help better understand the relationship between single and double-hull configurations and tanker accidents, a review of the State of Washington's tanker incident database was conducted. The review shows that the proportionate number of oil spills by year from single-hull vs. double-hull vessels has changed over time. Until 1997, significantly more single-hull tankers spilled oil in Washington than double-hull tankers. During the past ten years (since 1999), double-hull vessels accounted for more spills each year than single-hull vessels. Obviously, this shift reflects, to a significant degree, the phase-out of single-hull tankers in U.S. waters and the shift toward a predominantly double-hull fleet. The highest number of oil spills from double-hull tankers in any spill year (15 spills in 2001) is equal to the highest number of spills from single-hull tankers in a single year (15 spills in 1992).



Double Hulls Don't Prevent Human-Caused Oil Spills

While structural, design, and corrosion can cause tanker accidents and oil spills, oil spills are not caused by equipment failures alone. Often, the people or organizations operating and managing the equipment are at fault. Human factors – either individual errors or organizational failures – ***cause an estimated 80% of oil spills and marine accidents.***

A 1998 National Research Council study that considers the double-hull requirements in the Oil Pollution Act (OPA 90) notes that the transition to a double-hull oil tanker fleet ***does not erase the need for prevention programs that address human factors.*** When human error causes an accident or mishap, safety equipment such as double hulls may reduce the amount of oil that spills, ***but it will not interrupt the chain of events that cause the accident in the first place.*** The major protection afforded by double hulls occurs in a scenario where a grounding or collision has already occurred, and double hulls would be expected to prevent oil from spilling or reduce the size of the spill. Human factors interventions work to prevent accidents and oil spills much earlier in the accident timeline – by preventing the critical failure or series of events that lead to the grounding or collision in the first place.

The study of human factors considers how human characteristics and behaviors are directly linked with the functioning of the technology people design, build, maintain, and operate. The human-technology relationship works in both directions, though. Not only do humans impact the way technology functions, but technology can also influence human decisions and actions.

As the vessels that transport oil become increasingly reliant on engineered systems and automated technologies, humans that operate these systems are subjected to new challenges that ***may actually increase accident risks.*** While accident probabilities with a technological basis can often be reduced through engineering, accidents that involve human-technology interactions are much more difficult to address and can never be completely eliminated.

Given the complex nature of human-technology interactions, and the potential for new tanker designs and technologies to feed into the potential for human error, additional safety measures such as dual escort vessels provide an obvious benefit in that they may be able to provide assistance before the tanker experiences a major casualty. This is likely the closest one can get to achieving a "fail-safe" system.

Red Herring: Any Call for Another Risk Assessment in Prince William Sound

A credible risk assessment involves an objective evaluation of risk in which assumptions and uncertainties are clearly considered and presented. When properly conducted, using scientifically valid methods and credible data sets, risk assessments can shed light on the inherent risks within a given system and can provide insight into the types of risk interventions that would best reduce that risk.

Part of the difficulty in designing and conducting a risk assessment is linked to the fact that both of the factors by which risk is measured – potential loss and probability of

occurrence – can be extremely difficult to calculate and often times these risks simply cannot be accurately quantified. The chance of error in the measurement of these two concepts is significant and well-recognized.

A quantitative risk assessment was conducted in Prince William Sound during the mid-1990s, but the resulting report was extremely polarizing and was harshly criticized for both its methods and its results.

Within the Prince William Sound tanker system, the oil spill risks are already well understood. Another catastrophic oil spill could occur. Thanks to the hard work of industry, regulators, and citizen oversight, a sophisticated safety improvement program has been operating with good success for twenty years. As the transition to a double-hull tanker fleet nears completion, a few from industry have sought another risk assessment to determine whether the dual escort vessel system should be maintained for a double-hull tanker fleet. It would be ill-advised to conduct an unnecessary study for the purpose of justifying the reduction or elimination of the proven dual escort vessel system in Prince William Sound.

The Prince William Sound dual escort vessel system has evolved through an open process of give and take based on careful monitoring and study. The present dual escort system is the result of what has been, in effect, a "rolling risk assessment," based upon the ongoing work of the industry, government, and stakeholders who have contributed to the design, operation, and continued refinement of the dual escort vessel system.

The people who have had to live with the consequences of the *Exxon Valdez* oil spill understand the risks all too well – and they recognize the value in the prevention system that has been in place for the last twenty years. Common sense dictates that when a system has worked for two decades and continues to work now, it should not be changed or weakened; it should be kept intact. Alaskans are in near unanimity that the current dual escort system ***must not be weakened at all*** and they are not inclined to buy into any recitation of probabilities in lieu of relying on the system that they have seen work, and work well, for nearly twenty years.

TAB 5

Conclusion

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Conclusion

The Prince William Sound dual escort vessel system for oil-laden tankers is a proven prevention measure that protects the environment, lives, livelihoods, and the economy of Alaska and the nation that depends upon uninterrupted production of oil from Alaska's North Slope. The *Exxon Valdez* oil spill demonstrated the tragic consequences of a tanker accident. No matter how "safe" new oil tankers are supposed to be, there is always the potential for the people operating those tankers to make mistakes or have serious lapses in judgment, for some technological equipment malfunction to take place, or for some aberrant weather event to wreak havoc.

The two high-powered tugs that escort each laden oil tanker can assist a tanker if it experiences a loss of steering or propulsion, and can normally stop a drifting tanker before it runs aground. The tugs serve as lookouts and help alert the tankers to any dangerous conditions. They provide additional sets of eyes and ears and additional experience to help a tanker avoid a serious accident. They also are immediately available to provide initial oil spill response capabilities in the event that an accident does occur.

There is remarkable unanimity in support of maintaining the current dual escort system: the Alaska Legislature, the governor, the Alaska congressional delegation, the people, communities and businesses in the *Exxon Valdez* Oil Spill region, the state's two largest daily newspapers, and many others.

To responsibly address the problem outlined in this briefing booklet, Senators Lisa Murkowski and Mark Begich introduced S. 1041. This bill would memorialize in federal law a practice that is already in place for double-hull tankers and in use today – a system that provides proven protection against the potential for future catastrophic oil spills in Prince William Sound. Congressman Don Young worked successfully with Chairman Oberstar in the House Transportation and Infrastructure Committee to include language requiring the maintenance of the dual escort system in the Coast Guard Authorization Bill of 2010 (H.R. 3619). The Coast Guard Bill was passed by the U.S. House of Representatives in October 2009. But, legislative action is still required in the U.S. Senate to ensure that the Oil Pollution Act of 1990 is amended to continue this proven, essential safety practice.

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC), authorized under OPA 90, has carried out its monitoring and oversight responsibilities through cooperation and consultation with industry and federal and state government agencies. This collaborative effort has resulted in one of the safest marine oil transportation systems anywhere in the world. Passage of the remedial legislation, S. 1041, is one of the most important actions Congress could take to help ensure there is never another oil spill with such devastating consequences as the 1989 *Exxon Valdez* oil spill in Prince William Sound, Alaska.

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TAB 6

Remedial Legislation to Require That Two Escort Vessels Accompany Double-Hulled Oil Tankers in Prince William Sound, Alaska

- H.R. 3619
- S. 1041
- Congressional Record: Floor Statement by Senator Lisa Murkowski (May 14, 2009)
- Oil Pollution Act of 1990 (Public Law 101-380), Section 4116 (c): Prince William Sound Escort Vessel Requirements
- Current Escort Vessel Regulations (33 CFR Part 168) Implementing Section 4116(c) of OPA 90

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Prince William Sound Escort System Included in House Coast Guard Bill, Senate Legislation Pending

H.3619 Coast Guard Authorization Act of 2010

SEC. 313. DUAL ESCORT VESSELS FOR DOUBLE HULLED TANKERS IN PRINCE WILLIAM SOUND, ALASKA.

(a) In General- Section 4116(c) of the Oil Pollution Act of 1990 (46 U.S.C. 3703 note; Public Law 101-380) is amended--

(1) by striking 'Not later than 6 months' and inserting the following:

'(1) IN GENERAL- Not later than 180 days'; and

(2) by adding at the end the following:

'(2) PRINCE WILLIAM SOUND, ALASKA- The requirement in paragraph (1) relating to single-hulled tankers in Prince William Sound, Alaska, described in that paragraph being escorted by at least 2 towing vessels or other vessels considered to be appropriate by the Secretary (including regulations promulgated in accordance with section 3703(a)(3) of title 46, United States Code, as set forth in part 168 of title 33, Code of Federal Regulations (as in effect on March 1, 2009), implementing this subsection with respect to those tankers) shall apply to double-hulled tankers over 5,000 gross tons transporting oil in bulk in Prince William Sound, Alaska.'.

(b) Effective Date- The amendments made by subsection (a) take effect on the date that is 90 days after the date of enactment of this Act.

(c) Rulemaking-

(1) INTERIM FINAL RULE AUTHORITY- The Secretary shall issue an interim final rule as a temporary regulation implementing this section (including the amendments made by this section) as soon as practicable after the date of enactment of this section, without regard to the provisions of chapter 5 of title 5, United States Code. All regulations prescribed under the authority of this paragraph that are not earlier superseded by final regulations shall expire not later than 1 year after the date of enactment of this Act.

(2) INITIATION OF RULEMAKING- The Secretary may initiate a rulemaking to implement this section (including the amendments made by this section) as soon as practicable after the date of enactment of this section. The final rule issued pursuant to that rulemaking may supersede the interim final rule promulgated under this subsection.

S. 1041: Remedial Legislation to Require that Two Escort Vessels Accompany Double-Hulled Oil Tankers in Prince William Sound, Alaska

111th CONGRESS
1st Session
S. 1041

IN THE SENATE OF THE UNITED STATES

May 14, 2009

Ms. MURKOWSKI (for herself and Mr. BEGICH) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

---

A BILL

To amend the Oil Pollution Act of 1990 to modify the applicability of certain requirements to double hulled tankers transporting oil in bulk in Prince William Sound, Alaska.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. DUAL ESCORT VESSELS FOR DOUBLE HULLED TANKERS IN PRINCE WILLIAM SOUND, ALASKA.

(a) In General- Section 4116(c) of the Oil Pollution Act of 1990 (46 U.S.C. 3703 note; Public Law 101-380) is amended--

(1) by striking `Not later than 6 months' and inserting the following: `(1) IN GENERAL- Not later than 180 days'; and

(2) by adding at the end the following:

`(2) PRINCE WILLIAM SOUND, ALASKA-

`(A) IN GENERAL- The requirement in paragraph (1) relating to single hulled tankers in Prince William Sound, Alaska, described in that paragraph being escorted by at least 2 towing vessels or other vessels considered to be appropriate by the Secretary (including regulations promulgated in accordance with section 3703(a)(3) of title 46, United States Code, as set forth in part 168 of title 33, Code of Federal Regulations (as in effect on March 1, 2009) implementing this subsection with respect to those tankers) shall apply to double hulled tankers over 5,000 gross tons transporting oil in bulk in Prince William Sound, Alaska.

`(B) IMPLEMENTATION OF REQUIREMENTS- The Secretary of the Federal agency with jurisdiction over the Coast Guard shall carry out subparagraph (A) by order without notice and hearing pursuant to section 553 of title 5 of the United States Code.'.

(b) Effective Date- The amendments made by subsection (a) take effect on the date that is 90 days after the date of enactment of this Act.

Congressional Record: Floor Statement by Senator Murkowski (May 15, 2009)

Virtually every family farmer I have met in my travels across New York has aggressively tried to hire Americans to work in their nurseries, orchards, farms, and vineyards.

For instance, my friends in the Long Island Farm Bureau can tell you that more than half of their members pay more than $12–$15 per hour per worker, and actively seek to hire American workers, often arranging buses to recruit Americans into Long Island to work.

But what these family farmers are finding is that—even in this bad economy, even if they offer Americans twice or sometime three times the minimum wage and provide benefits—American workers simply won't stay in these jobs for more than a few days.

Why don't Americans want to stay in many of these agricultural jobs? Let me share with you the description of the working conditions for agricultural workers as provided by the Bureau of Labor Statistics in their 2008–2009 Occupational Outlook Handbook. Here is their description:

Much of the work of farmworkers and laborers on farms and ranches is physically strenuous and takes place outdoors in all kinds of weather.

Harvesting fruits and vegetables, for example, may require much bending, stooping, and lifting. Workers may have limited access to sanitation facilities while working in the field and drinking water may also be limited.

Farm work does not lend itself to a regular 40-hour workweek. Work cannot be delayed when crops must be planted or harvested or when animals must be sheltered and fed.

Long hours and weekend work is common in these jobs. For example, farmworkers and agricultural equipment operators may work 6- or 7-days a week during planting and harvesting seasons.

Many agricultural worker jobs are seasonal in nature, so some workers also do other jobs during slow seasons. Migrant farmworkers, who move from location to location as crops ripen, live an unsettled lifestyle, which can be stressful.

Farmworkers risk exposure to pesticides and other hazardous chemicals sprayed on crops or plants.

This is certainly not the description of a life most Americans would want for themselves, much less for their children. And so what the family farmers in New York experience is that even when Americans take these jobs, the vast majority quit after only a few days.

So who is stepping in to take many of these difficult agricultural jobs? Immigrants who need these jobs to support the families they left behind in their native country.

But the vast majority of the immigrants working in agricultural jobs are undocumented. For this reason, family farmers are often required to choose between hiring undocumented workers or going out of business.

AgJOBS solves this problem in a way that is fair to everyone.

AgJOBS requires current undocumented agricultural workers to pay a fine, pay their taxes, undergo thorough background checks, and legalize their status in order to keep their jobs. If these workers refuse to legalize their status, or have any kind of criminal record, they will be deported.

AgJOBS provides America's family farmers with access to legal workers and removes the burden on farmers to perform the role of Federal immigration enforcement officials.

But just as importantly, AgJOBS places increased penalties on farmers who hire illegal aliens and places penalties on farmers who provide poor working conditions for their employees. This will make it far likelier that Americans who want these jobs will stay in these jobs for longer periods of time.

For this reason, AgJOBS is supported by hundreds of agriculture, business, labor, religious, and ethnic affinity groups.

It is my profound belief that Americans are pro-legal immigration and anti-illegal immigration, and will support policies that are consistent with this basic principle.

AgJOBS fits this description. It severely penalizes farmers who will continue to hire illegal immigrants and who choose to exploit their workers. But it also provides farmers with the ability to hire Americans and legal immigrants who will take these jobs.

The current situation is simply untenable. Every day, American farms are closing and America has to import more and more food from abroad because it is far cheaper to buy foreign food than it is to produce food here.

For every farmworker job we lose to another country, America loses three to four other American jobs in packaging, processing, supplies, equipment, and other related sectors.

Failure to pass AgJOBS will continue to result in devastating consequences for our economy.

In New York alone, the Farm Credit Association of New York estimates that if AgJOBS is not passed, New York State could lose in excess of 900 farms, $195 million in value of agricultural production, and over 200,000 acres in production in agriculture over the next 24 months.

Finally, our national security is threatened when we no longer are able to ensure that we can sufficiently feed our people with American food. Without AgJOBS, we place our Nation's food security at risk from those who might seek to do harm to America.

This situation can and should be remedied. AgJOBS provides the remedy, and I am therefore proud to be an original cosponsor of AgJOBS and strongly support its passage.

By Ms. MURKOWSKI (for herself and Mr. BEGICH):

S. 1041. A bill to amend the Oil Pollution Act of 1990 to modify the applicability of certain requirements to double hulled tankers transporting oil in bulk in Prince William Sound, Alaska; to the Committee on Commerce, Science, and Transportation.

Ms. MURKOWSKI. Mr. President, today I am introducing a bill, with my colleague from Alaska Senator MARK BEGICH, that will require all oil laden tankers in Prince William Sound to be escorted by at least two towing vessels or other vessels considered appropriate by the Secretary of the Department of Homeland Security.

At 12:04 a.m. on March 24, 1989, the Exxon Valdez, carrying over 53 million gallons of crude oil, failed to turn back into the shipping lane after detouring to avoid ice, and ran aground on Bligh Reef. Alaskans will never forget that morning, waking up to hear about the worst oil spill and environmental disaster in U.S. history and living with the lasting impacts it has had on our State and residents.

The National Transportation Safety Board investigated the accident and determined probable causes for the accident. While it determined that it was primarily caused by human error of the captain and crew, it is my belief that we had also become complacent. It had been 12 years since we had begun to tanker oil out of Valdez and there had not been an incident. However, when the spill occurred, we became acutely aware of how woefully unprepared we were. The few prevention measures that were available were inadequate and the spill response and clean-up resources were seriously deficient. The oil eventually fouled some 1,300 miles of shoreline, stretching almost 500 miles, and covered an area of 11,000 square miles.

While the captain and crew were found at fault for the immediate cause of the spill, the incident also highlighted huge gaps in regulatory oversight of the oil industry. The response of Congress to the spill was passage of the Oil Spill Pollution Act of 1990 or OPA90. The law overhauled shipping regulations, imposed new liability on the industry, required detailed response plans and added extra safeguards for shipping in Prince William Sound. Since the law took effect, annual oil spills were greatly reduced and lawmakers, marine experts, the oil industry and environmentalists credit the law for major improvements in U.S. oil and shipping industries.

Oil spill prevention and response have been greatly improved in Prince William Sound since the passage of OPA90. The U.S. Coast Guard now monitors fully laden tankers all the way through Prince William Sound. Specially trained marine pilots ride the ships for 25 of the 70 mile journey through the Sound and there are weather criteria for safe navigation. Contingency plans, skimmers, dispersants, oil barges and containment booms are all now readily available. An advanced ice-detecting radar system is also in place to monitor the icebergs that flow off of the mighty Columbia Glacier.

Two escort tugs accompany each tanker while passing through the Sound and are capable of assisting the tanker in the case of an emergency. This world class safety system recently

saw the 11,000th fully loaded tanker safely escorted through Prince William Sound. It is estimated that if the Exxon Valdez would have been double-hulled, the amount of the spill would have been reduced by more than half. While double hulled tankers are a huge improvement over single hulls, they do not prevent oil spills.

The legislation that Senator BEGICH and I are introducing today will maintain the existing escort system in place for all tankers. Presently, the federal requirement that every loaded tanker be accompanied through the Sound by two tugs applies only to single-hulled tankers. Even though, right now, double-hulled tankers are escorted by two vessels, federal law does not require them to be. The last single hulled tanker in the Prince William Sound fleet is expected to be retired from service by August 2012 and our legislation ensures all double hulled tankers will always be escorted by two tugs.

Although there have been a number of marine incidents and near misses since the Exxon Valdez oil spill in 1989, over the past 20 years, through the efforts of the U.S. Coast Guard, industry, the State of Alaska, and the Prince William Sound Citizens Advisory Council to implement the requirements of OPA 90, there have been no major oil spills. Today, as a result, the marine transportation safety system established for Prince William Sound is regarded as among the most effective in the world. A key reason for that accomplishment is, in part, because of the safety benefits resulting from having dual escort vessels available to assist oil laden tankers transiting the Sound.

Section 4116 (c) of OPA 90 requires that single hulled tankers over 5,000 gross tons transporting oil in bulk in Prince William Sound, Alaska be escorted by at least two towing vessels or other vessels considered appropriate by the Secretary.

Subsection (a) makes applicable to double hulled tankers the requirement in existing law including regulations in 33 CFR Part 168 issued to implement that dual escort vessel requirement for single hulled tankers. The subsection leaves the dual escort vessel requirement in place for single hulled tankers. By making those cited regulations applicable to double hulled tankers, the U.S. Coast Guard would not need to issue new regulations as a result of the amendment to section 4116(c) of OPA 90. Rather, the Secretary is authorized and directed to ''carry out subparagraph (A)'' by order without notice and hearing, and without issuing new regulations, under section 553 of title 5 of the U.S. Code.

The dual escort plan, as it was constituted and in effect as of March 1, 2009 for Prince William Sound, is described in a document entitled, ''Vessel Emergency Response Plan'' or ''VERP'', and is on file with the House Transportation and Infrastructure Committee and the Senate Commerce, Science, and Transportation Committee.

It is envisioned that, as advancements in technology are made in the future, any appropriate and warranted modifications to the VERP cited above implementing the dual escort practice as in effect as of March 1, 2009 and implementing the dual escort requirement in this section, including implementing regulations, will be made by the Prince William Sound Tanker Owners/Operators in consultation with the U.S. Coast Guard, the State of Alaska, and the PWSRCAC and ratified and endorsed by the U.S. Coast Guard before being implemented.

The success of this escort system over the past 20 years has shown us that it must not be compromised. We cannot forget the lessons of the Exxon Valdez oil spill and allow ourselves to become complacent.

Mr. President, I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the text of the bill was orderd to be printed in the RECORD, as follows:

S. 1041

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. DUAL ESCORT VESSELS FOR DOUBLE HULLED TANKERS IN PRINCE WILLIAM SOUND, ALASKA.

(a) IN GENERAL.—Section 4116(c) of the Oil Pollution Act of 1990 (46 U.S.C. 3703 note; Public Law 101–380) is amended—

(1) by striking ''Not later than 6 months'' and inserting the following:

''(1) IN GENERAL.—Not later than 180 days''; and

(2) by adding at the end the following:

''(2) PRINCE WILLIAM SOUND, ALASKA.—

''(A) IN GENERAL.—The requirement in paragraph (1) relating to single hulled tankers in Prince William Sound, Alaska, described in that paragraph being escorted by at least 2 towing vessels or other vessels considered to be appropriate by the Secretary (including regulations promulgated in accordance with section 3703(a)(3) of title 46, United States Code, as set forth in part 168 of title 33, Code of Federal Regulations (as in effect on March 1, 2009) implementing this subsection with respect to those tankers) shall apply to double hulled tankers over 5,000 gross tons transporting oil in bulk in Prince William Sound, Alaska.

''(B) IMPLEMENTATION OF REQUIREMENTS.—The Secretary of the Federal agency with jurisdiction over the Coast Guard shall carry out subparagraph (A) by order without notice and hearing pursuant to section 553 of title 5 of the United States Code.''.

(b) EFFECTIVE DATE.—The amendments made by subsection (a) take effect on the date that is 90 days after the date of enactment of this Act.

By Mr. HARKIN (for himself, Mr. KENNEDY, Mrs. GILLIBRAND, and Mr. REED):

S. 1048. A bill to amend the Federal Food, Drug, and Cosmetic Act to extend the food labeling requirements of the Nutrition Labeling and Education Act of 1990 to enable customers to make informed choices about the nutritional content of standard menu items in large chain restaurants; to the Committee on Health, Education, Labor, and Pensions.

Mr. HARKIN. Mr. President, I rise to introduce a bill, the Menu Education and Labeling Act, on behalf of myself and my colleagues, Senator KENNEDY of Massachusetts, Senator REED of Rhode Island, and Senator GILLIBRAND of New York.

It is by now well established that poor diet and obesity, as well as related conditions such as heart disease, have reached epidemic levels. The majority of the U.S. population is either overweight or obese. The incidence of type II diabetes has reached levels not even imaginable 20 years ago, with some research suggesting that one in three children will develop the disease by adulthood.

There is no single solution to this complex issue of poor nutrition and diet related diseases. Policymakers looking for a silver bullet will be disappointed. But inaction is not an option. We must start taking meaningful steps to address this growing problem by giving people the tools necessary to live healthier lifestyles. That is why my colleagues and I are introducing this bill today to extend nutrition labeling beyond packaged foods to include foods at chain restaurants with 20 or more locations, as well as food in vending machines. This common-sense idea will give consumers a needed tool to make wiser choices and achieve a healthier lifestyle. It is a positive step toward addressing the obesity epidemic.

In 1990, Congress passed the Nutrition Labeling and Education Act, NLEA, requiring food manufacturers to provide nutrition information on nearly all packaged foods. The impact has been tremendous. Not only do nearly three-quarters of adults use the food labels on packaged foods, but studies indicate that consumers who read labels have healthier diets.

Unfortunately, when Congress first passed the NLEA, it excluded restaurants from any labeling requirements. Since that time, restaurants have become more and more important to Americans' diet and health. Americans consume a third of their calories and spend half of their food dollars at restaurants at the very time when nutrition and health experts say that rising caloric consumption and growing portion sizes are causes of obesity. We also know that when children eat in restaurants, they consume twice as many calories as when they eat at home. Consumers say that they would like nutrition information provided when they order their food at restaurants, yet, while they have good nutrition information in supermarkets, at restaurants they can only guess.

In recent years, some states and cities have led the way on menu labeling. New York City has already implemented a menu labeling initiative that requires the disclosure of calories on menus and menu boards at chain restaurants. Consumer surveys show that

Oil Pollution Act of 1990 (P.L. 101-380), Section 4116 (c), That Would Be Amended by S. 1041

SEC. 4116. PILOTAGE.

(a) PILOT REQUIRED- Section 8502(g) of title 46, United States Code, is amended to read as follows:

`(g)(1) The Secretary shall designate by regulation the areas of the approaches to and waters of Prince William Sound, Alaska, if any, on which a vessel subject to this section is not required to be under the direction and control of a pilot licensed under section 7101 of this title.

`(2) In any area of Prince William Sound, Alaska, where a vessel subject to this section is required to be under the direction and control of a pilot licensed under section 7101 of this title, the pilot may not be a member of the crew of that vessel and shall be a pilot licensed by the State of Alaska who is operating under a Federal license, when the vessel is navigating waters between 60«49' North latitude and the Port of Valdez, Alaska.'.

(b) SECOND PERSON REQUIRED- Section 8502 of title 46, United States Code, is amended by adding at the end the following:

`(h) The Secretary shall designate waters on which tankers over 1,600 gross tons subject to this section shall have on the bridge a master or mate licensed to direct and control the vessel under section 7101(c)(1) of this title who is separate and distinct from the pilot required under subsection (a) of this section.'.

(c) ESCORTS FOR CERTAIN TANKERS- Not later than 6 months after the date of the enactment of this Act, the Secretary shall initiate issuance of regulations under section 3703(a)(3) of title 46, United States Code, to define those areas, including Prince William Sound, Alaska, and Rosario Strait and Puget Sound, Washington (including those portions of the Strait of Juan de Fuca east of Port Angeles, Haro Strait, and the Strait of Georgia subject to United States jurisdiction), on which single hulled tankers over 5,000 gross tons transporting oil in bulk shall be escorted by at least two towing vessels (as defined under section 2101 of title 46, United States Code) or other vessels considered appropriate by the Secretary.

(d) TANKER DEFINED- In this section the term `tanker' has the same meaning the term has in section 2101 of title 46, United States Code.

Current Implement Escort Vessel Regulations (33 CFR Part 168) – Section 4116 (c) of OPA 90

33 CFR PART 168

ESCORT REQUIREMENTS FOR CERTAIN TANKERS

Sec. 168.01 Purpose.

(a) This part prescribes regulations in accordance with section 4116(c) of the Oil Pollution Act of 1990 (OPA 90) (Pub. L. 101-380). The regulations will reduce the risk of oil spills from laden, single hull tankers over 5,000 GT by requiring that these tankers be escorted by at least two suitable escort vessels. The escort vessels will be immediately available to influence the tankers' speed and course in the event of a steering or propulsion equipment failure, thereby reducing the possibility of groundings or collisions.

(b) The regulations in this part establish minimum escort vessel requirements. Nothing in these regulations should be construed as relieving the master of a tanker from the duty to operate the vessel in a safe and prudent manner, taking into account the navigational constraints of the waterways to be traversed, other vessel traffic, and anticipated weather, tide, and sea conditions, which may require reduced speeds, greater assistance from escort vessels, or other operational precautions.

Sec. 168.05 Definitions.

As used in this part–

Disabled tanker means a tanker experiencing a loss of propulsion or steering control.

Escort transit means that portion of the tanker's voyage through waters where escort vessels are required.

Escort vessel means any vessel that is assigned and dedicated to a tanker during the escort transit, and that is fendered and outfitted with towing gear as appropriate for its role in an emergency response to a disabled tanker.

Laden means transporting in bulk any quantity of applicable cargo, except for clingage and residue in otherwise empty cargo tanks.

Single hull tanker means any self-propelled tank vessel that is not constructed with both double bottom and double sides in accordance with the provisions of 33 CFR 157.10d.

Tanker master means the licensed onboard person in charge of the tanker.

Tanker owner or operator means the owner or shoreside organization (individual, corporation, partnership, or association), including a demise charterer, responsible for the overall management and operation of the tanker.

Sec. 168.10 Responsibilities.

(a) The tanker owner or operator shall:

(1) select escort vessels that can meet the performance requirements of this part; and

(2) inform the tanker master of the performance capabilities of the selected escort vessels. This information must be provided to the master before beginning the escort transit.

(b) The tanker master shall operate the tanker within the performance capabilities of the escort vessels, taking into account speed, sea and weather conditions, navigational considerations, and other factors that may change or arise during the escort transit.

(c) In an emergency, the tanker master may deviate from the requirements of this part to the extent necessary to avoid endangering persons, property, or the environment, but shall immediately report the deviation to the cognizant Coast Guard Captain of the Port (COTP).

Sec. 168.20 Applicable vessels.

The requirements of this part apply to laden, single hull tankers of 5,000 gross tons or more.

Sec. 168.30 Applicable cargoes.

The requirements of this part apply to any petroleum oil listed in 46 CFR Table 30.25-1 as a pollution category I cargo.

Sec. 168.40 Applicable waters and number of escort vessels.

The requirements of this part apply to the following waters:

(a) Prince William Sound: Each tanker to which this part applies must be escorted by at least two escort vessels in those navigable waters of the United States within Prince William Sound, Alaska, and the adjoining tributaries, bays, harbors, and ports, including the navigable waters of the United States within a line drawn from Cape Hinchinbrook Light, to Seal Rocks Light, to a point on Montague Island at 60 deg.14.6' North, 146 deg.59' West, and the waters of Montague Strait east of a line between Cape Puget and Cape Cleare.

(b) Puget Sound and certain associated waters: Each tanker to which this part applies must be escorted by at least two escort vessels in those navigable waters of the United States and Washington State east of a line connecting New Dungeness Light with Discovery Island Light and all points in the Puget Sound area north and south of these lights. This area includes all the navigable waters of the United States within Haro Strait, Rosario Strait, the Strait of Georgia, Puget Sound, and Hood Canal, as well as those portions of the Strait of Juan de Fuca east of the New Dungeness-Discovery Island line.

Sec. 168.50 Performance and operational requirements.

(a) Except as provided in paragraph (c) of Sec. 168.10, at all times during the escort transit each tanker to which this part applies:

(1) Must be accompanied by escort vessels that meet the performance requirements of paragraph (b) of this section (but not less than the number of escorts required by Sec. 168.40).

(2) Must have the escort vessels positioned relative to the tanker such that timely response to a propulsion or steering failure can be effected.

(3) Must not exceed a speed beyond which the escort vessels can reasonably be expected to safely bring the tanker under control within the navigational limits of the waterway, taking into consideration ambient sea and weather conditions, surrounding vessel traffic, hazards, and other factors that may reduce the available sea room.

(b) The escort vessels, acting singly or jointly in any combination as needed, and considering their applied force vectors on the tanker's hull, must be capable of—

(1) Towing the tanker at 4 knots in calm conditions, and holding it in steady position against a 45-knot headwind;

(2) Stopping the tanker within the same distance that it could crash-stop itself from a speed of 6 knots using its own propulsion system;

(3) Holding the tanker on a steady course against a 35-degree locked rudder at a speed of 6 knots; and

(4) Turning the tanker 90 degrees, assuming a free-swinging rudder and a speed of 6 knots, within the same distance (advance and transfer) that it could turn itself with a hard-over rudder.

Effective Date Note: At 59 FR 54519, Nov. 1, 1994, Sec. 168.50 was amended by suspending paragraph (b)(2), effective November 17, 1994.

Sec. 168.60 Pre-escort conference.

(a) Before commencing an escort transit, the tanker master shall confer, by radio or in person, with the tanker pilot and the masters of the escort vessels regarding the escort operation.

(b) The purpose of the pre-escort conference is for all parties to plan and discuss particulars of the escort transit.

(c) At a minimum, the following topics must be addressed during the pre-escort conference:

(1) The destination, route, planned speed, other vessel traffic, anticipated weather, tide, and sea conditions, and other navigational considerations;

(2) The type and operational status of communication, towing, steering, and propulsion equipment on the tanker and escort vessels;

(3) The relative positioning and reaction time for the escort vessels to move into assist positions, including, if appropriate, pre-tethering the escort vessels at crucial points along the route;

(4) The preparations required on the tanker and escort vessels, and the methods employed in making an emergency towline connection, including stationing of deck crews, preparation [[Page 702]] of messenger lines, bridles, and other towing gear, and energizing appropriate deck equipment;

(5) The manner in which an emergency towline connection would be made (which escort vessel will respond, how messengers and towlines will be passed, etc.);

(6) Other relevant information provided by the tanker master, pilot or escort vessel masters.

TAB 7

Expressions of Support for Maintaining the Existing Dual Escort Vessel Marine Safety System for Double-Hulled Tankers in Prince William Sound

- Senator Lisa Murkowski
- Senator Mark Begich
- Honorable Don Young
- Alaska Governor Sarah Palin
- Alaska State Legislature
- Alaska Representative John Harris
- Anchorage Daily News
- Alaska Department of Environmental Conservation
- Oil Companies International Marine Forum
- City of Seldovia
- Chenega Native Corporation
- City of Valdez
- City of Seward
- Mayor Jerome Selby, Kodiak Island Borough
- Rep. Scott Kawasaki, Alaska House District 9
- Old Harbor Native Corporation
- Kenai Peninsula Borough
- Alaska Wilderness Recreation and Tourism Association
- Chugach Alaska Native Corporation
- Chenega IRA Council
- City of Homer
- City of Cordova
- Kodiak Island Mayor Association
- City of Whittier
- Kodiak Chamber of Commerce
- Oil Spill Region Environmental Coalition
- Prince William Sound Aquaculture Corporation
- City of Kodiak
- Cordova District Fishermen United
- Fairbanks Daily News-Miner
- Anchorage Daily News

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Expressions Of Support:

For Maintaining The Existing Dual Escort Vessel Marine Safety System For Double-Hulled Tankers In Prince William Sound

"Mr. President, today I am introducing a bill with my colleague from Alaska Senator Mark Begich that will require all oil laden tankers in Prince William Sound to be escorted by at least two towing vessels . . . The legislation . . . will maintain the existing escort system in place for all tankers . . . The success of the escort system over the last 20 years has shown us that it must not be compromised. We can't forget the lessons of the Exxon Valdez oil spill and allow ourselves to become complacent."

Senate Floor Statement by Senator Lisa Murkowski upon the introduction of S. 1041, May 2009.

"The dual escort coverage of tankers operating in Prince William Sound has helped ensure we have the best oil transportation system in the world . . . Their [tractor tugs] continued use is inexpensive insurance to protect the environment of Prince William Sound and maintain the flow of oil."

Press Release from Alaska Senators Mark Begich and Lisa Murkowski upon the introduction of S.1041, May 2009.

"Even as oil companies have phased in the double-hulled tankers, they have retained the dual escorts for each. It's a wise policy but one that could be dropped too easily after the last single-hulled tanker leaves. Congress should not present the opportunity…The lower standard of caution is not justifiable."

Fairbanks Daily News-Miner Editorial (October 2009)

The Coast Guard's 2010 authorization bill, which recently passed the House…[includes] many useful directives…One provision of the bill is…the requirement to keep twin tractor tug escorts on oil tankers carrying oil south from Valdez. By 2012, all tankers in the Valdez trade will be double-hulled, so the tugs might seem like a redundant and expensive form of protection. But as Alaska learned during the Exxon Valdez disaster, it takes a coordinated system with layers of redundancy to ensure that oil stays inside ships where it belongs, and the cost of failure is astronomical. The bill requires the tug escorts, even on double-hulled Valdez tankers. Credit Don Young for making sure the bill included this protective measure…Now it's up to Sens. Mark Begich and Lisa Murkowski to keep them.

Anchorage Daily News Editorial (October 2009)

"Additionally this authorization includes language that would require dual tug escorts for double-hulled oil tankers at Prince William Sound. This will allow for greater redundancy in a place where severe weather and human error can lead to disaster. Twenty years ago, the state of Alaska suffered the worst tragedy of its history, during the Exxon Valdez Oil Spill. We are still learning from the mistakes of that disaster and this bill works toward a safer and better future for our waterways and for the men and women of the Coast Guard."

Hon. Don Young, Press Release regarding passage of Coast Guard Authorization Bill (HR 3619), which includes Prince William Sound Escort System Requirements (November 2009)

"Why would anyone want to weaken the marine oil transport system we have in place now in Valdez which is the safest in the world."

Hon. Don Young, 2006

"He wants to make sure regulations don't loosen in Prince William Sound. He agrees with the Prince William Sound Regional Citizens' Advisory Council and he wants to see a two tug escort system kept in place."

Reporter for APRN in an interview of Rep. Don Young, March 2009

"Congressional action is required to amend OPA 1990 to extend the dual escort requirement beyond the phase-out of single-hulled tankers, and I am asking your assistance in taking this action. Together, we must remain vigilant in ensuring the safest possible transportation standards in Alaska."

Letter from Alaska Governor Sarah Palin to Congressional Delegation (April 2009)

"Twenty years ago today, the state of Alaska suffered the worst tragedy of its history . . . The disastrous effects were felt not only on our natural marine life and subsistence resources but on Alaskan families as they watched their livelihoods destroyed, and their businesses close . . . [in OPA 90] We increased requirements for planning and response that fundamentally changed the standard of care at the marine terminal and in the shipment of oil through Prince William Sound."

Press Release, Hon. Don Young, on the Anniversary of the Exxon Valdez Oil Spill, March 2009

"BE IT RESOLVED that the Alaska State Legislature supports the continued practice in Prince William Sound of accompanying each loaded oil tanker, whether single-hulled or double-hulled, with at least two escort vessels."

Resolution passed by the Alaska State Legislature, signed by Governor (July 2009)

"These [escort tugs], together with the double-hull, double-engine ships and better tracking systems, make the Sound's tanker traffic the safest in the world."

Anchorage Daily News Editorial (March 2009)

. . . the Legislature passed and Governor Palin has signed HJR 19 . . . dealing with oil tanker escorts in Prince William Sound. I was fully supportive of that measure and hope that . . . the members of the PWSRCAC are assured that the State has addressed your concerns with this piece of legislation. . . all Alaskans share in the common vision that we can get it right here when it comes to resource development and the protection of our environment . . . we must . . . recognize that a healthy environment also provides numerous other jobs in the commercial fishing and tourism industries . . .thank you and your members for the contributions you have made to keeping Alaska moving forward with responsible resource development.""

Alaska State Representative John Harris, regarding HJR 19 in support of escort tankers in Prince William Sound (July 2009)

"Because of the Exxon Valdez accident we now have improvements in the oil transportation system and oil spill response… We must never allow ourselves to get complacent again regarding oil shipment in any of our coastal areas. We must retain and improve on the prevention measures which now exist in the Sound. Prince William Sound cannot handle another major spill. We must do everything possible to prevent it."

Anchorage Daily News COMPASS (March 2009)

"Lest anyone be tempted to let down their guard, remember what happened 20 years ago when the Exxon Valdez hit Bligh Reef. Nobody thought that would happen either. Keep the tugs on the Sound and the oil out of it."

Anchorage Daily News Editorial (March 2009)

"You should not expect favorable consideration of any proposal that significantly changes the present tanker escort system in Prince William Sound..."

Correspondence from Alaska Department of Environmental Conservation
to Prince William Sound Tanker Response Planning Group (July 2004)

"Double-hulled vessels are regarded by some as the answer to all the problems of transportation of oil at sea without pollution. Whilst it is acknowledged that double-hulled vessels have some advantage over single-hulled vessels...both designs will be inadequate if poorly maintained and operated. Double-hulled tankers because of their complex design and structure are potentially <u>more susceptible</u> to problems of poor maintenance and operation." [emphasis added]

Oil Companies International Marine Forum (2003)

"Recognizing the 20th anniversary of the Exxon Valdez oil spill and supporting the continuation of the practice of dual tug escorts for loaded oil tankers that traverse Prince William Sound...whereas the Prince William Sound escort system is the primary prevention measure to safeguard against oil spills caused by navigational errors, equipment failures, severe weather, and human or organizational errors."

Resolution by the City of Seldovia (2009)

"The Chenega community should not be subjected to another oil spill."

Chenega Native Corporation (2009)

"In support of maintaining a strong and reliable escort fleet and preserving the practice of requiring two escorts, as currently practiced, for all laden tankers transiting Prince William Sound."

Resolution by the City of Valdez (2009)

"The City of Valdez supports the continued operation of the Prince William Sound escort system in the configuration as depicted in the 2001 Vessel Escort and Response Plan for all laden tankers transiting Prince William Sound."

Resolution by the City of Valdez (2005)

"The Seward City Council recognizes the 20th anniversary of the Exxon Valdez oil spill and supports the continued practice in Prince William Sound of accompanying each loaded oil tanker, whether it be single-hulled or double-hulled, with at least two escort vessels."

Resolution by the City of Seward (2009)

"The Kodiak Island Borough has concerns about discussions within the oil industry to reduce the number of escort vessels required to escort a laden tanker out of Prince William Sound."

Jerome Selby, Kodiak Island Borough Manager (March 2005)

"Even 20 years after the* Exxon Valdez *disaster, it is imperative to continue the efforts of prevention. We cannot and should not dismantle any safety requirements simply because no incidents have occurred, because that is the very point of their implementation, so that no incidents* will *occur."

Rep. Scott Kawasaki, Alaska House District 9 Fairbanks (March 2009)

"To weaken the current system that is working so well would be indefensible. Given that the system is the best insurance policy the public and industry could devise, we hope the oil industry will concur with the intent of your resolutions. Anyone who attempts to weaken the current system would be placing the entire region in serious jeopardy once again."

Emil Christiansen, Old Harbor Native Corporation (March 2009)

"The Kenai Peninsula Borough Assembly strongly supports the continued operation of the Prince William Sound escort system…depicted in the Vessel Escort and Response Plan for all laden tankers transiting Prince William Sound."

Resolution by the Kenai Peninsula Borough (2005)

"A large oil spill in Prince William Sound would adversely affect the commercial fisheries, tourism industry, and economies of coastal communities in south central Alaska and cause major environmental damage."

Alaska Wilderness Recreation and Tourism Association (2005)

"It is imprudent to reduce proven prevention programs."

Chugach Alaska Native Corporation (2005)

"Whereas, the Chenega IRA Council…is the governing body of the Native Village of Chenega…be it resolved that the Chenega IRA Council supports the continued operation of the Prince William Sound escort system."

Resolution by Chenega IRA Council (2005)

"The current Prince William Sound escort system safeguards against oil spills caused by navigational errors, severe weather, and human or organizational errors."

Resolution by the City of Homer (2005)

"The current Prince William Sound escort system provides the capability of immediate, on-scene response of two escort vessels.

Resolution by the City of Cordova (2009)

"The Kodiak Island Mayor Association supports the continued operation of the Prince William Sound escort system…as depicted in the 2001 Vessel Escort and Response Plan."

Kodiak Island Mayor Association (2005)

"The City of Whittier supports…the continued operation of the Prince William Sound escort system in the configuration as depicted in the 2001 Vessel Escort and Response Plan for all laden tankers transiting Prince William Sound."

Resolution by the City of Whittier (2005)

"Since 1989, the practice of requiring a two vessel escort for tankers in Prince William Sound has contributed to no other oil spills in Prince William Sound."

Resolution by the Kodiak Chamber of Commerce (2009)

"…working to ensure that the Alyeska pipeline terminal and associated tankers operate safely in the unique environment of Prince William Sound and the Gulf of Alaska."

Oil Spill Region Environmental Coalition (2005)

"The Prince William Sound Aquaculture Corporation supports maintaining a strong and reliable escort fleet and preserving the practice of requiring two escorts, as currently practiced, for all laden crude oil tankers transiting Prince William Sound."

Resolution by the Prince William Sound Aquaculture Corporation (2005)

"It is imprudent to reduce proven prevention programs based solely on improvements in vessel engineering and design."

Resolution by the City of Kodiak (2005)

"In the spring of 1989, this newspaper and those across the nation featured daily portraits of the liquid devastation sloshing around the sound and smearing its way westward down Alaska's coastline. The crude oil badly oiled beaches as far distant as Kodiak Island. Such an accident should never happen again. Alaska Sens. Lisa Murkowski and Mark Begich have introduced legislation to help ensure it doesn't. They want Congress to require all oil tankers in the sound to be escorted by at least two tugboats. Double-hulled tankers are safer than single-hulled. However, a hard hit on a rock could break through both walls. Two escort tugs are an absolutely essential tool to prevent such a hit. They must accompany the tankers, and two are necessary, given the often heavy winds and currents… The U.S. Senate should pass the Alaska delegation's bill or similar language being advocated by Rep. Don Young in the House, and it should do so before someone cuts a corner we all end up regretting."

Fairbanks Daily News-Miner Editorial (May 2009)

"The Cordova District Fishermen United supports the continued operation of the Prince William Sound [dual] escort system."

Cordova District Fishermen United (2005)

Alaska Sens. Lisa Murkowski and Mark Begich have not forgotten the lessons or legacy of the 1989 Exxon Valdez oil spill. That puts them on the same page with the majority of Alaskans who were here for that disaster. So it's no surprise they have co-sponsored legislation in the Senate to require two-vessel escorts for all tankers in Prince William Sound. Rep. Don Young is working on similar legislation in the House. Most important, the increased vigilance the tugs provide makes any accident less likely. They are one of the reasons Alaska's oil transportation is among the safest in the world. Prevention is gospel in protecting the Sound and Alaska's prosperity. Our senators have offered an "amen" with the force of law. Their bill deserves swift passage to assure safe passage of Alaska's oil. BOTTOM LINE: Keep Prince William Sound protected. Keep the escorts for all tankers.

Anchorage Daily News Editorial (May 2009)

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TAB 8

Appendices

Appendix A – In Their Own Words: Comments by Some Who Were Involved in and Impacted by the *Exxon Valdez* Oil Spill

Mark Delozier, Coast Guard officer, Valdez, Alaska
Rick Wade, commercial diver, Valdez
Steve Cowper, former Alaska Governor
Tom Blanchard, Exxon Valdez second mate
Steve McCall, U.S. Coast Guard

Gary Bader, Alyeska Pipeline Service Company
Dennis Kelso, Alaska Department of Environmental Conservation
Frank Iarossi, Exxon Shipping Company

Stan Stephens, Valdez tour boat operator
Harry Allen, Environmental Protection Agency
Charles Wohlforth, Anchorage Daily News
Roy Robertson, Seldovia resident
Kelley Weaverling, Cordova resident

Tom Copeland, Cordova fisherman
Michelle Hahn O'Leary, Cordova fisherman
Ricki Ott, Cordova resident

Larry Evanoff, Chenega Bay resident

Anne Castellina, National Park Service, Seward
Tim Robertson, Seldovia resident
Jane Eismann, Kodiak resident
Walt Parker, Alaska Oil Spill Commission
Jeff Short, National Oceanic and Atmospheric Administration
Craig Matkin, Homer resident and marine biologist
Rick Steiner, Cordova resident

Duane A. Gill, Mississippi State University sociologist
Belen and Joe Cook, Cordova residents

Margy Johnson, former Cordova mayor and innkeeper
Mike Webber, Cordova fisherman

Kory Blake, Cordova fisherman
Mead Treadwell, City of Cordova spill director
Joe Banta, Cordova fisherman
Darrell Totemoff, Chenega Bay resident
Jerome Selby, Kodiak Island Borough Mayor
Elenore McMullen, Port Graham resident

Appendix B – Bibliography

Appendix C – About the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC)

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Appendix A: In their Own Words: Comments by Some Who Were Involved in and Impacted by the Exxon Valdez Oil Spill

"As the oil came to the surface it made a gurgling noise, and big bloops would leap right out of the water two to four feet."

Mark Delozier, Coast Guard officer, Valdez, Alaska

"The tanker was grinding something fierce. It sounded like a train. Our greatest fear was that it was going to break apart."

Rick Wade, commercial diver, Valdez

"There was no effort whatsoever being made to clean up."

Steve Cowper, governor of Alaska, 1986–1990

"While the ship was at Naked Island, she had no bottom. She was literally floating on a bubble."

Tom Blanchard, *Exxon Valdez* second mate after the spill

" 'Serious as a heart attack.' "

Steve McCall, Coast Guard commander, Valdez, Alaska

"The window of opportunity was in the first forty-eight hours, and for the first forty-eight hours we at Alyeska were trying to figure out what the hell to do."

Gary Bader, human resources manager, Alyeska Pipeline Service Company

"That auditorium was absolutely electric. There was so much fear and anger, you could hear it crackling through the audience."

Dennis Kelso, commissioner, Alaska Department of Environmental Conservation

"I really didn't want to tell people how hopeless it was, as far as getting the oil off the water anytime soon. I tried to be as honest as I could because we had to keep looking at the positive side."

Frank Iarossi, president, Exxon Shipping Company

"I realized that, for two whole hours, I had not seen one bird, one otter, one seal, or any other living creature. It was like there had been a nuclear attack, with cities still standing but not a living soul to be seen. Something broke inside of me then."

Stan Stephens, Valdez tour boat operator

"In my job, I've seen a lot of destruction, but I had never seen anything quite like that of the Exxon Valdez."

Harry Allen, Environmental Response Team, Environmental Protection Agency

"Our civilization had no concept of the scale of our actions. Correspondingly, we had no notion of our ability to destroy and our inability to fix it."

Charles Wohlforth, reporter, Anchorage Daily News

"That was when I realized that their goal was not to pick up the oil. They just wanted to cover up and say it was clean and hope that the winter storms would wash it away."

Roy Robertson, Seldovia resident

"There was death everywhere, dead birds, dead otters, dead deer…It was a terrible scene, one to rival anyone's idea of hell."

Kelley Weaverling, Cordova resident

"There was a seal who had been screaming for hours, trying to get on her boat, trying to get out of the oil. The sound of a seal's scream is exactly like that of a baby's, and it kept hitting the side of her hull, trying to climb on board."

Tom Copeland, Cordova fisherman

"I felt like I was speaking for the environment, for the birds, for the herring, the whales. That is what drove me. Somebody had to speak for those critters."

Michelle Hahn O'Leary, Cordova fisherman

"We swooped down to get a better look and instantly got into a cloud of hydrocarbons. We all started feeling nauseous. Steve banked the plane, and we flew up into clean air."

Ricki Ott, Cordova resident

"We used to go out almost every weekend, even if it was raining. We'd go out and picnic, take the canoe and have a day. We don't do that anymore…the spirit of the water has changed."

Larry Evanoff, Chenega Bay resident

"Exxon had bought a lot of Inipol…We said, 'So you're going to spray all this stuff, which we know is cancer-causing, all over the beaches and all over the oyster beds and everything else that's in the nearshore area and we're not supposed to be worried about that?' We wouldn't let them do it."

Anne Castellina, National Park Service, Seward

"I'd been working in the oil industry for the previous ten years…To have to witness the death of the environment, the death of the water, by the hands of work that I had done myself, was emotionally devastating to me."

Tim Robertson, Seldovia resident

"When you have a disaster like the Exxon Valdez, it goes beyond money. You can't repair emotions and you can't repair the loss of an ecosystem."

Jane Eismann, Kodiak resident

"The oil industry dumped every last vestige of trying to do the right job on oil spill response."

Walt Parker, chair, Alaska Oil Spill Commission

"It was deathly silent. All you could hear was the lapping of oil on the rocks of the beach with the wave action. It gave all of us a sense of death on a big scale."

Jeff Short, oil pollution researcher, National Oceanic and Atmospheric Administration

"We began to realize that, yes, the animals were gone. And they've never come back. We didn't find the bodies. Unfortunately, killer whales sink most of the time."

Craig Matkin, marine biologist and Homer resident

"The fishermen of Cordova had a lot of fear around the construction of a pipeline across Alaska to Prince William Sound. It turns out they were right. Fishemen know boats and they know that people in boats can and do make mistakes."

Rick Steiner, Cordova resident

"The majority of our respondents believe that the Sound's ecosystem will not recover within their lifetime. For many, the only way the Exxon Valdez disaster will end is when they die."

Duane A. Gill, sociologist, Mississippi State University

"I just hope to God another oil spill never happens here or any other place again."

Belen and Joe Cook, Cordova residents

"I left the town that I love, my business, my friends. But my angst was so huge that, if I had stayed, I don't think I would have lived."

Margy Johnson, Cordova innkeeper and former Mayor of Cordova

"When Exxon said they would make us whole, they ended up putting a hole in us, a hole in our hearts."

Mike Webber, Cordova fisherman

"I was in a deep hole. I felt like I was worthless. Without counseling I might have taken my life."

Kory Blake, Cordova fisherman

"For the most part, the town 'fathers' were out on boats, and an amazing set of women ran the meetings at home."

Mead Treadwell, spill response director, City of Cordova

"We had to get to the beach early in the morning before the eagles did, because if they found anything oily that had washed up or crawled up overnight, they were on it fast."

Joe Banta, Cordova fisherman

"It was hard to get our points across a lot of times to people from Houston who worked for Exxon. They just really didn't understand Alaska, and they didn't understand small town life, so they certainly couldn't understand village life, or Native subsistence life."

Darrell Totemoff, Chenega Bay resident

"A couple of times, at the public meetings where Exxon kept telling everybody how wonderful things were going, police officers had to be called in because we had some people who were pretty upset."

Jerome Selby, mayor, Kodiak Island Borough

"I went down to the beach and looked around, and the mussels had all died. I'd touch them and they'd fall off the rocks."

Elenore McMullen, Port Graham resident

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Appendix C: About the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC)

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) is an independent non-profit corporation authorized pursuant to OPA 90 and guided by its mission: citizens promoting environmentally safe operation of the Alyeska Pipeline marine terminal in Valdez and the oil tankers that use it. The council is accountable to the people and groups with the most to lose from another catastrophic oil spill in Prince William Sound. They include communities and interest groups in a region stretching from Valdez itself to Kodiak Island to lower Cook Inlet—all areas that were touched by oil and its impacts from the Exxon Valdez oil spill. The council's 18 member organizations include representatives from communities, aquaculture, commercial fishing, environmental, Alaska Native, recreation, and tourism groups. The member entities are as follows:

- Alaska State Chamber of Commerce
- Alaska Wilderness Recreation & Tourism Association
- Chenega Bay
- Chugach Alaska Corporation
- City of Cordova
- City of Homer
- City of Kodiak
- City of Seldovia
- City of Seward
- City of Valdez
- City of Whittier
- Cordova District Fishermen United
- Kenai Peninsula Borough
- Kodiak Island Borough
- Kodiak Village Mayors Association
- Oil Spill Region Environmental Coalition
- Prince William Sound Aquaculture Corp.
- Tatitlek

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