STATE AND FEDERAL OIL SPILL LAWS

Alaska State Legislature
HOUSE OF REPRESENTATIVES
COMMITTEE ON RESOURCES

POUCH V
JUNEAU, ALASKA 99811
(907) 465-3715

HOUSE RESOURCES COMMITTEE, OIL SPILL HEARING

Thursday, January 18, 1990
3:00 to 5:00 p.m.
Capitol Room 124

EXISTING STATE AND PROPOSED FEDERAL LAW
STATE PRE-EMPTION
INTERSTATE COMPACTS

John Katz - Special Counsel, Federal State Relations,
Office of the Governor, Washington D.C.
Status of federal legislation, the conference committee and the state's priorities for the legislation.

Zygmunt Platter - Boston College and Harvard Law School
Professor, Sea Grant
Sea Grant Project on Alaska Oil Spill including Pre-emption and Interstate compacts.

Amy Kyle - Deputy Commissioner
Department of Environmental Conservation
Status of legislation passed last session, the B.C. task force, the state's position on pre-emption as it relates to state requirements and possible federal pre-emption.

- Attorney General's Office
SB 406 and reintroduction of legislation that may potentially be pre-empted by federal law.

Report of the Alaska Oil Spill Commission

Executive Summary

SPILL

The Wreck of the *Exxon Valdez*

Implications for Safe Marine Transportation

State of Alaska

January 1990

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Implications for Safe Marine Transportation

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FOREWORD

On March 24, 1989, Alaskans awoke to the shock of disaster. Shortly after midnight, the 987-foot-long supertanker Exxon Valdez had run hard aground on Bligh Reef, spilling 10.8 million gallons of crude oil into the unspoiled waters of Prince William Sound. The worst case had occurred.

This was the threatened tanker catastrophe residents of Prince William Sound had dreaded — but many had come to discount — ever since the trans-Alaska pipeline system was proposed in the late 1960s. A few of those scrambling to cope with the disaster knew something more chilling still. Though nearly 11 million gallons of crude oil already had escaped the fully-loaded *Exxon Valdez*, another 40 million gallons remained on board — and the ship was in considerable danger of capsizing. The spill that became the environmental disaster of the decade easily could have been five times worse.

The system that carried 25 percent of America's domestic oil production had failed. So had the regulatory apparatus intended to make it safe. The promises that led Alaska to grant its rights-of-way and Congress to approve the Alaska pipeline in June 1973 had been betrayed. The safeguards that were set in place in the 1970s had been allowed to slide. The vigilance over tanker traffic that was established in the early days of pipeline flow had given way to complacency and neglect. In the months following the spill, more than 1,000 miles of Alaska's coastline would be sullied by North Slope crude.

Communities touched by the effects of the spill staggered under the damage to land and water upon which they lived or the impact of the massive cleanup mobilization after the spill. Alaskans from walks of life as diverse as the oil industry and subsistence communities struggled with the economic losses, sorrow and dislocations as well as, for some, the opportunities that came with the spill and cleanup. Attitudes toward oil development, the land, the industry and the future were examined and re-examined as Alaskans searched for answers to the question of how things went wrong.

The Alaska Legislature created the Alaska Oil Spill Commission to provide some of the answers. Two months after the spill, the governor appointed an independent panel to study the event and recommend public policy remedies. The commissioners came to their work with broad experience in government and public affairs. Their sole purpose was to learn the causes of this disaster and propose changes that would prevent a recurrence of similar disasters anywhere. The mission was clear: Our report must show a path for Alaska, the United States and the world to a vastly improved system for transporting oil and other hazardous substances in the marine environment.

This disaster could have been prevented — not by tanker captains and crews who are, in the end, only fallible human beings, but by an advanced oil transportation system designed to minimize human error. It could have been prevented if Alaskans, state and federal governments, the oil industry and the American public had insisted on stringent safeguards. It could have been prevented if the vigilance that accompanied construction of the pipeline in the 1970s had been continued in the 1980s.

In 1977, when tanker operations began from Valdez, we thought we had created a system that offered guarantees against most disasters. As chairman of Alaska's Oil Tanker Task Force, I pulled together a team that provided the first full-scale simulation of marine operations ever done for a North American port.

Our simulation model demonstrated to the masters and pilots the conditions that would put their ships on the rocks. Tanker lanes into Port Valdez were set to insure the maximum feasible level of safety in tanker operations. Restrictions were imposed to limit operations in high winds. Agreements between the state, the industry and the Coast Guard established that when ice was encountered, the ships would slow down and proceed at minimum speed in the tanker lanes, rather than proceeding outside the lanes at sea speed, as did the *Exxon Valdez*.

The historical record developed by the commission is clear: The original rules were consistently violated, primarily to ensure that tankers passing through Prince William Sound did not lose time by slowing down for ice or waiting for winds to abate. Concern for profits in the 1980s obliterated the concern for safe operations that existed in 1977.

This disaster could have been prevented by simple adherence to the original rules. Human beings do make errors. The precautions originally in place took cognizance of human frailty and built safeguards into the system to account for it. This state-led oversight and regulatory system worked for the first two years, until the state was preempted from enforcing the rules by legal action brought by the oil industry. After that, the shippers simply stopped following the rules, and the Coast Guard stopped enforcing them.

This past year the Alaska Oil Spill Commission traveled to the coastal towns and villages of Prince William Sound and Southcentral Alaska to hear from the people most affected by the spill. We found communities and individuals whose lives and trust had been destroyed, but who had rededicated themselves to protecting their livelihood on water and land. Walter Meganack, Sr., traditional village chief of the Alaska Native subsistence community of Port Graham offered these words at a conference of mayors from spill-affected communities:

> *It is too shocking to understand. Never in the millennium of our tradition have we thought it possible for the water to die. But it is true. ... what we see now is death. Death — not of each other, but of the*

source of life, the water. We will need much help, much listening in order to live through the long barren season of dead water, a longer winter than before.... We have never lived through this kind of death. But we have lived through lots of other kinds of death. We will learn from the past, we will learn from each other, and we will live.

Port Graham is about 250 miles, by water, from Bligh Reef. To get there, the oil had to travel the length of Prince William Sound, past Green, Story, Knight, Montague and LaTouche islands, out into the Gulf of Alaska and along the rocky headlands of Kenai Fjords National Park. It had to round the corner at the end of the Kenai Peninsula, plastering Elizabeth Island and heading into Cook Inlet and the outer reaches of Kachemak Bay. Moving beyond Port Graham and the surrounding area, the oil fouled beaches down the Alaska Peninsula — in Katmai National Park, along the Shelikof Strait, on Kodiak Island and beyond. As the oil spread so, belatedly, did the impact of cleanup and containment efforts, with an army of workers and a navy of boats to move and house them.

To trace on a map the tortured routes of the oil spilled from the *Exxon Valdez* is to appreciate the vulnerability of every coastline on earth as supertankers of 500,000 deadweight tons and more carry crude oil to market. When the Alaska pipeline was being planned and built, the largest tankers in the U.S. flag fleet were about half that size. The world's oil shipping companies, to the benefit of consumers and corporate shareholders, have created a megasystem that carries oil from wellheads in the far corners of the earth to refineries in its major industrial centers. But this megasystem is fragile. It requires careful scrutiny from outside the industry in design, construction and operation. When it fails, as it has in tanker disasters around the world, entire coastlines are at risk. Had a spill the extent of the *Exxon Valdez* disaster occurred off the United States East Coast, the devastation would have stretched from Cape Cod to Chesapeake Bay.

This is not a fictitious risk. Alaskans assume such risks daily as supertankers carry 2 million gallons of North Slope crude through Prince William Sound and out into the Gulf of Alaska. Other Americans on three coasts face just as ominous a threat as the world tanker fleet delivers 43 percent of all U.S. oil consumption daily from overseas.

What will limit these risks? Obviously, the present system, providing minimum penalties for creating massive environmental damage, has not deterred the industry from putting the coasts and oceans of the world at constant hazard. The system calls out for reform. The mission of this commission is to explain what must be done and why.

Walter B. Parker, chairman
Alaska Oil Spill Commission
January 5, 1990

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INTRODUCTION

The evidence points to eight fundamental conclusions that form the basis of this report:

I. *Moving oil by sea involves a complex, high-risk megasystem whose breakdown can threaten the welfare of entire coastlines.*

II. *Risk is unavoidable in modern oil transportation. It can be reduced but not eliminated.*

III. *Prevention of major oil spills must be a fundamental goal in the oil trade since cleanup and response methods remain primitive and inadequate.*

IV. *In government as well as industry, enforcement zeal declined, alertness sagged and complacency took root in the years preceding the* Exxon Valdez *disaster. Prevention was neglected.*

V. *Without continuing focus on the safety of the entire system by government and industry leaders, the oil transportation system poses an increasing risk to the environment and people of Alaska.*

VI. *The State of Alaska has primary responsibility for protecting the resources of the state and the welfare of its people, who bear the risk of unsafe conditions in oil transportation.*

VII. *Privatization and self-regulation in oil transportation contributed to the complacency and neglect that helped cause the wreck of the* Exxon Valdez.

VIII. *The safety of oil transportation demands review and overhaul. Not just new technology, but new institutions and new attitudes in old institutions are required.*

These are the basic premises we believe policymakers should understand in designing remedies for a flawed system of oil transportation.

Tankers carrying North Slope crude oil from the Valdez terminal of the trans-Alaska pipeline had safely transited Prince William Sound more than 8,700 times by the time the *Exxon Valdez* left port at 2112 hours (9:12

"I warned the community that the possibility of an oil spill in Valdez was very high. Given the high frequency of tankers into Port Valdez, the increasing age and size of that tanker fleet, and the inability to quickly contain and clean up an oil spill in open water of Alaska, we felt that we were playing a game of Russian Roulette. We knew 'The Big One' was only a matter of time."

Dr. Riki Ott, Cordova District Fishermen United

House Committee on Interior and Insular Affairs hearing, May 1989

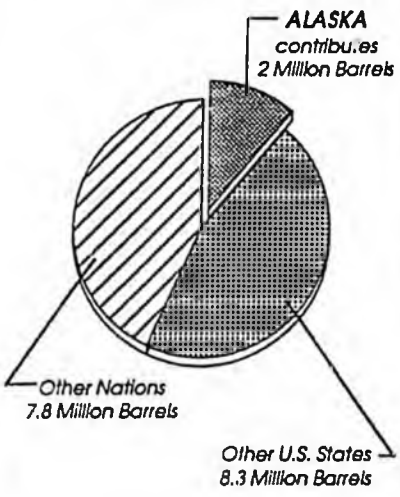
p.m., Alaska Standard Time) on March 23, 1989. This experience gave little reason to fear impending disaster. Yet less than three hours later, the *Exxon Valdez* grounded at Bligh Reef, rupturing eight of its 11 cargo tanks and spewing some 10.8 million gallons of crude oil into Prince William Sound.

No human lives were lost as a direct result of the *Exxon Valdez* disaster, and only one life was reported lost in the massive cleanup effort. Indirectly, however, the human and natural losses were immense—to fisheries, subsistence livelihoods, tourism, wildlife. The most important loss, for most Americans who will never visit Prince William Sound, was aesthetic—the sense that something sacred in the relatively unspoiled land and waters of Alaska had been defiled.

Experienced mariners express astonishment that a modern, well-equipped supertanker ran aground at Bligh Reef. The *Exxon Valdez* was traveling through well-charted waters in conditions of moderate weather and visibility. Bligh Reef was a well-known hazard, and all mechanical and navigational systems on the ship were working properly. Coast Guard Commandant Paul Yost engaged in only slight hyperbole when he said after inspecting the accident scene that his 10-year-old son could have steered the tanker safely through the area.

Yet the events leading to the grounding, and the institutions and procedures reflected in them, revealed a situation where the risk of disaster had increased steadily through years of relatively incident-free tanker trade. Success bred complacency; complacency bred neglect; neglect increased the risk—until the right combination of errors finally led to an accident of disastrous proportions.

U. S. uses 18.1 million barrels of oil every day



The wreck of the *Exxon Valdez* was not an isolated, freak occurrence, but simply one possible (and disastrous) result of policies, habits and practices that for nearly two decades have infused the nation's maritime oil transportation system with increasing levels of risk. The *Exxon Valdez* was an accident waiting to happen, the link that broke first in a chain with many unreliable couplings. The specific lapses that permitted the *Exxon Valdez* to run aground on Bligh Reef are being remedied, but similar circumstances easily could be repeated in some other combination to allow some other disaster. What is required now is comprehensive action to reduce the risk in the system.

At one level it is obvious that a combination of human actions and errors led to the *Exxon Valdez* disaster. Many have been scrutinized in the public record, particularly the proceedings of the National Transportation Safety

Board. Not even the root of this disaster—departing from traffic lanes—was unique: The 1967 *Torrey Canyon* grounding off England took place when the captain left the traffic lanes to save time.

Yet behind all human actions in the Valdez tanker trade, supporting the men and women who load and operate the tankers, is a system—one whose design and function clearly failed that night in Prince William Sound.

The system includes hardware in the form of pipelines, terminals, storage tanks, loading facilities, tankers and all the associated gauges, meters and machinery that operate them. It also involves operating instructions in the form of technical and design standards, international protocols, capacity ratings, terminal procedures, loading instructions, contingency plans, pilotage rules, maritime rules of the road, local navigation regulations, vessel traffic monitoring and economic and career pressures on all participants. Finally, the system involves institutional oversight in the form of corporate management, private insurance systems, state inspection and enforcement, local port management and Coast Guard regulation.

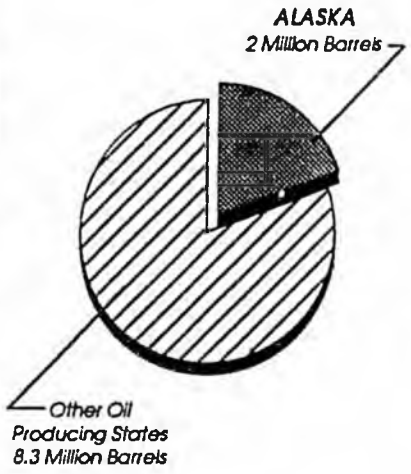
The objective is to move oil safely across the seas regardless of inevitable human error. System design must provide for redundancy—backup systems to prevent error from becoming disaster and overbuilding to provide for wider margins of error. Proper functioning requires constant testing, inspection vigilance, cooperation, discipline, expertise and commitment of organizations at every level of government and industry.

Yet for reasons of maritime tradition, economics, politics, public policy and modern practice, the maritime oil transport system is relatively more error-prone than safety-inducing. Industry tends to measure success as operating the biggest vessel with the thinnest hull and the smallest crew at the highest speed with the quickest port turnaround consistent with meeting minimum government requirements. Efficiency in a competitive world dominated by profit is all important in the oil transportation business, even in the Alaska trade where transportation competition is muted.

A comparison between the nation's passenger air transport system and the maritime transport system is instructive, if not exact. Air transport safety is better reinforced, backed up and institutionally safeguarded than maritime transport.

- Air pilots share responsibility with co-pilots and foster teamwork in the cockpit, while marine masters hold absolute authority,

Alaska produces 2 million barrels of oil every day



"It takes great strength to recognize the reflection in the mirror. Look in the mirror, and dig deep within yourself. Don't create an image that isn't there. Act on what you see. The environment is a reflection of who we are. We can't ignore the reflection we see. We have to live with it—today, tomorrow, and forever."

Dolly Reft, Kodiak native
Alaska Oil Spill Commission hearing, 8/11/89

sharing little command responsibility with other ship officers. Mistakes in the cockpit are more easily challenged than on the bridge;

- Air traffic control is mandatory, and ground controllers share responsibility with air pilots for safety of takeoffs, landings and approaches. There is no equivalent to ground control in marine transport, and vessel traffic systems are typically only advisory;

- The federal government imposes strict standards and enforcement carried out by the Federal Aviation Administration in air transport, while the federal presence is minor and interspersed among other Coast Guard duties in the marine environment;

- Strong international cooperation governs air transport practices, while international cooperation remains weak in the maritime field; and

- Working conditions in air transport are governed by strictly enforced limits on work hours, while overwork and long hours are routinely permitted to create fatigue among crew members in marine transport.

- Airline accident victims are identifiable and directly linked to the business of air travel, while the victims of marine accidents—seamen, fishermen, wildlife—are more likely to be anonymous.

"We in industry cannot assume that all regulation is bad; it's not."

Jerry Aspland, President, ARCO Marine, Inc.

Alaska Oil Spill Commission hearing, 9/1/89

The analogy to air transport is not perfect. The issues described here reflect institutional settings, demands and traditions that go beyond considerations of safety. But two points illustrate the relevance of the comparison.

First, there are approximately 17,000 airline departures per day in the United States. On most days, every single one of these departures safely arrives at its destination. The *Exxon Valdez* was a catastrophic failure—the oil transport equivalent of a major airliner crash. Studies performed for the commission indicate that a catastrophic failure such as the *Exxon Valdez* disaster can be expected to occur in the Valdez tanker trade approximately every 13 years, or about once every 11,600 transits. At a similar rate of catastrophic failure, the air transport system would produce 1.5 airliner disasters every single day, or 550 per year. If an average of 150 people died in each airline crash, such an accident rate would result in the loss of about 82,500 human lives per year—an unthinkable carnage that

is prevented by a tight, safety-reinforcing system of regulation and oversight.

Technological and human systems aren't perfect: Airliners occasionally do crash. But we have built a system that does not tolerate in air traffic anything like the catastrophic failure rate we can expect in the Valdez tanker trade. Because of that system, air travel can be considered safe and reliable. Risk cannot be eliminated, but it can be reduced—if we accept the costs involved.

Second, as vessels carrying oil and other hazardous materials impose higher and higher risks upon the world's oceans and coastlines, the environmental and social costs of marine transport accidents increase. The growth of a massive international system of transportation of oil by sea since World War II has not been accompanied by the development of organizations and active constituencies of those affected by the environmental hazards inherent in the trade. Those stakeholders, however, deserve increasing attention, for the risks they suffer are growing as the world's oil transportation system grows. And the marine transport system must become tighter and more safety inducing as the costs of failure grow more serious and more pervasive.

Alaska, like other states, has long relied on the National Contingency Plan to provide the manpower and resources to handle a catastrophic spill. But the *Exxon Valdez* response illustrated the emptiness of the NCP: It failed to provide the necessary resources, and indeed the record of the past decade shows that the federal government has relied on private industry to contain or clean up a major spill. The government provided no resources of its own to handle even moderate-sized spills adequately. Nor is there any indication that either the Environmental Protection Agency or the Coast Guard, the federal administrators of the NCP, made any effort to determine whether the oil industry actually had the capability to clean up a catastrophic spill.

The proposals in this report aim to revive the commitment of the state and nation to tanker safety and response preparedness. The basic premises behind these proposals are highlighted at the beginning of this chapter. The major recommendations for state, federal and industry actions are then divided by subject into seven sections.

The first section includes general prescriptions concerning prevention as a comprehensive policy goal of maritime oil transportation. It focuses on direct citizen oversight, improved industry and government attitudes,

"I think there's probably going to be reluctance from the management agencies that were involved, both at the state and federal levels, to take a hard look at their performance."

Dr. David G. Shaw, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

knowledge of risk at all levels and regulatory vigilance as primary building blocks to a safer system.

The second section defines some commitments that must be made by the oil industry to provide better environmental protection, just as it would for human safety.

The third section addresses actions the State of Alaska should take to bolster its oil spill prevention and response systems. It provides insights on the state's relationship with the federal government and ideas on focusing the state's position on oil and gas transportation, expanding its regulatory position, creating interstate compacts, and adding greater local input to decision-making.

Recommendations to the federal government in section four, if adopted, would have considerable impact on tanker safety. Tanker design changes, including double hulls, improved traffic control systems and a increased emphasis on proper manning and crew training are the key elements. If adopted, these could decrease spill probabilities of the *Exxon Valdez* size more than four-fold. If further recommendations for increased federal oversight also were carried out, we could expect a five-fold improvement in oil tanker safety—and therefore a substantial decrease in the present devastation of our coasts and oceans.

"The level of inability to function in chaos that's going on out there is ridiculous. The amount of money that is being spent is obscene."

Dennis Holan, Cordova fisherman
Alaska Oil Spill Commission hearing, 6/28/89

Section five describes what the commission believes should be the government's posture toward future spills—the response mechanisms of state, federal and local governments, and how they might fit together better to prepare for future spills. The private sector is included as a critical element of response, but not as the governing element. The key to a proper response system is speedy mobilization of manpower and resources immediately after a spill. The next element is to insure protection of key environmental areas if a spill cannot be contained. We recommend that the Incident Command System—currently familiar to many federal agencies for emergency response—be put into use widely to respond to natural disasters.

In section six we make recommendations on how to implement an oil spill response and how to integrate the Incident Command System into existing organizations. Our goal is to show how to use existing government systems in the most efficient manner while avoiding the creation of a separate spill response bureaucracy in every government agency concerned with oil spills. We have also emphasized an increased and structured role for local communities both to insure that local resources are available and that rapid mitigation of spill impacts occurs when

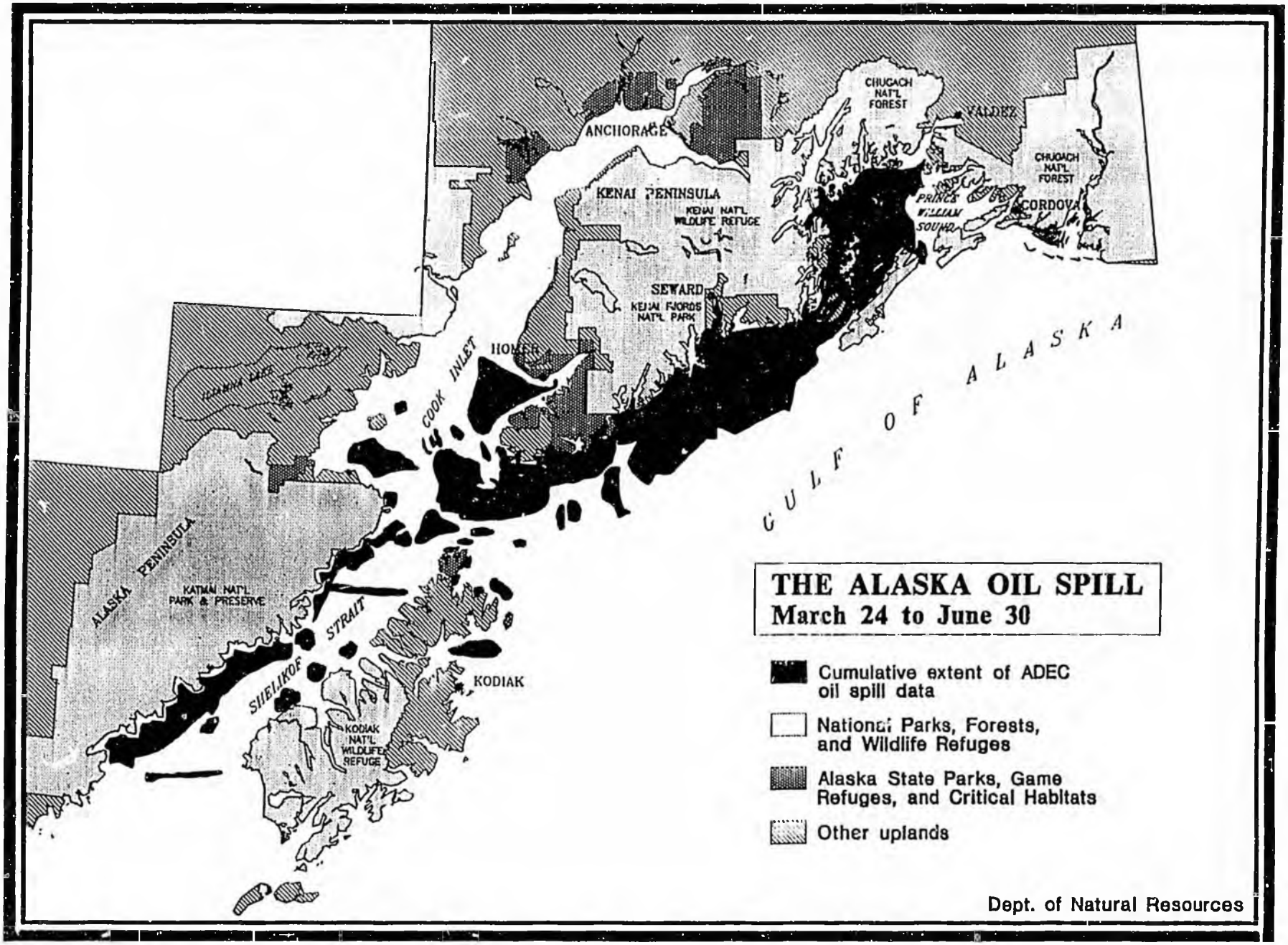
necessary. The role of private contingency plans also is defined in this section.

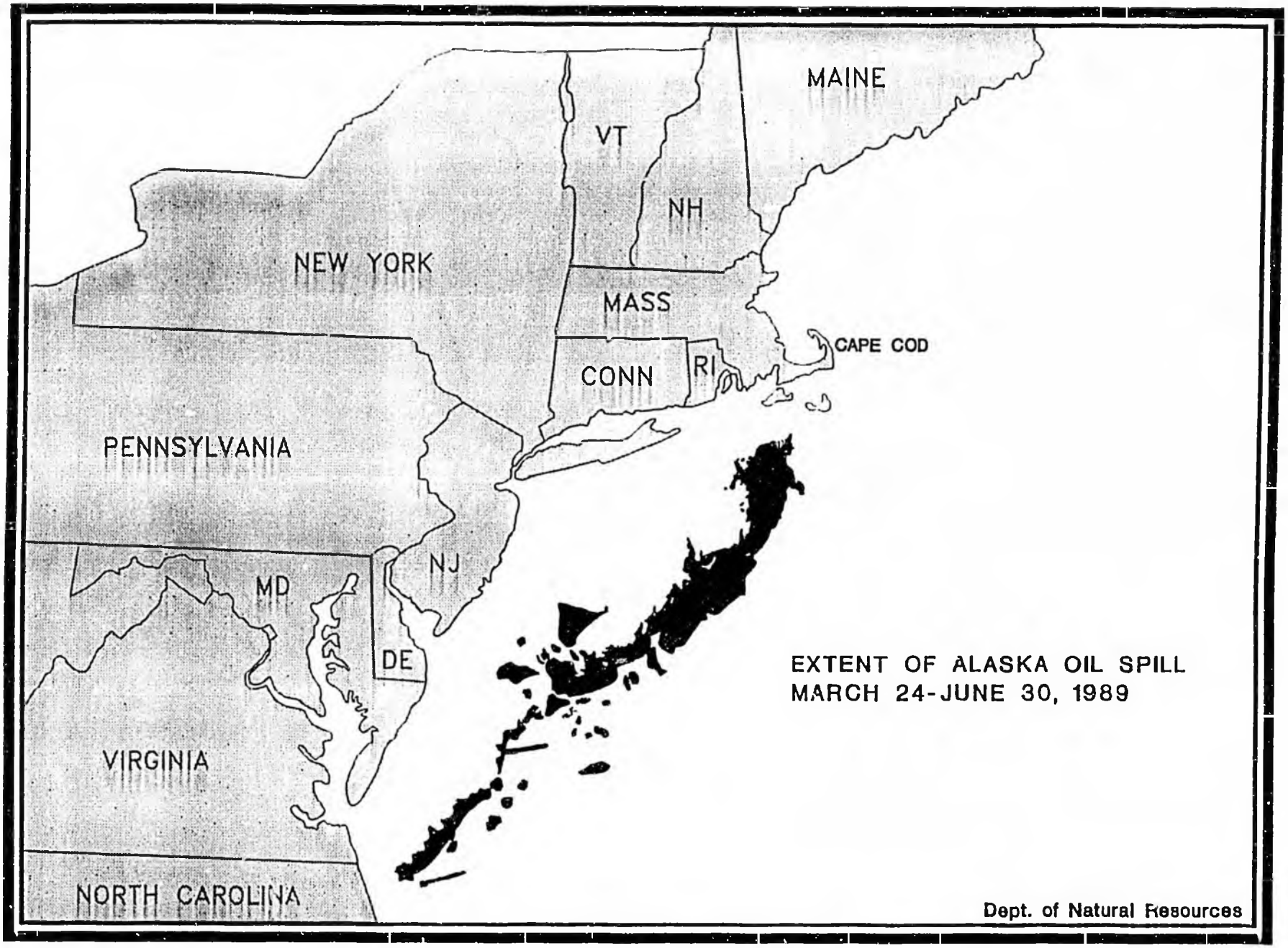
Section seven concludes this report with some ideas for improving research and development efforts toward oil spill prevention and response. We were able to use information gained from around the United States by the General Accounting Office and Office of Technology Assessment in their studies done after the *Exxon Valdez* spill. We also were able to obtain substantial information on advanced technologies in use by the U.S. Navy that were ignored in the *Exxon Valdez* incident. Finally, we have accumulated information on advanced spill response technology in Great Britain, the Netherlands, West Germany, Norway, France and South Africa. Information from the Middle East, the Soviet Union and Japan still remains to be gathered, a task we leave to our successors. In this section we also include our comments on the use of simulators in crew training.

If the commission's labors have been successful, the implementation of its proposals should considerably improve the safety of oil transportation by sea. But implementation rests in forums from the White House to local council halls, corporate board rooms to legislative chambers. Future vigilance rests in the hands of state and federal leaders, industry and public agency officials, terminal operators, tanker officers and crew, technical advisors and, perhaps most important of all, citizens exercising a watchdog presence and role.

"What I'm afraid of is that the commission could end up being in such a defensive mode that it could end up making the world safe for oil spills."

Mike Milligan, Kodiak
Alaska Oil Spill Commission hearing, 8/11/89


CHUGACH NAT'L FOREST
VALDEZ
ANCHORAGE
CHUGACH NAT'L FOREST
KENAI PENINSULA
KENAI NAT'L WILDLIFE REFUGE
PRINCE WILLIAM SOUND
CORDOVA
SEWARD
KENAI FJORDS NAT'L PARK
HOMER
COOK INLET
GULF OF ALASKA
ALASKA PENINSULA
KATMAI NAT'L PARK & PRESERVE
SHELIKOF STRAIT
KODIAK
KODIAK NAT'L WILDLIFE REFUGE
THE ALASKA OIL SPILL
March 24 to June 30
Cumulative extent of ADEC oil spill data
National Parks, Forests, and Wildlife Refuges
Alaska State Parks, Game Refuges, and Critical Habitats
Other uplands
Dept. of Natural Resources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EXTENT OF ALASKA OIL SPILL
MARCH 24-JUNE 30, 1989
Dept. of Natural Resources

WORLD OIL TANKER ROUTES BY VOLUME
GREENLAND
NORTH
AMERICA
ATLANTIC
OCEAN
EUROPE
ASIA
MIDDLE
EAST
AFRICA
PACIFIC
OCEAN
SOUTH
AMERICA
OCEAN
INDIAN
OCEAN
AUSTRALIA
ANTARCTICA

COMPREHENSIVE PREVENTION POLICY

Prevention is the only way to protect the oceans and coastlines from oil spills. Once it reaches the water, spilled oil is extremely difficult to contain and collect, even under ideal conditions. And the conditions under which oil is spilled are seldom ideal.

General Accounting Office data suggest no more than 10-15 percent of oil lost in a major spill is ever recovered. The Office of Technology Assessment estimates that only 3-4 percent of the oil spilled from the *Exxon Valdez* was recovered, despite Exxon's summer-long beach cleanup and oil skimming effort.

The urgency of establishing strong prevention policies for Alaska is also suggested by computer-assisted simulations done for the Alaska Oil Spill Commission by ECO, Inc., of Annapolis, Md. Its report notes that more tonnage of crude oil is shipped through the Valdez marine terminal than through any other port in the United States. Its simulations show that under typical winds and currents a catastrophic spill any time in Prince William Sound can be expected to coat the beaches of much of the sound and the Kenai Peninsula with oil. And its calculations indicate that under poiicies prevailing at the time of the *Exxon Valdez*, a similar occurrence can be expected in Prince William Sound approximately every 13 years.

Worldwide figures gathered by ECO show that during the past 20 years, tanker spills of the magnitude of the *Exxon Valdez* — more than 10 million gallons — have occurred approximately yearly. Spills of up to 1 million gallons have occurred approximately monthly. As this report goes to print, less than 10 months after the *Exxon Valdez* disaster, the *Khark-5* spill off the coast of Morocco has exceeded 30 million gallons, with the full cargo of 72 million gallons still at risk.

Both the frequency of oil spills and the failure of human capacity to clean them up argue for strong prevention regimes at every level.

"The die is cast, that Prince William Sound is going to recover pretty much at its own rate. And that no matter what we do, the rate isn't going to change a whole lot."

Professor David G. Shaw, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

Recommendation 1
Prevention as policy

Prevention of oil spills must be the fundamental policy of all parties in the maritime oil transportation system.

Worldwide experience has shown repeatedly that containing and collecting significant amounts of oil lost in a spill is beyond present technological capability except for relatively small amounts under optimum conditions. Data collected by the U.S. General Accounting Office suggests that no more than 10-15 percent of all spilled oil is ever recovered. Full repair of environmental and ecological damage caused by a major spill is similarly beyond human capabilities. Cleanup and containment technology remains primitive, although recent research and development initiatives offer promise of some improvement. With present technology, natural recovery often is the most effective recourse after a spill hits shore, but generations may lose the advantages of environmental quality during the recuperation.

"The most telling remark, the president of Exxon, Mr. Stevens, said that the contingency plan cannot deal with a spill like this."

Rep. George Miller, California
House Committee on Interior and Insular Affairs hearing, May 1989

These lessons were relearned in the response to the Exxon Valdez spill. Given the increasing capacity of supertankers carrying more and more oil through the world's oceans and the acknowledged shortcomings of cleanup methods, a sharpened focus on prevention is the key to environmental protection and, indeed, the only adequate response to the increasing risk in the system.

Recommendation 2
Changed attitudes

All parties must instill the attitude that spilled oil in the water is unacceptable into the approach of the maritime transportation industry in the United States and abroad.

The shipping industry historically has neglected the environmental costs to the public of oil spills. Maritime losses traditionally are measured only by the financial value of vessel and cargo. Economic calculations have emphasized short-term expenses over long-term protection. Attitudes in regulatory and response agencies, particularly the Coast Guard, tend to reflect a similar disregard for environmental costs. Protecting property has a long legal and practical tradition — witness the Coast Guard's longstanding focus on salvage of vessel and cargo — while protecting the environment still receives too little emphasis. Finally, cost-benefit analyses undertaken by public officials charged with regulating the maritime transportation industry sometimes assume that the costs and benefits accrue to industry alone, thus neglecting the interests of others affected by the risk of accident.

As public concern for environmental protection grows, industry and regulatory attitudes must change. The shipping industry has an incentive

to adopt stronger approaches to prevention as increasingly it is being required to pay for environmental costs previously borne by society.

Recommendation 3
Citizen knowledge of risk

Because many individuals and communities are placed at risk by modern oil transportation systems, citizens should be involved in oversight arrangements at every level of government.

Shipping oil involves inherent risk. The risk cannot be eliminated, only reduced. Citizens deserve to know and make informed social judgments about what constitutes an acceptable level of risk. Reducing the risk involves costs, both public and private. Citizens may or may not be willing to pay the incremental costs of reducing particular risks, but to make informed choices they should be made aware of the tradeoffs involved. Present federal committees for oversight and policymaking are made up of industry and government representatives. There are no equivalent state committees.

"We can't rely on government agencies to be the sole watchdog over industry."

Unidentified witness, Port Graham, Alaska

Recommendation 4
Regulatory vigilance

The nation and the state need strong, alert regulatory agencies fully funded to scrutinize and safeguard the shipment of oil.

The notion that safety can be insured in the shipping industry through self-regulation has proved false and should be abandoned as a premise for policy. Alert regulatory agencies, subject to continuous public oversight, are needed to enforce laws governing the safe shipment of oil.

National and state agencies formally vested with responsibility for overseeing the environmental safety of oil transportation frequently have been complacent. Regulatory authority has been weak, and there has been a dramatic decline in vigilance since 1981. State authority has been further impaired by conflict with federal authority. Funding ordinarily furnished to protection agencies has left broad areas of concern without oversight. Between disasters, appropriations have tended to decline. As federal administrations have changed, funding and commitment have fluctuated as well. Missions have been attenuated by the addition of further responsibilities without further funds, as in the case of the U.S. Coast Guard, whose duties have greatly expanded without a commensurate increase in budget.

In such an environment the nation's maritime oil transportation system becomes more, not less, prone to risk of accident. The nation's regulatory agencies must be committed to the safe shipment of oil and other

"The best way to keep the oil from becoming a problem is to keep it in the ship, because historically ... we clean up very little of the oil. ... So I guess prevention is one of the things that we certainly would look at as the strongest avenue to avoid having a catastrophe."

Commander Dennis Rome, U.S. Coast Guard

Alaska Oil Spill Commission hearing, 8/31/89

hazardous substances, and they must be encouraged by the regular oversight of citizens who have the greatest stake in the relevant environments. Without such an an invigoration of these agencies, accidents such as Exxon Valdez are bound to increase.

Recommendation 5
Foreign flag spill prevention

State laws protecting the environment from oil spills should be applied to foreign flag vessels equally with other vessels engaged in the transportation of oil.

The state has been unduly deferential to constitutional limits supposedly restricting a state's ability to impose containment and cleanup planning and equipment requirements on foreign flag vessels. A changing congressional intent will produce revised judicial interpretations of preemption doctrine. While most vessel design features are subject to exclusive federal rule, the state is empowered to protect its environment by all reasonable, non-burdensome means.

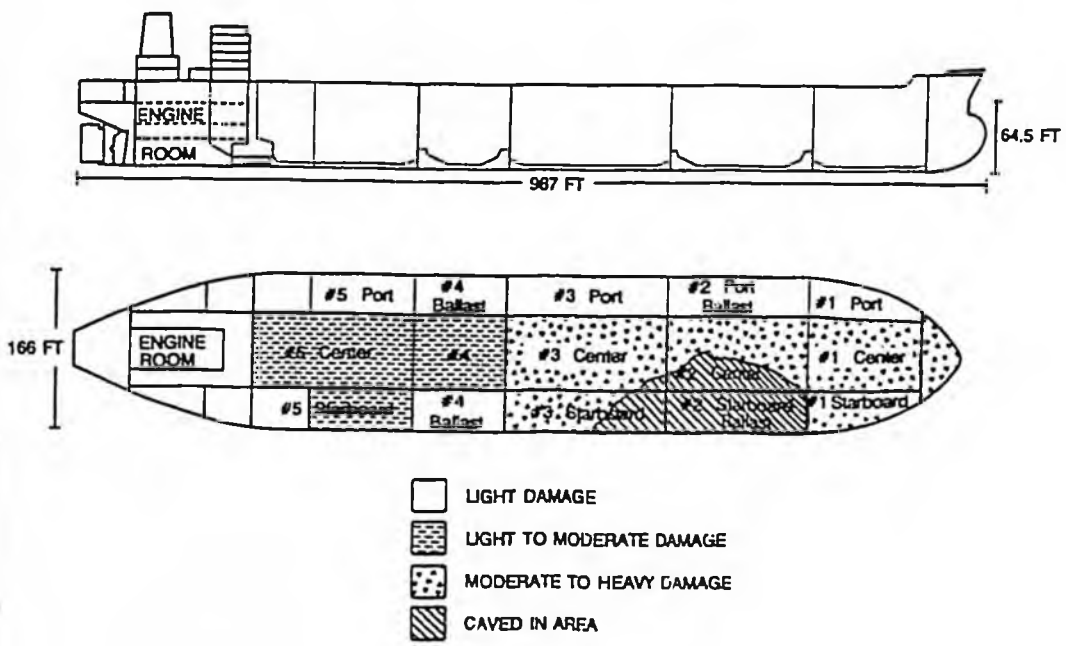
Containment and cleanup planning and readiness regimes established under state authority should apply to barge or tanker traffic under any flag in the waters of a state.

"We should look beyond ineffective sticks and consider some carrots as well. I think we should consider paying the industry to stay ready and to stay on top of technology—with their money, of course."

Professor Steve Colt, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

EXXON VALDEZ DAMAGE



RESPONSIBILITIES OF INDUSTRY

Public authority can do a great deal to enforce safety standards in oil transportation, but industry promises, policies and practices are typically the starting point for discussion. Industry bears a heavy obligation to operate safely and responsibly, regardless of the regulatory structure imposed by government.

Alyeska Pipeline Service Company has demonstrated a commitment to safer operations since the spill by establishing new procedures, including escort vessels, new spill response equipment, speed limits for tankers and dictates that tankers stay in designated traffic lanes while pushing through ice. Some of these reforms were more sweeping and costly than required by government.

Private industry's task is to carry oil to market responsibly and efficiently. Government's task is to regulate that trade prudently in the public interest. The obligation to protect the safety of the public and the environment is mutual, and shared by both sides.

"I think it's important to begin a process of informing society about the uncertainty, the risks and the tradeoffs that are involved in most human activities and especially in these kinds of large scale resource development activities."

Professor David G. Shaw, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

Recommendation 6
Industry commitment

The nation and the state need a private oil transportation system with management that is committed to environmental safety.

The *Exxon Valdez* incident refocuses attention on industry's obligation to operate safely and responsibly. Decision-making by private industry is the first and, in many ways, most important pressure point for safety in the oil transportation system. Government regulation and public oversight can help safeguard the system, but industry can — and should — move rapidly and effectively on its own to establish procedures to reduce the risk of oil spills.

"Each of the various interested parties is trying to pass on their own real or perceived costs to everybody else."

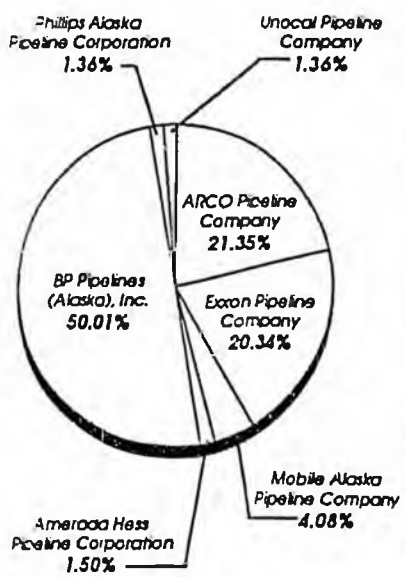
Professor Matt Berman, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

Response to the *Exxon Valdez* disaster illustrated industry's ability to mobilize quickly after a disaster. Exxon, though unprepared for a spill so large, responded far more swiftly than any government agency. The company committed vast human and material resources and reportedly spent more than $1 billion to respond to the spill. (Luckily, Exxon was able and willing to bear this expense, but the industry would have had to spend comparatively modest sums to provide stringent prevention measures instead.)

Though the industry's safety record is mixed, by and large it has not been committed to environmental safety. Driven by competition and profit-maximizing goals, the industry has focused on economic efficiency and opposition to government regulation, claiming it could operate with as great or greater regard for safety without regulation. An industry ideology that regulation is a nuisance can drive an industry attitude that the objectives of regulation are also a nuisance.

Alyeska Pipeline Service Company



Source: *Alyeska Pipeline Service Company*

In addition, maritime liability limits and low levels of accountability for oil spills have led to neglect of the interests of those who are not owners of vessels and cargo but whose exposure to risk makes them stakeholders in the system.

Historically, the industry has "externalized" the costs of environmental degradation — that is, shifted the costs to others. As concern about oil spills increases, however, industry will be forced to "internalize" more of these costs as incentive to protect the environment.

Properly motivated and funded, private industry can move more swiftly and effectively than any regulatory agency to correct deficiencies in the oil transport system. A tenacious commitment to environmental protection by industry could do more, quicker than any government inducement. Management and shareholders should insist that the traditions and operating assumptions of the shipping industry reflect this commitment.

Recommendation 7
Best available technology

Government and industry should strive to adopt the best available standard technology in establishing performance standards.

Consciousness of the importance of prevention, spill preparedness and corporate responsibility varies greatly among oil carriers. The blurring of responsibility within each oil company and within the Alyeska consortium, coupled with the independence of each shipping company and its owners, argues for uniform application of standards by government authority.

In the past the oil transportation industry has attempted to reduce virtually every performance standard sought, asking that government impose only minimum standards and claiming that most carriers voluntarily will exceed those minimums. But when accidents have occurred, industry representatives have frequently claimed that it has no obligation to go beyond those minimums. The public no longer should tolerate this double standard — and the conflict should be resolved as soon and as much as possible by the adoption of improved standards of performance by industry.

Recommendation 8
Corporate safety executive

Every company shipping oil through the United States should identify a full-time environmental safety officer empowered to take recommendations to the highest level of the company.

Corporate performance on safety issues can be significantly improved by making safety a specified goal and giving primary responsibility to identified managers charged with increasing awareness at the highest executive level. Such corporate structures operated effectively, for example, during construction of the trans-Alaska pipeline system and should be recreated for operations as the system ages and becomes more prone to risk.

The designated corporate safety officer should be required to report annually to shareholders and the public concerning the safety of the tanker fleet, accidents and near-misses, state-of-the-art technology, and company plans for bringing its fleet into compliance with the most appropriate standards.

"The marine industry needs to revamp all personnel training and development programs to meet today's modern fleet demands."

Jerry Aspland, President, ARCO Marine, Inc.

Alaska Oil Spill Commission hearing, 9/1/89

Public pronouncements by Alyeska and its owners that the company employed the best available technology and committed adequate resources to safety purposes turned out to be false. These assurances were aided by corporate institutional advertising and a sense of well-being

arising from the flow of oil revenue to Alaska's citizens which encouraged an atmosphere of laxity in state oversight of oil transportation.

A report to the public and corporate shareholders should provide accurate information about each shipper's spill prevention plan and preparedness posture to encourage greater corporate accountability for safety practices.

Recommendation 9
Tank farm

Tank farm capacity at Valdez should be increased to meet the original design requirement for maximum throughput.

Limited storage capacity at the Alyeska terminal can create undue pressure on loading and shipping schedules of tankers calling at Valdez. Shortage of storage capacity could lead terminal operators to load tankers under otherwise marginal weather conditions, for example, to avoid an expensive slowdown or shutdown of the pipeline.

It may be that the cost of tank farm construction is high enough that a slowdown or risk of slowdown is a preferred cost. If that is the case, standards for slowdowns and shutdowns should be clearly stated so that safety is not sacrificed to revenue or pipeline flow considerations.

"In boarding both the Japanese vessel and the Soviet vessel I had no problem getting on those vessels, but yet there was a guard at the door of the VECO office when I tried to enter that door. And I started wondering who is really afraid of me."

Rita Turner, Seward
Alaska Oil Spill Commission hearing, 7/14/89

STATE REGULATION AND OVERSIGHT

The State of Alaska carries primary responsibility for protecting the state's public resources. Neither federal nor local authority and self can take the place of strong state regulation of industries that vitally affect the economic and environmental welfare of Alaskans.

State authority must be exerted to protect fish and wildlife resources, to vouchsafe federal regulation, to oversee industry operations, to inform the public of risk, and to insure proper response capabilities in case of accident. State government was not fully prepared in any of these categories before the *Exxon Valdez* disaster.

Alaskans have benefited strongly from the production and transportation of oil in the state, but they have not invested commensurate resources and attention in regulating and safeguarding the operations of the industry. It is incumbent upon Alaskans, through their elected officials as well as their own efforts, to create workable and effective institutions to protect their interests in the production and transportation of oil in the state.

"If you had an enforcement unit in place, staffed by the people who were solely charged with it and not distracted by some of the other responsibilities, that they would be able to take the time to account for what are our main polluters in the state."

Sue Libenson, Executive Director
Alaska Center for the Environment
Alaska Oil Spill Commission hearing, 9/21/89

Recommendation 10
Obligation to manage and protect

The people of Alaska should recognize they are the stewards of vast natural resources that are the mainstay of their livelihood and a national treasure. Among the obligations of state stewardship is the duty to protect these resources as much as possible from harm.

The State of Alaska has not spent an amount appropriate to the job of natural resource management and protection. There are many reasons for this, including low recognition of the magnitude of the task.

Compare the total amount spent by the people of Alaska to manage fish and game resources to that for overseeing the oil industry. Recognizing the importance of fish and game to the state, the people of Alaska have spent substantial sums on regulation, enforcement, research and development, as well as a statewide system of citizen advisory committees. The amount spent overseeing the oil industry and its safety practices, by comparison, is a fraction of that total.

Recommendation 11
Federal preemption

The state should adopt stringent standards regulating the transportation of oil in its own waters without fear of federal preemption.

Alaska has had unsatisfactory experience with federal preemption in the field of tanker safety and local navigational controls, but Congress no longer intends to override more stringent state regulation.

In 1976 the State of Alaska adopted a law giving broad authority to state agencies to oversee and regulate the safety of tanker traffic to Valdez. In 1977 the oil companies responsible for carrying Alaska's oil initiated a lawsuit (*Chevron, et al. v. Hammond)* challenging the state's right to regulate the safety of marine oil transportation on grounds that congressional action and Coast Guard regulation preempted the field. By 1979 the plaintiff companies had gained both a favorable ruling from the U.S. District Court and negotiated concessions from the state. The result was a gutting of key provisions in the legislation.

"I think what's missing here is an attitude among state leaders that the buck stops here, with the people of Alaska and not in Houston or Washington, D.C."

Professor Matt Berman, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

Industry encouraged the view that it should be allowed to take care of its own safety matters; that state activity was a needless and obstructionist interference with private prerogative; and that left to its own devices the industry would employ the best available technology with the optimum commitment of resources. This was not remotely the case. The eviscera-tion of the state's regulatory framework and the antiregulatory temper of the times laid a foundation for repeal of the 1976 legislation and a slashing of state budgetary allocations for oversight. As a result, the role of the Department of Environmental Conservation was sharply reduced. The

department's small staff was overwhelmed by technical licensing and permitting activities, leaving no opportunity for the agency to perform its role as overall environmental policy watchdog. Though the state retained certain powers over water quality, the overall effect of preemption through the federal courts was to reduce or eliminate the state presence in the oversight of oil industry affairs and demoralize state personnel engaged in such activity.

In the absence of the state presence, the already weak federal regulatory presence declined further. In 1990 Congress is likely to adopt legislation that would eliminate any presumption of federal preemption in actions taken by the state with respect to safety and response. Thus the way is open for the state to reassert its historic role in resource protection.

Recommendation 12
Oversight council

A citizens' advisory council should be established in the office of the governor and given responsibility for overseeing the safe transportation of oil, gas and other hazardous substances.

No state agency has as its primary mission oversight of environmentally safe transportation of Alaska's resources. Regulatory authority over such transportation is spread among several agencies that do not always coordinate information or resources. The only overall view of the system is exercised by the governor, but he has no single designated officer or council to provide information or maintain consistent oversight.

The state should establish a citizens' advisory council, supported by a full-time executive director and small staff, to provide focus to state oversight. Members should be chosen from among the general public, selected for their concern for environmental safety. The council should have power to subpoena information and witnesses, to inspect facilities, to conduct investigations, and to collect information and statistics on safety.

The council's duties should be to:

- Advise the governor and legislature on the environmental safety of the transportation of Alaska oil, gas and other substances posing environmental risks;

- Advise on potential initiatives in state and federal regulations and at the governor's request, represent the state's interests in the development of multistate compacts and national and international policy;

"What we have is a system driven by the fact the pipeline is pumping 2 million barrels of oil into the sound, and they have to get it out of here. They choose not to restrict it, turn it off, or anything else. The decision to sail or not to sail is not a dispassionate decision based on weather or traffic."

Rep. George Miller, California House Committee on Interior and Insular Affairs hearing, May 1989

"What tends to happen is DEC will get dragged into a septic tank argument and it will drain away as many resources as fighting, for instance, the Alyeska ballast water treatment plant. There's a real problem with priorities within DEC."

Sue Libenson, Executive Director
Alaska Center for the Environment
Alaska Oil Spill Commission hearing, 9/21/89

- Identify unmet needs and recommend priorities, strategies and obstacles to achieving them;
- Encourage coordination of spill prevention and response programs currently spread among several agencies that cumulatively deserve high priority;
- Make budget and resource allocation recommendations;
- Evaluate programs and recommend elimination of marginal activities;
- Recommend changes based on new technologies and scientific impacts;
- Designate advisory panels, if deemed necessary, including appropriate representation, ex-officio, of appropriate departments of the state and municipalities, regional oil spill authorities, representatives of fishing and environmental groups, and shippers, owners and residential groups on the pipeline route; and
- Issue an annual report and safety assessment. Reports to the governor should include regular statistical and special reports on accidents and near-misses, the status of major risks, the performance of state and federal agencies, and long-term options for improving safety.

Recommendation 13
Enhanced regulatory strength

The state should expand and exercise its regulatory authority over environmental safety. Measures voluntarily adopted by industry should be backed up by state regulation. Federal technical standards and safety requirements should not preclude more stringent state standards.

The State of Alaska currently does not exercise its full power under the U.S. Constitution to regulate environmental safety. Recent congressional enactments and judicial decisions make it clear that Congress does not intend that states should hesitate to protect local environments with greater stringency than the minimums established under federal law. The state should have the power, for example, to prohibit vessels from entering or departing Alaska ports and waters under unsafe circumstances.

Regulatory effectiveness also should be improved through assessment of administrative and civil penalties to encourage prevention, no preen-

forcement review of compliance orders, environmental audits, stronger criminal penalties, and statutory provision for citizen lawsuits. Private voluntary prevention measures, though commendable, are often ignored as memories fade unless backed up by state regulations.

Recommendation 14
Strengthened state inspections

The state should renew and strengthen its authority to conduct inspections and spill response drills on vessels calling at Alaska ports and marine terminals.

The Valdez tanker fleet, built in the 1970s is approaching obsolescence. Structural weaknesses, technical malfunctions and other equipment problems can be expected to increase in frequency and seriousness.

Inspections and reports, done in cooperation with the Coast Guard or alone, should include examinations for structural integrity and environmental hazards. Inspection duties may be allocated between the harbor administration office proposed in this report and the Department of Environmental Conservation. State authority should include the power to levy substantial summary civil fines for interfering with inspections or failing to cooperate with response drills.

The lack of any quality control or assurance program on tanker operations from Prince William Sound or Cook Inlet allows serious hazards to arise. Coast Guard authorities already perform inspections on tankers calling at Valdez, but state inspection would provide an added measure of safety. In the past, when the state and the Coast Guard both inspected vessels, the two agencies reenforced each other's effectiveness. When the state was stopped from making inspections on the grounds that the activity was exclusively federal, the quality of Coast Guard inspections declined. Inspection by two governments is not needless duplication but needed redundancy, providing a greater measure of safety.

"We are obligated to provide systems which enhance marine transportation safety, and we do it economically."

Jerry Aspland, President, ARCO Marine, Inc.

Alaska Oil Spill Commission hearing, 9/1/89

The "two-tier" system of quality control was adopted during construction of the trans-Alaska pipeline. The value of the two-tier system has been reenforced by the National Aeronautics and Space Administration experience with space disasters. The official inquiry into the 1986 Challenger space shuttle explosion found that system capabilities had been stretched to the limit in the winter of 1985-86 to support the flight schedule of the shuttle program. System capabilities for shipping oil from Valdez were similarly stretched to accommodate increasing throughput of the trans-Alaska pipeline to 2.2 million barrels per day without increasing other elements of the system, such as tank storage capacity.

When systems are stretched thin, redundancy in oversight and inspection is doubly important to reduce the risk of catastrophic failure.

Recommendation 15
State presence at Alyeska terminal

Government agencies should be given space at the Alyeska terminal to carry out their duties.

State inspection efforts at the Alyeska terminal should be situated so as to maintain a continuing presence, instant response and constant vigilance over environmental safety at the terminal and on vessels calling there. Until the Exxon Valdez wreck, various agency personnel were hampered by lack of quick and easy access to the terminal. Alaska Department of Environmental Conservation officials attempting to inspect Alyeska facilities were told they might be required to procure a warrant, a laborious and time-consuming process. A more cooperative posture by Alyeska staff might result if state personnel were seen not so much as an opposing force, but as a normal and integral part of the operation. Office facilities on-site might normalize relations between government and industry officials so that regulatory activities, which on occasion can be adversarial, need not become unnecessarily antagonistic.

Recommendation 16
State licensing of safety managers

A state licensing system should be established for oil transportation system safety personnel, including pipeline pump station and terminal managers.

Oil transportation safety managers should be required to show educational qualifications or equivalent experience and pass examinations reflecting an understanding of environmentally safe resource transportation in Alaska.

Mariners, captains, engineers and ship's pilots, all water based transportation managers, already are licensed to encourage safety and public accountability. Similar practices should be established to insure that personnel meet a state standard of professionalism for all important managers in the oil transportation system. Few of the managers brought in to oversee contingency plan development or respond to the Exxon Valdez spill had significant prior knowledge of Alaska environmental laws, resources or local capabilities.

Licensing can significantly help assure knowledge of prevention and response capabilities as well as public accountability. For example, regardless of whether particular conduct may be tacitly approved or

tolerated by an employer, a licensee who falsifies a report, bypasses a required procedure or otherwise violates the professional obligations covered by the license can lose his or her opportunity to engage in the employment.

Recommendation 17
Enforcement in state waters

To the extent it does not already have such authority, the state should seek from Congress authority to require and enforce prevention and response regimes on vessels trading in Alaska or adjacent waters.

Spilled oil recognizes no state boundaries. State jurisdiction is necessary because spilled oil may come ashore or ravage important local fisheries hundreds of miles from the point of the spill. The risk of breakup of a tanker or loss of a barge in the Gulf of Alaska is real. Gulf of Alaska shipping routes should be covered by an adequate regional response developed under the National Contingency Plan and backed by capabilities of the state, the Coast Guard, the carriers and other relevant authorities.

Recommendation 18
Interstate compacts

The State of Alaska should negotiate interstate compacts with other coastal states and provinces for the development of prevention strategies, storage of response capabilities and to effect coordination of assets in case of another major spill.

The western coastal states and provinces may share common environmental concerns about spilled oil. Compact agreements have the force of federal law and may enable these states to create an appropriate regional administration to oversee oil shipping.

Recommendation 19
Maintenance and personnel audits

The state should require maintenance and personnel audits at oil transportation facilities to provide information and pinpoint problems in spill prevention.

Accurate, timely information is central to the exercise of the oversight function and must be available to all government actors in prevention and response. The state can gather information on conditions relating to spill prevention through technical maintenance audits, thereby supporting the work of the state advisory council and regulatory agencies. Technical and personnel audits may be done by outside contract.

Recommendation 20
Marine pilot qualifications

Training and experience standards for marine pilots in Alaska should be upgraded to require actual experience in Alaska operations of vessels at thresholds of 60,000 and 150,000 deadweight tons.

Training and experience requirements have been reduced for pilots of large tankers in Prince William Sound and Cook Inlet since the late 1970s, allowing pilots to qualify for very large ship operations on insufficient experience. While no accidents have been caused by this circumstance, a system with multiple thresholds is inherently safer.

Recommendation 21
State as co-insured

Insurance policies should identify the State of Alaska as an additional insured or named beneficiary.

The shipping industry is responsive to economic incentives. Insurance premiums and premium requirements create incentives. The insurance industry is responsive to the needs of co-insureds. Such practices were required during construction of the trans-Alaska pipeline. There is every reason to revive them.

Recommendation 22
Remote spill response

The state should set rigorous requirements for private oil spill prevention and response capability in remote locations. The state also should develop response plans for major spills and articulate a prevention program from the Aleutian Islands to the Arctic.

Despite the state's obligation to respond to major spills, only if private resources are committed to prevention systems and response can an acceptable reduction in risk be achieved.

Marine traffic in arctic Alaska already poses unacknowledged risk. Fuel provisions delivered by sea and vessels fueled by oil create risks of damage in these hazardous and environmentally fragile waters. Spills are usually impossible or much more difficult to contain and collect in arctic waters. Immediacy of response is the key to cleanup if a spill occurs.

Measures should be undertaken to reduce spill risk in the arctic, including better vessel tracking and contingency plan requirements for all large vessels transiting the arctic, and for smaller vessels carrying oil or major fuel supplies.

Recommendation 23
Arctic prevention research priority

Given the high risk involved in arctic oil transportation, the options for developing systematic environmental safety protections for this region should be a priority for scientific authorities.

The long-term need to develop environmental safety regimes of great stringency cannot be ignored. Development of arctic oil discoveries dependent on maritime transportation should await the preparation of approved systems of oil transportation using experience gained from the trans-Alaska pipeline system. But any increase in traffic simply to accommodate increases in oil production should be accompanied by a major increase in preventive safety.

Recommendation 24
Pipeline evaluation

The state should establish a task force to review the environmental safety of the trans-Alaska pipeline system independently or in concert with a federal counterpart.

More than enough evidence is available regarding sharply increasing risk of a pipeline breach and raising questions regarding government response capability. On the advice of contractors showing evidence of massive corrosion problems with the pipe, Alyeska already has undertaken a review and reconstruction program of the trans-Alaska pipeline system. The state was intimately involved in oversight of the original design and construction of the pipeline. This pattern of oversight should be renewed to protect the same public interests.

The task force should make recommendations to better oversee the long-term safety of the pipeline and gathering system. Specifically, it should review the environmental safety of:

- the trans-Alaska pipeline and gathering system;
- applicable government and private contingency plans; and
- the response plans and capabilities of government agencies.

The commission endorses the concept of a presidential task force on pipeline safety as proposed by Congress and urges that provision be made for state participation.

"The community must be imbedded in the bureaucracy because this is the only way oversight is going to happen. It's the only way that continued community involvement is going to happen. And it's the one way to guard against apathy if you don't have another oil spill for 20 years."

Jim Sykes
Alaska Oil Spill Commission hearing, 9/21/89

Recommendation 25
State harbor administration

The state should create harbor administration offices for Prince William Sound and Cook Inlet to help regulate traffic and navigation and to implement terminal and vessel inspections.

Local oversight of navigation and port operations can improve conditions by bringing local perspectives to bear. A harbor administration office should have the power to:

- Regulate traffic and navigation issues not preempted by Coast Guard regulation to impose more exacting standards in the best interests of the state.
- Advise and oversee the Coast Guard's management of such issues and make recommendations for changes;
- Certify and declare disasters, and order state management of a spill in the port area; and
- Assume functions given under contract by the Coast Guard and participate in joint management arrangements.

The state asserted greater control over harbor activity in the mid-1970s, but conceded its management prerogatives in negotiations leading to a resolution of the Chevron, et al., v. Hammond lawsuit. Pending legislation clarifies congressional intent that the state may undertake safety reguiations relating to local harbor conditions, weather and the like, and that the vessel must follow the more stringent rule. Collaboration with federal authority is required to assure that no direct conflict with Coast guard regulations are involved and that optimum safety conditions are observed.

"I would promote that there is a state group that deals with marine transportation, kind of a one-stop shopping group."

Jerry Aspland, President, ARCO Marine, Inc.

Alaska Oil Spill Commission hearing, 9/1/89

In the event of a spill, the harbor administration at Valdez probably would be the headquarters of the on-scene commander carrying out the governor's delegated emergency authority.

Oil transportation in Cook Inlet, a body of water widely noted for its extreme tides, currents, winds and ice conditions, faces a high risk of spills. Though smaller volumes of oil pass through Cook Inlet than Prince William Sound, similar oversight arrangements should be duplicated there, allowing for appropriate variations in representation and the difference in geographic circumstances.

Research done for the Alaska Oil Spill Commission indicates that a major spill of between 300 and 1 million gallons can be expected in Cook Inlet approximately every 2.2 years, a spill of between 1 million and 9 million

gallons about every 24 years, and a spill of 9 million gallons or more about every 66 years. Oversight arrangements should be created to provide appropriate public accountability and awareness of spill risks.

Recommendation 26
Regional advisory committees

A system of regional advisory councils should be formalized under state authority to oversee harbor administration, state and federal regulation and private safety functions.

The people living closest to a danger have the most to risk and are the most likely to insure that readiness and alertness are maintained. As a Prince William Sound resident told the commission, "People take care of the things they love."

Regional oversight councils can both encourage protection of local resources and provide an opportunity to make use of local residents' knowledge of conditions and needs in crafting workable spill prevention and response policies. Regional advisory councils should provide advice to the statewide policy council proposed in this report and respond to its recommendations. A similar council should be considered for permanent oversight of the trans-Alaska pipeline system.

Recommendation 27
Local government representation

Local governments should be represented on the regional advisory councils and the harbor administration.

Local residents complained that their views and knowledge often were ignored. Residents in small villages, in particular, believed they were bypassed despite their great, direct interest in events. Villagers rarely are able to send delegates to advisory boards, even though their lives may be severely traumatized by a spill. Special provisions should be made to assure no neglect of these stakeholders.

FEDERAL REGULATION AND OVERSIGHT

Congress has mandated a comprehensive system to protect the safety of oil and gas transportation, but for lack of enthusiasm and underfunding enforcement has been a failure. The quality of federal oversight of oil transportation in Alaska was typified by the U.S. Coast Guard, whose safety and regulatory efforts gradually declined for most of the decade leading up to the *Exxon Valdez* disaster.

The Coast Guard supported safe traffic monitoring systems and design standards, including double-hulled tankers, when the trans-Alaska pipeline system was approved in 1973. But by 1978, after strong industry opposition to double hulls in international regulatory forums, the Coast Guard backed off its support. The Coast Guard also imposed stringent safety inspections and vessel monitoring practices during the early years of tanker operations after the opening of the pipeline in 1977. Inspection and monitoring efforts waned noticeably after parallel state inspections were stopped in 1979, and gradually thereafter as Coast Guard funding and resources for these activities declined.

Some federal agencies performed admirably in events surrounding the spill — notably the U.S. Army Corps of Engineers and the U.S. Navy in cleanup response efforts and the Coast Guard itself in successful measures to salvage the ship and the unspilled cargo. As a rule, however, federal authority must be reinvigorated in several ways if it is to provide significant leadership in the safety and oversight of maritime oil transportation.

"Figure out what 25 percent of the nation's oil is worth."

Rep. George Miller, California

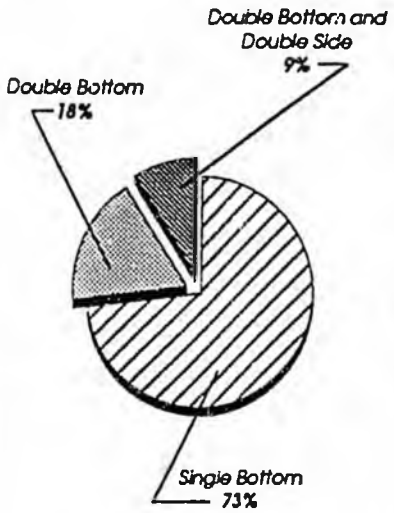
House Committee on Interior and Insular Affairs hearing, May 1989

Recommendation 28
Double hulls and vessel design

Double hulls and other technological advances in tank vessel design should be required on an accelerated timetable, including prohibition of nonqualifying vessels, regardless of flag registry, in all U.S. waters.

The loss of oil from the *Exxon Valdez* wreck would have been substantially less if the vessel had had a double hull of appropriate design. A U.S. Coast Guard study undertaken after the accident indicated that up to 60 percent less oil — about 6 million gallons — would have entered the water if the *Exxon Valdez* had been equipped with a double hull. Double hulls already are required for chemical tankers and gas carriers to provide maximum protection to cargo tanks. A study for the Alaska Oil Spill Commission by ECO, Inc., of Annapolis, Maryland, says double hull design "provides the highest probability of surviving damage, either from a collision or grounding, with no loss of cargo."

Hull designs of the 93 tankers registered for Alaska trade.



Technical measures to reduce risk of accident and oil spillage have been advocated by naval engineers and others over the past two decades, but this advocacy has not produced significant voluntary changes in the way the industry does business. Suggestions regarding multiple screws, horsepower enhancement and other design overbuilding proposals to enhance safety have received only a negative response. Required changes are necessary, particularly as the size and carrying capacity of modern supertankers has increased.

Recommendation 29
Mandatory traffic control

Mandatory traffic control systems should be installed in due course in Cook Inlet, Prince William Sound and all waters of the U.S. where an equivalent or greater risk occurs.

Any of several common practices relating to positive vessel traffic control would have prevented the *Exxon Valdez* from straying so far off course as to run aground on Bligh Reef. The wreck would not have occurred if there had been a traffic control system covering operations to Hinchinbrook Entrance, as was promised by owners of the trans-Alaska pipeline system at the time the system was approved. The wreck would not have occurred if Loran C retransmit or radar had provided reliable coverage to Hinchinbrook Entrance, as was promised by the owners. And the *Exxon Valdez* wreck would not have occurred if the Coast Guard had not, according to regular, informal practice, given permission to the vessel to move outside established tanker lanes.

The *Exxon Valdez* wreck would have been less likely if the vessel had been traveling at lower speed and would not have occurred if the captain had

chosen to push through ice in the traffic lanes at low speeds, as was more common practice in the early years of operation of the Valdez terminal.

A mandatory vessel traffic control system operated by personnel more experienced that those now posted to the advisory system would require strict monitoring of a vessel's position in relation to traffic and known hazards and would prevent corner-cutting to save time, a conspicuous cause of the well-known Torrey Canyon disaster.

Recommendation 30
Crew levels

Crew levels on tank ships must be established to reflect manning needs under emergency conditions, not just normal operating circumstances, and must reflect the need to avoid fatigue and overtime among those with responsibility for safe navigation.

Crew sizes and fatigue factors have been subjects of investigation since the *Exxon Valdez* accident. A second qualified officer on the bridge would have made the wreck substantially less likely by increasing the likelihood that the bridge would have been alerted to the ship's errant position, the impact of the automatic steering mechanism, or to alternative last-minute navigation strategies for avoiding the reef, in time to avert the accident. Similarly, the wreck would have been less likely if crew members and ship's officers required to do double duty in Valdez harbor during loading operations had not been subject to fatigue.

A 1984 survey indicated that the ability to make schedules is viewed as the single most important factor in a company's evaluation of a captain's performance. Under such circumstances, a captain is strongly motivated to run whatever crew he has as long and as hard as necessary to meet the required schedule, despite formal duty time limitations. National Transportation Safety Board hearings on the *Exxon Valdez* accident showed that several crew members — including Third Mate Gregory Cousins, who was at the helm at the time of the accident — had worked extraordinarily long hours the day of the wreck. This practice is not rare in the trade.

Crew training standards must be strengthened and retraining and reexamination reviews tightened. Physical standards, in addition to those proscribing alcohol or drug abuse, must be met. A captain having a "predictable" heart attack is of no more use than one under the influence.

"The tradeoff in risk involved with a double hull is that to carry a given amount of oil, you now have to have 60 percent more tankers, and if you do the arithmetic that's the way it comes out."

Frank Iarossi, President, Exxon Shipping Company

Alaska Oil Spill Commission hearing, 9/1/89

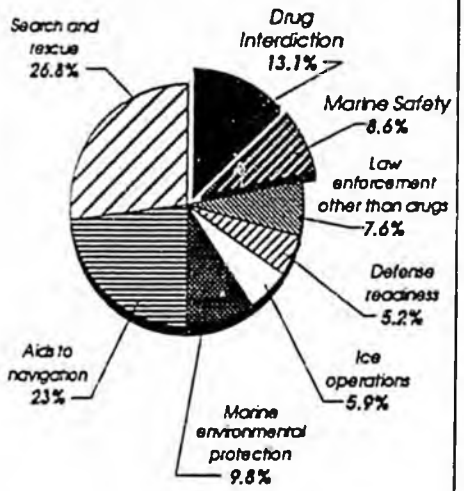
Recommendation 31
Coast Guard role

The mission of the U.S. Coast Guard to protect the safety of navigation should be defined specifically to include the safe transportation of oil by sea. Sufficient funding, resources and institutional support should be given to insure the strengthening this purpose.

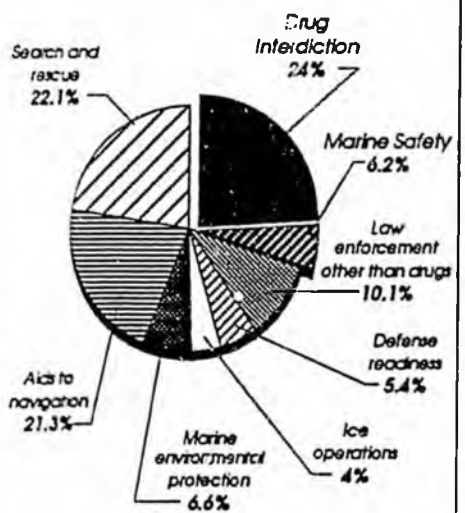
For reasons that include not just underfunding, but also confusion of mission and an unduly friendly relationship with industry, the Coast Guard has failed the American people in providing oversight of the country's oil transportation system. Enforcement must be strengthened and the penalty structure raised to a point where it weighs in the economic calculations of each company.

Coast Guard Budget Comparisons

1982



1989



Source: *The Seattle Times*

While various Coast Guard units have operational responsibilities for tanker safety, the Coast Guard's primary mission is not the environmentally safe transportation of oil by sea. There is a general disposition in the agency to keep commerce moving without regard to all environmental or social costs. This disposition may be in conflict with the need to "follow the book" to insure safety. The lack of particular focus on the environmental risks of oil transport was revealed in the system weaknesses that permitted the wreck of the *Exxon Valdez*.

The Coast Guard commandant is selected by the president and accordingly is likely to reflect the philosophical perspective of the times. After President Nixon's declaration of a policy of oil independence, which President Carter pursued through establishment of a Department of Energy, the national mood under President Reagan moved to industrial self-regulation. This mood was reflected in a greater resonance with industry wishes in Coast Guard performance. Relaxed regulation has contributed to a lack of progress in maritime environmental safety. Safety does not do well in a laissez-faire environment.

Underfunding and relaxed attitudes toward regulation increased the likelihood of the *Exxon Valdez* wreck in several ways. The junior Coast Guard personnel posted to Valdez did not think they had the authority to instruct tanker operators in navigation or to require frequent position reporting. Only one Coast Guard employee was on duty at the time of the accident. The wreck would not have occurred if the Coast Guard had prioritized the installation of up-to-date vessel monitoring systems. The wreck would have been less likely if the Coast Guard had exercised strong oversight of crews and manning practices.

The Coast Guard's power to determine required crew levels is of little consequence as exercised. The determination is largely a paper exercise in which the shipper submits a proposal that typically is routinely

approved without inspection, sea trials or a determination of need under foreseeable emergency or unusual conditions.

In the normal course, Coast Guard personnel retire or transfer to the shipping industry in large numbers, particularly at the executive level. It may be that the prospect of working for industry is reflected in the attitude of some Coast Guard personnel. The "revolving door" and the resulting sympathy of interests between regulators and the regulated is a common problem in other areas of government service.

Recommendation 32
Insurance premiums to reflect risk

Congress should revisit the antitrust exemption granted to marine industrial insurance to require that premiums reflect design and operational considerations in accident prevention and pollution abatement.

The shipping industry is responsive to economic incentives. Insurance premiums and premium requirements create incentives. Congress has adopted special provisions concerning the conditions under which marine insurance is exempt from antitrust regulation. Various requirements must be observed as a condition of the exemption. These conditions should require additional features affecting premium structure and loss control to encourage design improvements and operational practices that enhance environmental safety in the shipment of oil.

Recommendation 33
Corporate safety reporting

Congress should require corporations transporting oil or hazardous substances to file environmental safety reports as part of their Securities and Exchange Commission 10K filing. These corporations also should include a separate environmental report card in their annual reports to shareholders.

Safety is a factor in long-term profitability that may be neglected in management preoccupation with annual profit. Safety is a factor of cost and accountability. SEC requirements are intended to inform investors of facts needed to assess risk. A company's record and status concerning environmental safety should be available to inform such assessments.

A company responsible for oil transportation should report to its shareholders on the safety of its operations in addition to their profitability. The report should include an account of accidents, close encounters, technological developments, goals and objectives. This information should also be collected for the government's report.

"A lot of the Coast Guard personnel that came in did not have an understanding or a local knowledge of the area. I think that should be ... Local knowledge is going to be a key ingredient."

Jim Butler, Kenai Peninsula Borough

Alaska Oil Spill Commission hearing, 9/7/89

The meaning of corporate democracy should involve full discussion of all matters shareholders may care about. Environmental responsibility is a large part of corporate social responsibility for most large corporations, and certainly for companies carrying oil or hazardous substances. Shareholders should be kept informed of the corporation's stance toward its environmental record.

Recommendation 34
International action

The United States should pursue an aggressive policy in bilateral and international regulatory forums to demand safety improvements. The practice of deferring to international transportation safety standards in U.S. waters should cease. Environmental regimes established by state or federal government should apply to tanker or barge traffic under any flag in U.S. waters.

U.S. law should provide for the protection of U.S. waters, resources and regulatory standards regardless of whether international standards are consistent with them. Trade with the United States is at a high enough volume that this country should set the standard for environmental safety rather than accept a lower standard set by other nations.

Improvements in international safety standards have not been commensurate with growth in maritime oil transportation. The policy of the United States in international forums has been cautious, and forums have been dominated by U.S.-based multinational corporations to the disadvantage of environmental protection. American policy should be reoriented toward leadership in the establishment and maintenance of rigorous standards of safety and environmental protection. The United States should pursue bilateral agreements with its North American neighbors and its trading partners to provide cooperative standards, enforcement and spill response. The need for international spill response systems is shown dramatically by the 30 million-gallon spill from the Iranian supertanker *Khark-5* off the Morocco coast in December 1989. International standards should be viewed as a floor beneath which U.S. requirements will not fall rather than a ceiling above which they cannot rise.

Recommendation 35
Offshore tanker lanes

Tanker lanes should be established to keep tankers and fuel barges in the Gulf of Alaska and North Pacific trade at least 100 miles offshore.

Time is critical in efforts to protect coastlines from oil spill damage. In the event of tanker collision or breakup at sea, sufficient distance from imperiled coastlines can provide time to prepare defenses for key resources or habitats before oil reaches them.

Recommendation 36
Tracking vessels in the North Pacific

A system of tracking large vessels in the North Pacific should be developed.

The technology exists at modest cost to take the "search" out of search and rescue by tracking vessels broadcasting a signal on the high seas. Similar systems are required on all commercial air carriers and should be done for vessels. The system would not only enhance the environmental safety of tankers but also for modest marginal cost would enhance life safety systems in one of the most hazardous areas in the world.

Recommendation 37
Presidential Report

Congress should ask the president to require the administrator of the Environmental Protection Agency and the secretaries of Transportation and Commerce to issue a special report on the safety of oil transportation by sea. Annually thereafter, the Office of Science and Technology Policy or the Council on Environmental Quality should report on progress made by all parties, close encounters and accidents during the year, and emerging issues in the field.

No federal agency has as its primary mission oversight of the environmentally safe transportation of oil. The focus provided by a presidential-level report on the safety of maritime oil transportation would help alert the nation and the federal government to shortcomings in the system, as well as emphasizing the importance of safeguarding this system.

The report to the president should include:

- A history of accidents involving oil, gas and hazardous substances;
- An assessment of current risks and safety practices with reference to national energy policy;
- An assessment of prospects for progress in the enhancement of prevention technologies and techniques;
- An account of the activities of all federal agencies with responsibility for maritime safety, including a report on maritime recommendations of the National Transportation Safety Board, actions taken on them and reasons recommendations may have not been followed;
- An account of penalties levied for violations of oil, gas and hazardous substance transportation safety regulations;

"The few Coast Guard people that I have met in the field are green. I mean, they reminded me of summer hires. They were kids right out of school, and I can't help feeling that the powers that be are up there telling them to get those guys out of here and get this signed off so we can get this paper work, this paper chase done and get on with our business of running government."

Rich King, Upper Cook Inlet fisherman

Alaska Oil Spill Commission hearing, 9/7/89

- A specific report on the safety of the trans-Alaska pipeline system, the preparation of which should include adequate provision for state participation; and

- An overview evaluation of the effectiveness of private contingency and public response plans to oil spills in U.S. waters.

The Alaska trade is substantially less than a fifth of the maritime oil transportation system requiring national oversight. Either a strengthened Council on Environmental Quality or a more focused new agency as a watchdog over national environmental protection might better serve the nation's interests in reporting on the protection of the marine environment.

"In spills of this kind the Coast Guard has primary jurisdiction, and it is only when, as I understand the law, only when the responsible party either refuses to clean up or fails to do the job that the Coast Guard has the ability to step in."

Dennis Kelso, Commissioner
Alaska Department of Environmental Conservation
Alaska Oil Spill Commission hearing, 8/31/89

GOVERNMENT RESPONSE POSTURE

Alaska and other states have depended upon the National Contingency Plan to organize catastrophic spill response, but the *Exxon Valdez* incident illustrated the emptiness of its promises. The NCP provided neither the resources nor the manpower for effective action against a 10.8 million-gallon spill.

What is required in a successful oil spill response is to blend the resources of state, federal and industry response teams into an effective organization, and to provide sufficient manpower and resources to make a significant attack on the spill within 24 hours.

The greatest weakness of the NCP, as revealed in the *Exxon Valdez* incident, was that it failed to establish the firm, predesignated working relationships that are vital to a successful emergency response. Yet if that had been accomplished, it only would have revealed the weaknesses in the rest of the plan: lack of matériel, lack of trained manpower and lack of established common goals.

"What really happened here is that the system failed. We were down to the kicker on the football team making the tackle, and no coach wants that."

Vice Admiral Clyde Robbins, U.S. Coast Guard

Committee on Interior and Insular Affairs hearing, May 1989

Recommendation 38
Government in charge

The spiller should not be in charge of response to a major spill. A spiller should be obligated to respond with all the resources it can summon, but government should command that response.

Response should be a cooperative effort of government and industry under the direction of either the state or federal government, depending on which one has the stronger interest or can marshal resources more quickly and effectively.

The spiller was obliged to respond to the spill under contingency plans in effect at the time of the *Exxon Valdez* wreck. Neither Alyeska Pipeline Service Company nor Exxon Shipping Company was prepared to respond to a spill of such magnitude. The handoff of spill response authority from Alyeska to Exxon was not anticipated by all authorities and contributed to command confusion. Key decisions, such as the focus on "Corexit," an Exxon dispersant, were unduly influenced by the fact that the spiller was in charge of the spill.

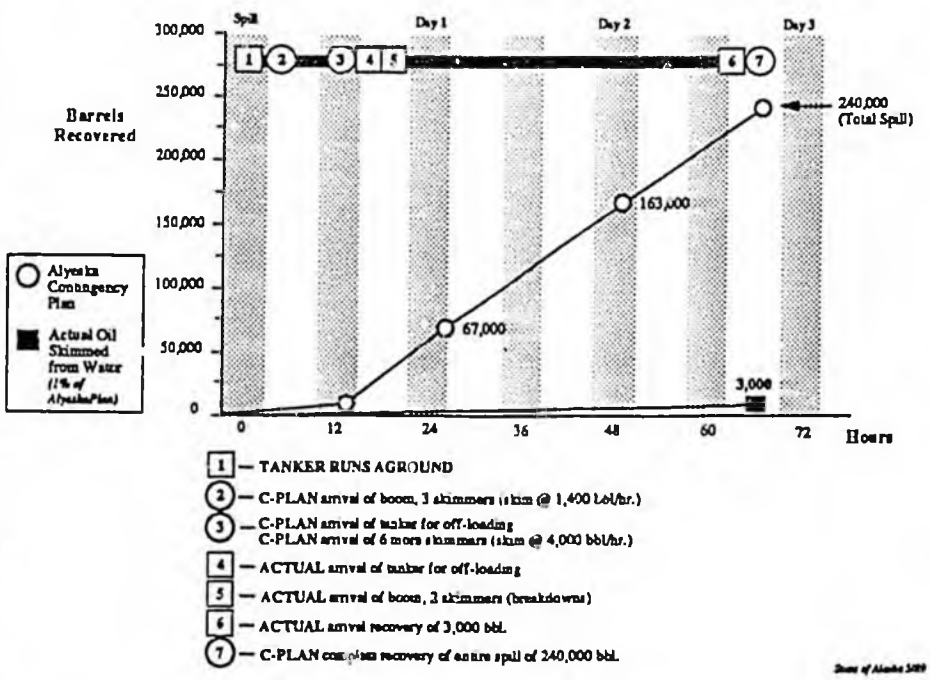
Spill response regimes should provide for government direction of the response effort, with the full participation and resources of both the spiller and government. Small spills, according to DEC regulations, can continue to be handled by the spiller.

"It's just a simple question of who's in charge."

Jim Butler, Kenai Peninsula Borough

Alaska Oil Spill Commission hearing, 9/7/89

Actual Cleanup vs. Intended Contingency Plan Cleanup



Congress should either strengthen the Coast Guard's oil spill response capability or transfer oil spill containment and cleanup responsibilities to the U.S. Army Corps of Engineers.

Recommendation 39
Coast Guard role in response

One of the real and relatively unsung success stories in the response to the *Exxon Valdez* disaster was the work of Exxon and the U.S. Coast Guard in lightering crude oil off the grounded vessel and later moving the ship safely off the reef. That success is a marked contrast to the failure of all efforts to contain and collect the oil that escaped in the accident.

By tradition and practice, the Coast Guard has developed considerable expertise and experience in salvage and rescue, but comparatively little ability in oil spill response. The Coast Guard is seriously underfunded and underdirected in the the field of oil spill response. The Coast Guard has been given one mission on top of another—most recently drug interdiction, a critically important task—without proportionate increases in appropriations. Thus the Coast Guard is obliged to do too many things for too many people and is not doing at least this one well.

"It's very important that a defined chain of command is recognized. You've got a couple of windows of opportunity in the initial management of a spill. You've got 12 hours, which is one tide cycle, a flood and an ebb. And then you've got, I'd say, four days and then after that it's gone."

Jim Buller, Kenai Peninsula Borough
Alaska Oil Spill Commission hearing, 9/7/89

Corps of Engineers and U.S. Navy equipment and workforces were the largest component of public response to the *Exxon Valdez* spill. There is a long history of cooperation between the Corps of Engineers and the Navy. The Navy has long experience in spill cleanup. Approved career patterns in the Corps of Engineers allow the development of career-long expertise and professionalism in a particular specialty. The Corps of Engineers' dredging capacity (which can be converted to skimming and oil recovery) and its nationwide mission involving the movement of water, soils, the management and preservation of wetlands, give it an unmatched spill response presence in all regions of the country.

Transferring spill response duties to other agencies would allow the Coast Guard to focus on tasks it does well—salvage and rescue—while permitting greater expertise of other agencies to be brought to bear on cleanup. Short of a formal transfer of functions, the Coast Guard should consider entering into delegation agreements for spill response functions.

The Environmental Protection Agency is not adequately funded and staffed for oil spill prevention and response. Unless the agency receives sufficient resources, these functions should be delegated to the states or transferred to agencies better able to perform them.

Recommendation 40
Role of Environmental Protection Agency

The Environmental Protection Agency commitment of staff and funding to activities in Alaska does not support the public perception that the

agency oversees protection of the environment. The EPA has no Alaska presence and is unfamiliar with local conditions. The agency performs its mission in Alaska only by delegation; for example, it has contracted with the Bureau of Land Management for spill response duties in the trans-Alaska pipeline corridor.

"One of the big problems in this oil spill situation was that for the first couple weeks probably over 50 percent of management energy was spent in organizational determination and role decision."

Dave Liebersbach, Multiagency Coordination Group

Alaska Oil Spill Commission hearing, 8/31/89

The EPA's response to the *Exxon Valdez* disaster was limited, though it did provide expertise in water sampling and environmental analysis. Only a narrow range of approvals and disapprovals of chemical response techniques were asked of the EPA in this incident. But it did not perform well even this limited task due to a lack of adequate testing and a backlog of approval authorization actions.

The EPA had no capacity to propose response strategies to the *Exxon Valdez* wreck, only to pass on the proposals of others. For example, the agency was in no position to propose alternatives to Corexit, Exxon's patented dispersant, or to challenge its use. The causes of this performance lapse include inadequacies in the research and development budget of the agency.

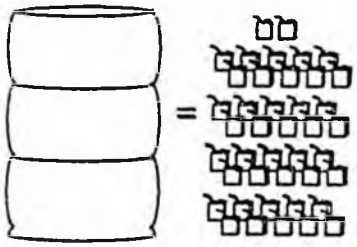
Although it is formally identified as the federal government's lead responder on land spills, the role of the EPA in such events has not been conspicuous. The agency has no capability in Alaska to regulate oil spill prevention or plan for contingencies and has only a limited capacity to respond to a spill by flying people into the state in an advisory role.

Recommendation 41
State takeover of oil spills

The state should empower itself to take over direction of the response to any spill in Alaska waters.

There is no indication the federal government is inherently better suited than the State of Alaska to respond effectively to an oil spill in Alaska waters. Indeed, the state often will have more response resources than the federal government as well as a greater knowledge base concerning local circumstances. The state's resources and expertise generally will be more readily available in the crucial early hours of a spill.

One barrel of oil = 42 gallons



The state has a constitutional obligation to protect its own resources and the primary responsibility to assist its own citizens. Considering the limited capabilities of federal agencies to respond to a variety of contingencies and the industry's conflict of interest, the state can never rely completely on the United States government or on industry to protect the resources of the state, whether on federal or state lands.

The state's authority should include the power to command the spill cleanup, to apportion scarce public and private resources, and to set in motion an emergency procurement process that will bypass the red tape that was a conspicuous element in the response to the *Exxon Valdez* wreck.

Recommendation 42
State role under federal authority

Even when the federal government maintains authority over a spill, the scheme for direction and command should permit full cooperation with state authorities.

Though primary responsibility for the salvage of vessels and the safety of crews should remain with the Coast Guard, pollution abatement may be left to the direction of state authorities indicating a willingness and capacity to do so with the support of federal resources. In particular, the state on-scene commander should be empowered to give binding directions to a spiller concerning particular response strategies. Community impact functions should be left to the standard emergency response command system.

Recommendation 43
State response depots

The state should establish community-based response depots under the management of the state Department of Military and Veterans Affairs.

A major oil spill is in many respects analogous to emergencies such as floods, forest fires and earthquakes. Persons trained in emergency systems to mobilize a large workforce quickly and with the required urgency tend to be better equipped to respond to a major spill. Those specially trained in environmental protection perform better in advice on establishing goals and objectives and in evaluating the impact of the operation.

A state response committee made up of representatives of the appropriate state and federal agencies should be created to review state response plans and participate in periodic drills.

Recommendation 44
Immediate local response

Local volunteer and part-time spill response units should be established, trained and equipped under the direction of the state Department of Military and Veterans Affairs.

Trained volunteer and part-time spill response units, properly trained, supervised and mobilized, should be prepared to protect critical habitat by keeping oil from reaching the shore or protected areas. The work of

Cordova fishing community mobilizing a "mosquito fleet" to protect fish hatcheries after the *Exxon Valdez* wreck is an instructive example. The local experience, knowledge and equipment of a trained volunteer corps should be put to work to help protect local resources.

Recommendation 45
Comprehensive regional response plans

The state should develop regional response plans reviewed by appropriate regional advisory committees. Private contingency plans should be developed that presume and mesh with the regional response plan.

Regional committees should be made up of local community members, state and federal agencies and industry. They will prepare the regional response plans and participate in drills to insure readiness. When a spill occurs this committee makes decisions regarding the region and reports to the on-scene commander. During the aftermath of the *Exxon Valdez* wreck the best example of a coordinated response was the response in Seward. The incident command system was fully employed and was able to carry out a well-managed, organized response.

These committees need to be predesignated before spills so they can participate in the planning process and be even more effective in responding to spills when they occur.

Recommendation 46
Regional response capability

The regional response capability designated in the regional response plan should be able to respond to a major spill with the speed of a fire department to protect habitat and contain, transform, recover or destroy a major spill before it reaches shore.

Time is the critical factor in all attempts to limit the environmental damage in a major spill by keeping oil off the shore. Regional response organizations must perform swiftly and with clear command and control to maintain the hope of keeping oil off the beach.

Recommendation 47
Emergency economic maintenance

The state should sponsor a system of emergency economic maintenance for persons immediately and seriously affected adversely by a spill.

The financial victims of a spill should not be subject to economic pressures to settle their claims quickly. Victims whose injury is indirect also should receive some early relief. The economic maintenance system should follow the pattern of unemployment insurance but would cover all

classes of people injured by a spill, not just insured unemployed. This program should be funded from spill impact funds.

Concern for fish and wildlife resources was the dominant concern in the response of state agencies and federal environmental agencies. Impacts on people were given relatively lighter attention, despite the toll in human misery on those whose livelihood and way of life had been severely disrupted or effectively destroyed for the foreseeable future.

Exxon did set up a system for the early compensation of claims and settled a large number of them, an activity it was not required by law to undertake. A smaller and less financially capable company may not have been willing or able to provide such a system.

Exxon was able to mitigate claims against it by hiring large numbers of people put out of work by the spill in cleaning up after it. The injured and economically benefited, however, were far from congruent groups. The principal economic beneficiaries of the spill were the two corporations hired by Exxon to manage the cleanup.

Many fishers or other injured parties believed they were disadvantaged in dealing with Exxon on claims.

The private system was incomplete in that many people who suffered severe income loss received no compensation because their claims were not against Exxon or were not legally cognizable. For example, seafood processing workers and crews of fishing vessels that were not hired according to their annual expectation were left to their own resources. Some were successful in obtaining employment with Exxon or its contractors. Others were not.

"I can't quantify the losses that occurred because no in-place, quick studies were made as to what was happening to the economy at that time. We have lost the economic history."

Vince O'Reilly, City of Kenai

Alaska Oil Spill Commission hearing, 9/7/89

"EPA classified Alyeska as a nonprofit organization and based their entire permit on that. When operations at Alyeska were compared to other operations including facilities partly owned by the Alyeska owner companies, it becomes readily apparent that the oil industry is operating under a set of global double standards."

Dr. Riki Ott, Cordova District Fishermen United

House Committee on Interior and Insular Affairs hearing, May 198[illegible]

IMPLEMENTING THE RESPONSE

Inevitably, a major spill will occur.

Just as inevitably, there will be surprise and chaos. But unpredicted circumstances and the disarray of managers caught off guard can be sharply reduced if a plan is in place that sets out in a coordinated fashion what people should do in emergency circumstances.

The failure of response to the *Exxon Valdez* disaster was made more poignant by the location of the accident. Bligh Reef is in protected waters, only 25 miles from one of the world's major oil terminals. Most of the cleanup equipment in the state was stored at the terminal, and the weather for the first three days after the spill was extraordinarily good.

Command and contingency plan changes contributed to the chaos. When it became obvious that Alyeska's contingency plan was inadequate, the local response commanders — the Coast Guard captain of the port, the Valdez field office chief for the Alaska Department of Environmental Conservation, and the manager of the Alyeska marine terminal — were replaced, even though they were the most familiar with the spill area and the existing contingency plan. Within 48 hours, the spill was being managed by a Coast Guard admiral, the head of Exxon Shipping Company and the commissioner of the Alaska Department of Environmental Conservation, none of whom had particular knowledge of the area or its response planning. Eventually the Exxon worldwide contingency plan took priority, even though it had no specific relationship to Prince William Sound.

Response to the *Exxon Valdez* wreck revealed confusion and unpreparedness on a massive scale. But because plans do not work perfectly does not mean that they don't work at all. There is no reason why the chaos of the *Exxon Valdez* response should be repeated.

"As regards the cleanup effort and the equipment, I think it would stop the average reader just to read that the equipment that was used in most cases was inadequate. In most cases it didn't work. In a lot of cases the equipment was not in place."

Vince O'Reilly, City of Kenai
Alaska Oil Spill Commission
Hearing, 9/7/89

Recommendation 48
Incident Command System

A formal command structure, known as the Incident Command System, should be used to direct response to oil spills.

The safety of the crew and salvage of the ship and cargo should be left primarily in the hands of the Coast Guard and the owner. The Incident Command System, which is familiar to many state and federal agencies, appears to be the optimum command and control system for other oil spill response functions. The system allows for training and management by state emergency and environmental authorities to cover three major responsibilities:

- Containment and recovery of the spill on water.
- Treatment of beaches and recovery of oil from the intertidal zone.
- Management of onshore impacts, primarily a responsibility of emergency response authorities.

The local on-scene commander can be predesignated under this system. The function of higher officials such as a federal "czar" should be to see that resources are mobilized and provided, not to replace the on-scene commander. Pre-incident agreements and the Incident Command System should guide the allocation of labor and equipment to communities.

A confusion of command and responsibility handicapped response in Prince William Sound, despite the good faith efforts of all parties. Similarly, a confusion of mission resulted in a division between the very successful focus on the safety of the crew and salvage of the vessel and its cargo and the much less effective effort to contain and recover the oil. Shore operations were often marked by chaos, misallocations of resources and neglect of the interests and wishes of residents.

In almost every command structure surrounding the *Exxon Valdez* spill, the individual most knowledgeable about the circumstances of the spill and theoretically charged with response was quickly replaced by a person who may never have read the local contingency plans. The Coast Guard appears to have rotated personnel through Prince William Sound for the experience.

"The cleanup effort consisted principally of managers, most of whom knew little about the area or environment they're entrusted to restore, fairly rigidly supervising laborers. These same managers, private and public, have discouraged volunteers with local knowledge from helping in the cleanup effort. This kind of centralization works for mobilizing heavy equipment and disposing of hazardous waste, ... but I think it's discouraged the flexibility and creativity needed to pick up oil with the primitive technology that we have in remote areas."

Professor Matt Berman, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

A substantive role should be given to the affected communities in any response system.

Recommendation 49
Enlarged community role

Communities in proximity to the spill and in the shadow of the oil were not given a proportionate role in the response system after the *Exxon Valdez* accident. Frequently they were ignored. Often they devised their own strategies for response, for instance acquiring or manufacturing boom by themselves. Yet local interests, local knowledge and experience with the ocean often made the community-based work force the most efficient available.

The state Department of Environmental Conservation should continue to insure spill response capability. For smaller spills this responsibility can be carried out or supported through private contract. In a major spill, where mobilization of private resources and multigovernmental agency response is required, the Department of Military and Veterans Affairs, with the advice of DEC, may determine that the spill be taken over by the state.

Recommendation 50
Allocation of state response authority

Confusion of command in response to the *Exxon Valdez* disaster grew out of the state's failure to focus response activity in a single agency with an operational capacity.

Distinctions were blurred in the *Exxon Valdez* disaster between the system for making decisions and responsibility for carrying them out. DMA is better suited than DEC to carry out operational decisions. DEC is better suited to provide quality assurance auditing functions and to give advice, as is the role of DEC in relation to the private spiller in charge.

Logistic support agencies were not sufficiently utilized in the *Exxon Valdez* spill as a result of a confusion between the decision-making process and execution command.

Responsibility for the management and preparedness of emergency local response activity should be vested in the Department of Military and Veterans Affairs.

Recommendation 51
Enhanced role for Department of Military and Veteran Affairs

Regional depots, now privately controlled under a Regional Response Agreement, should also be managed under the Department of Military and Veterans Affairs or as the department delegates. This may require some redelegation of authority vested in the Department of Environmental Conservation in the last session of the Alaska Legislature.

In their professional training the normal professional complement of the DEC consists of persons primarily trained in the measurement and evaluation of environmental quality. Such personnel are not as well trained in the skills of maintenance and mobilization of a workforce and equipment, communications, procurement and the like.

The personnel of DMA are primarily trained in emergency response, the mobilization of a workforce and equipment, emergency procurement and similar tasks. DMA's management of emergency response gives the DMA a standing outreach into all Alaska communities including personnel, equipment, a command structure, a work force, buildings, planes, vehicles, etc.

The DEC, a regulatory agency, though far better equipped and staffed than EPA, did not have a disaster response capability sufficient to meet a spill of large magnitude.

Recommendation 52
Emergency response funding

An immediate funding mechanism must be available after a spill to allow the earliest commitment of response resources.

Procurement limitation was the first reason the Coast Guard did not take command of the *Exxon Valdez* spill, though other reasons, including presidential directive, followed.

An immediate funding mechanism would permit authorities to contract resources, the mobilization of a workforce, the purchase of supplies, etc. Procurement procedures normally followed to insure accountability make response efforts ineffective under emergency conditions. Until the governor is notified, the on-scene commander should be empowered to authorize the expenditure of funds. When the governor is notified of a spill, the governor should authorize the release of funds and determine their allocations among agencies. Both federal and state contingency fund sources are required for an effective spill response capability.

"There was never a question in my mind about whether to incur a commitment or enter a contract because of worries about funding."

Dennis Kelso, Commissioner
Alaska Department of Environmental Conservation
Alaska Oil Spill Commission hearing, 8/31/89

Public agencies were substantially handicapped by their inability to quickly commit themselves financially. In contrast, Exxon was the most effective responder because its officers on the scene had authority to commit the corporation. The Coast Guard is required to determine whether to federalize a spill based on whether the spiller is doing an adequate job. In fact, the Coast Guard determines whether the spiller can do a more effective job than the Coast Guard. This is almost always the case because the Coast Guard is handicapped by procurement limitations.

The EPA has no significant presence in Alaska capable of responding to a major spill on the uplands, notwithstanding that the response planning assumes the EPA will be in charge. In Alaska, this responsibility has been transferred by contract to the Bureau of Land Management.

Recommendation 53
Local service impact funding

A declaration of emergency should trigger the ability of the governor or other appropriate officials to release funds collected from state oil revenues to cover all impact costs, including economic maintenance programs and local impacts which become an extra burden on local services, whether provided by state or local government.

Indirect government service costs can be as important as direct spill expenditures in meeting a spill emergency. Local governments in particular were hard hit by lack of funding for increased burdens which hit everything from phone service to mental health during the crisis following the *Exxon Valdez* spill.

Exxon released some funds to communities for service needs, which it was not obliged to do. But the availability of such funds should not depend on the policy of the spiller.

Recommendation 54
Full-cost reimbursement

As a prevention incentive, existing regulations should be broadened to insure that tin future spills the state can recapture all expenses directly or indirectly incurred by the state, its subdivisions and private parties to whom the state owes reimbursement or who have benefited under the state's oil spill disaster economic-maintenance program.

Disagreement on reimbursable costs that resulted in an economic loss to the state resulted in the cancellation of a contract by which, on the pipeline route, DEC exercised EPA authority over spills, all to the detriment of environmental protection.

Reimbursability became a criteria for state response in the *Exxon Valdez* spill, to the detriment of the environment and people injured by the spill.

A fund should be created in state government to help local governments cover public spill costs caused by oil and hazardous substance releases that cannot be charged back to responsible parties.

Recommendation 55
Private contingency plans

Private parties carrying oil must have a state-approved plan of response to spills of all sizes, including a worst-case scenario, that can be used under either private, federalized or "Alaskanized" spill response.

The state requirement that Alyeska's contingency plan respond to the "most probable" spill, however, put a lid on expectations about response to a worst-case spill. Alyeska did not prepare beyond the state's minimum standard and did not advocate a higher one.

The risk of a catastrophic spill cannot be reduced to zero as long as oil is carried in large quantities. But the interval between spills can be lengthened and the impact mitigated.

Under known and approved technology, it is also incorrect to assume during contingency and response planning that nearly all oil will be recovered. Under extreme circumstances of weather and location, no oil may be recovered. Here the emphasis should be on critical habitat protection.

"The seven oil companies who own Alyeska broke a contract with the U.S. government and the people of the state of Alaska. Simply put, Alyeska was unprepared to deal with an oil spill of this magnitude, as they promised they would be, and they failed to react quickly during the critical early hours of the spill to minimize environmental damage, as they are mandated to do."

Dr. Riki Ott, Cordova District Fishermen United

House Committee on Interior and Insular Affairs hearing, May 1989

In reviewing plans for unfavorable circumstances, DEC should determine a standard of "good effort" rather than one based on a fully successful result.

We know of no effective way to prevent major damage once oil reaches the intertidal zone and shore. To be most effective spill response must be immediate to keep oil from spreading or reaching shore and critical habitat. In the case of a spill near shore, it is not the magnitude of the response over time but what is done in the first few hours that offers the most protection.

Exxon Corporation ultimately marshaled an impressive array of resources and spent great sums of money in the *Exxon Valdez* cleanup. As each hour from the time of the wreck passed, however, the worth of each resource commitment and dollar rapidly declined. After two days, the spill managers were effectively incapable of preventing the spill from reaching shore and destroying major habitat areas.

Though containment and cleanup actions were undertaken at great cost and eventually with massive participation by many parties, containment was fundamentally flawed and failed as a result of insufficient resources being applied too slowly to prevent the oil from hitting the beaches.

The lack of resources was compounded by the absence of a standardized system of information transfer in the first few hours and confusion in the

command and response system that resulted in decision-making and mobilization lapses in the first critical hours.

Beach treatment, a major investment by Exxon, was too late to touch more than a small percentage of the spill. Large quantities of oil remain in the substrata of beaches and continue to exact a toll on the biosphere. Technologies used to get large quantities of substrata oil out tend to take a high toll on the environment. Assessment of beach condition in Prince William Sound is problematic since the treatment had a cataclysmic effect, if not on the magnitude of the oil, on intertidal life.

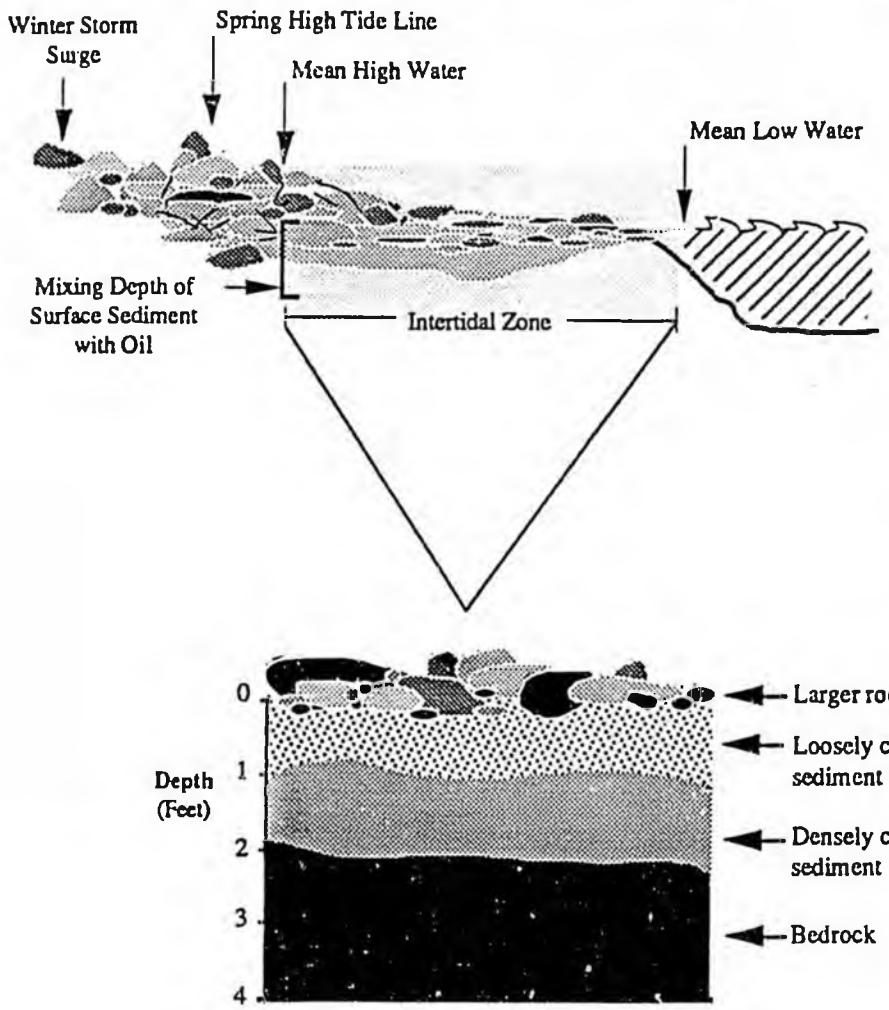
"Clearly from our understanding of what the state expected from us and what the people of the state expected from us, we had a good plan and we executed it. The problem many times is that people automatically assumed that adequacy or inadequacy hinges on being able to pick up 248 or 262,000 barrels before it gets on the shore."

Theo L. Polasek, Vice President of Operations

Alyeska Pipeline Service Company

House Committee on Interior and Insular Affairs hearing, May 1989

Typical Beach Profile in Prince William Sound



RESEARCH & DEVELOPMENT

The *Exxon Valdez* disaster has awakened industry, government and public interest in oil spill research. The May 1989 report to the president on the *Exxon Valdez* by Transportation Secretary Samuel Skinner and Environmental Protection Agency Administrator William Reilly bluntly concluded that "oil spill cleanup procedures and technologies are primitive." That view was echoed by the American Petroleum Institute, an industry group that issued a report calling for new private investment in research and development of spill response methods. Federal agencies are preparing research and development initiatives in spill response techniques, technology, training and deployment systems. There is also increasing interest in coordination and collaboration with other countries, particularly Canada, to provide faster progress, faster dissemination of research results, and less unnecessary duplication of effort.

Legislation now pending in Congress provides for the establishment and funding of oil spill research and development programs. One proposal would create a Prince William Sound Oil Spill Recovery Institute to identify and develop the best technology for dealing with spills in arctic and subarctic marine environments. Another would establish a minimum of six regional centers to address research needs.

Government-supported research and development should insure that public priorities are met, that government agencies expected to direct future oil spill response will be knowledgeable about new technologies and techniques, that regulation is appropriate and effective and that up-to-date response capabilities are maintained. Coordination and cooperation in research and development programs is in the interest of all concerned.

Alaska's interests in oil spill research should focus on specific Alaska marine habitats, the characteristics of oil and dispersant methods in arctic and subarctic waters, prevention research and training programs to ensure that Alaska response authorities will be fully prepared to understand and cope with future spills.

"We therefore are guinea pigs within a giant experiment, where facts are made to fit the hypothesis made. In our frustration of our loss, we fight an invisible enemy, and suffocate in the air polluted with politics."

Dolly Reft, Kodiak native
Alaska Oil Spill Commission hearing, 8/11/89

"It's embarrassing to know that the level of our technology of this great country is what it is when I see out there that the most effective thing is an oil absorbent pad."

Dennis Holan, Cordova fisherman
Alaska Oil Spill Commission hearing, 6/28/89

Recommendation 56
Knowledge transfer

The United States, the State of Alaska and Canada should establish cooperative research programs to develop and disseminate knowledge on oil spill prevention and response.

Despite two decades of rising public concern for the environmental consequences of oil spills, research on the subject is still in its infancy. Prevention systems are haphazard. Spill response technology is untested and underdeveloped. Research investment is low, and institutional commitment to this field is scarce.

"Cost avoidance also occurs through the efforts of managers of all agencies to try to control information in order to keep other people from finding out whether you might be able to do a better job. Public policy can improve organizations so that they do what we want."

Professor Matt Berman, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

For a variety of reasons — including, predominantly, ignorance — the latest technologies were not used in the *Exxon Valdez* cleanup. Much of the available cleanup equipment had not been tested in the various circumstances facing cleanup crews. Due to caution or uncertainty, untested techniques were not quickly implemented.

The response effort was handicapped by the absence of a rapid, accurate and comprehensive system, available to all, for information on local conditions, habitat, fish and wildlife, currents and weather.

The primitive state of development of both prevention and response methods holds out some hope that, given sufficient investment, dramatic strides will be made in a short time.

Research dedicated to improving the state of knowledge in oil spill prevention and response should be undertaken to remedy information gaps. Among the topics that should be pursued are the relevant regional geography, environmental assets, weather, technological systems and basic research on the behavior of oil in water. Information management should be included in the agenda for response and contingency plans. Resources should be committed to ensure adequate information systems and services in emergency response efforts in the future.

Recommendation 57
State research center

The state should establish, in the University of Alaska system, an institute for research on oil spill prevention and response policy, technology, testing and evaluation.

An Alaska-based institute should be created and encouraged to strengthen its programs through consortium agreements with other institutions studying the safe transportation of hazardous substances. Research topics should include locality-specific investigations of marine habitat and the impact of oil, as well as prevention policy and response technology. The

institute also could develop and administer education, training and safety licensing programs for participants in oil transportation and handling. The institute's efforts should be coordinated with similar programs developed under federal authorization. Its functions should include making recommendations to appropriate authorities regarding changes in standards and requirements in oil and gas and hazardous substance transportation.

The research program should be established independently of the that conducted in support of fault-oriented litigation. Research since the Exxon *Valdez* wreck has been noticeably distorted by its litigation orientation.

"There is no mandate to a government body that when an incident like this occurs they shall go gather data. There's no mandate in place and there's obviously no funding for that mandate."

Vince O'Reilly, City of Kenai

Alaska Oil Spill Commission hearing, 9/7/89

Recommendation 58
Pretesting

Authorities responsible for testing and approval of response technologies such as dispersants, coagulants, burning and bioremediation should evaluate and decide whether to preapprove these technologies more rapidly.

Parties responding to the spill were handicapped to varying degrees by a lack of scientific knowledge concerning what was available, the properties and effectiveness of various technologies under varying conditions, and the lack of prior approval of response strategies. Those responsible for containment and cleanup were not fully advised on state-of-the-art methods or regularly provided with appropriate technology.

The system for testing and approving new response technologies is haphazard and slow and should be improved. Many emerging technologies hold promise, but they were untested and undeveloped at the time of the *Exxon Valdez* wreck.

"Perhaps for the first time in history, the consequences and costs associated with major failures are greater than the value of the lessons we learn from those failures."

Professor Todd LaPorte, University of California

Alaska Oil Spill Commission hearing, 8/4/89

The U.S. Navy's use of coagulants in containing and cleaning up shipboard fuel spills — fully tested for Navy use but no other — was of particular interest to the commission. The commission also was intrigued by reports of proposed vessel-based coagulant systems capable of jelling cargo in the vicinity of a breach and of vacuum-based systems for containing oil in a damaged vessel. Such avenues of development call for early and thorough exploration for possible use.

Key public agencies, notably the federal Environmental Protection Agency and the state Department of Environmental Conservation (both of which are involved in Regional Response Plans and the oversight of industry contingency plans), are charged with approving or disapproving response technologies for oil spill cleanup. A continuing, visible process for study, analysis and application of emerging technology is required.

Recommendation 59
Tanker simulator training

The West Coast states should create a training center using simulators to advance the knowledge of masters, mates, pilots and shipboard bridge crews in the operations of very large vessels in West Coast ports.

There is currently no place on the West Coast where mariners can receive real-time simulation training in the bridge operations of very large ships. Maintaining an adequate pool of ships' officers and pilots fully trained in up-to-date circumstances will enhance safety and efficiency in the maritime industry.

"We need to establish a prize for invention of technologies that work. Organized research to produce information that would help achieve the goal of minimizing social costs isn't really being undertaken."

Professor Matt Berman, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

"I am skeptical that there will be as much scientific value gotten out of this situation as would otherwise be possible. That's partly because the work is confidential and partly because the work is focused on determining the extent of environmental injury, which is not the same as understanding in ecological or social terms the impact of this event."

Professor David G. Shaw, University of Alaska

Alaska Oil Spill Commission hearing, 9/21/89

Note: Those who wish to review in more detail the factual circumstances explored by the commission and the options considered and rejected in choosing these specific remedies will find explanations in a longer report still to be published and in the specific studies accepted by this commission from its contractors.

Commission members

Walter B. Parker, chair—Anchorage, a former technical staff director of Alaska's Office of Pipeline Coordinator, currently is president of his own transportation and resource consulting firm and president of the Alaska Academy of Engineering and Sciences. Parker served on the Federal Field Committee for Planning in Alaska and co-chaired the Joint Federal-State Land Use Planning Commission for Alaska 1976-79. He was Alaska Commissioner of Highways and an Anchorage municipal assembly member during the 1970s. He was chairman of the Alaska Oil Tanker Standards Task Force 1975-1977 and served 24 years with the Federal Aviation Administration.

Esther Wunnicke, vice chair—Anchorage, is an attorney who served as commissioner of the Alaska Department of Natural Resources in the early and mid-1980s. She managed the U.S. Department of the Interior's Alaska Outer Continental Shelf Office, co-chaired the Joint Federal-State Land Use Planning Commission for Alaska in the mid- and late 1970s, and served on staff of the Federal Field Committee for Development Planning in Alaska.

Margaret Hayes—Anchorage, is a geologist and former director of the Alaska Department of Natural Resources Division of Land and Water Management. She was employed by the department in various capacities from 1975 through 1988.

Tim Wallis—Fairbanks, is president of Tim Wallis and Associates, a consulting firm. The firm is currently representing a municipality and other interests as a lobbiest in Juneau. Wallis is a former state legislator, past president of Doyon, Ltd., an interior Native corporation, as well as the past president of Alaska Federation of Natives and the Fairbanks Native Association.

John Sund—Ketchikan, is a former state legislator and commercial fisherman who now practices law and operates a fish-processing firm. Sund served on the Resources Committee as a state House member from 1984 to 1988 and from 1981 to 1985 was president and chief executive officer of the Waterfall Group Ltd., a resort operation.

Edward Wenk, Jr.—Seattle, professor emeritus of engineering, public affairs, and social management of technology at the University of Washington, is a former advisor to three presidents and Congress. An expert on the strength of ships, Wenk was a test pilot on the initial deep dive of America's first nuclear submarines and developed a world-class lab on the structural mechanics of submarine pressure hulls. The author of more than 150 papers and books, many on the interaction of technology with people and politics, he holds a master's of science from Harvard University and a doctorate of engineering from Johns Hopkins University.

Michael Herz—Berkeley, Calif., has studied previous oil spills and tanker accidents and is currently baykeeper and executive director of the San Francisco Bay-Delta Preservation Association, a nonprofit corporation that monitors oil and chemical spills. An advisor on oil spill dispersants, waste disposal, and the impact of oil spills on fisheries, Herz studied and produced a major report on the 1984 Puerto Rican tanker spill and has co-written three books and more than 80 technical reports and papers. He holds a doctorate from the University of Southern California, was a postdoctoral fellow at UCLA's Brain Research Center, and has been involved in marine research and policy since 1973.

UNIVERSITY OF ALASKA SEA GRANT LEGAL RESEARCH TEAM

PROFESSORS HARRY BADER, FAIRBANKS
RALPH JOHNSON, SEATTLE
ZYGMUNT PLATER, BOSTON, COORDINATOR
ALISON RIESER, NEW HAVEN

ADMINISTRATION : RON DEARBORN, SUSAN DICKINSON U/A FAIRBANKS SEA GRANT (907) 474-7086

LEGAL RESEARCH REPORT

No. 9.2

"POTENTIAL UTILITY OF AN INTERSTATE COMPACT AS A VEHICLE FOR OIL SPILL PREVENTION AND RESPONSE"

Submitted: December 1989

Principal Investigator: Harry Bader

FINAL

I. PROSPECTUS

Federal Courts, in the past decade, have breathed renewed vitality into compact clause theory. This judicial activity, coupled with recent creative applications of the compact clause by Congress to mounting regional problems, offers the state of Alaska a wide range of options which permits conduct otherwise prohibited within the stream of interstate commerce.

Through compact, the state can achieve enhanced sovereignty via regulations which have the force of federal law and exert a controlling influence over federal agency conduct. Compacts also permit the pooling of resources generating the synergistic effect of creating a sum greater than its parts. Compacts also can be designed to increase responsiveness to local needs.

This paper addresses the utility of compacting as a means for protecting natural resources, notably the abundant fishery, through enhanced regulation of oil transshipment in Pacific waters and terrestrial pipelines, terminal operations, and production areas. The application of compact concepts in this analysis is, therefore, directed toward resource protection, not resource allocation. Thus, the involved states should find little opportunity for internal conflict within the compact structure.

II. INTRODUCTION

Alaska has assumed a premiere role as nation's steward by virtue of the incalculable natural resource wealth within her borders. Whether those resources are unscathed wilderness, alluring placer deposits, the oil which drives industry, or the remarkable yet still not entirely understood anadromous fish, these resources are Alaskan from whom the future of a nation is fashioned. Due to the importance of these resources to all American, Alaska has often been forced to accept resource policies not of her own choosing. It is incumbent upon this state to protect its sovereignty by demonstrating a willingness and an ability to ensure the protection and wise use of resources vital to both Alaska and the rest of the country. Pursuant to this end, leaders in the state must apply proven mechanisms in innovative ways which will enable the state to emblazon her own vision to her own future.

The interstate compact is a potentially valuable instrument for ensuring Alaska's rightful place as chief architect or resources planning management. As U.S. Supreme Court Justice Felix Frankfurter championed in a 1925 Yale Law Review article, "Conservation of natural resources is thus making a major demand on American statesmanship. An exploration of the possibilities of the compact idea furnishes a partial answer to one of the most intricate and comprehensive of all American problems." Indeed, the federal judiciary recently heralded the compact as an "...innovative system of cooperative federalism..." in which states can substantively participate in natural resource decision making. Seattle Master Builders v. Pacific Northwest Power and Conservation Council 786 F.2d. 1359 (1986).

There are basically two types of compacts which can take on any one or part of three forms. The traditional compact is the multi-state agreement. A newer type, pioneered under the Delaware River Compact is a multi-state/federal

organization. The forms of compact may be a self-sustaining service compact such as the New York Port Authority, which operates the New York City commercial port, or the nonregulatory cooperative management agreement such as the Atlantic States Fisheries Commission, 56 Stat.267(1942), or a regulatory compact with substantive teeth such as the Northwest Power Planning Council, 16 USC 839. An effective compact among the Pacific states and provinces for the regulation of oil shipments would most effectively be an amalgamation of the regulatory and management forms.

Alaska is no stranger to the compact. Indeed the state is currently a partner in seventeen compact organizations, such as the Pacific States Fisheries Compact and the Interstate Oil and Gas Compact. All of these compacts, however, predate the judicial pronouncements which brought forth the new principles enabling compacts to serve as dispensers of federal law; therefore, our state's current agreements lack the ability to be an effective forum for enforcing Alaska's appropriate role in resource management.

III. PROSPECTS

WHAT IS A COMPACT?

A compact is a multi-state agreement, (or multi-state/federal agreement) consented to by Congress, whereby states may coalesce to form an authoritative body governing issues of regional concern. They have been employed to solve problems of air pollution, land use planning, water allocation, and a myriad of other applications. The one consistent theme, always, is the presence of a regulatory problem with transcends state boundaries.

The constitutional basis for compacts is found in article, I, section 10 clause 3, which holds that "... no state shall, without the Consent of Congress...enter into any Agreement or Compact with another state or with a foreign power." Through this simple clause, the Constitution recognizes the inherent sovereign power of

states to form agreements aimed at regional problem solving. Because a compact is essentially a contract between states, the basic tenets of contract law have traditional been applied to compact relationships. Pursuant to these agreements, the Supreme Court has confirmed that states have the ability to delegate their political powers to, and to devise financing for, the activities contemplated by compacts. Dyerv. Sims 341 US 22 (1951).

Because Congressional consent transforms compact provisions into federal law, compacts can authorize state conduct which would otherwise be constitutionally invalid. Cuyler v. Adams 449 US 433 (1981) and Intake Water Company v. Yellowstone River Compact 590 F.Supp. 293 (1983).

In structure, compacts are formal documents made between the states in an identifiable text. This document is enacted by statute in the legislatures of the separate states. The wording of these statutes must be essentially the same for each state. Once ratified by the requisite states and approved by Congress, the compact cannot be altered, repealed, revoked or ignored by a member state. Disputes arising under compacts are taken to the federal courts, not state courts, for final interpretation. Unlike reciprocal agreements, the statutes ratifying compacts are conditioned upon conduct by the members. Seattle Builders at 1372.

WHAT ARE THE POWERS OF A COMPACT?

Because a compact is approved by congress, the compact is federal, not state, law for consideration of Constitutional objections. Cuyler at 438. Therefore, a compact cannot, by definition, be a state law impermissibly interfering with interstate commerce or federal supremacy interests, nor do traditional pre-emption problems apply. This transformation occurs because Congress, in approving the agreement, exercises its legislative power that the compact threatens to encroach upon, and declares the compact to be consistent with Congress's supreme power in that area. Intake Water Company at 297. Therefore the compact agency may

justifiability, subject to all the structures of administrative procedure law, is proffered by the federal agency.

POLICY BENEFITS OF A COMPACT ORGANIZATION

Several benefits accrue from the structural organization and inherent powers of a compact. Chief among these benefits is enhanced state sovereignty over issues of critical importance to the state. Contrary to the intuitive belief that compacts truncate state power through binding agreements, the compact is a latch key which opens a door into an entirely new sphere of influence otherwise inaccessible to states. Oklahoma's governor, Johnson Murrasy, understood this attribute while advocating Red River Compact. Murray believed a compact "...an effective block against federal encroachment on state sovereignty...and an inspiration to many who are tired of federal intervention in every field imaginable." Reviewing the sad history of Coast Guard supervision over tanker and crew safety monitoring, federal supervision may not only be a benign nuisance, but incompetent and dangerous as well.

Compacts can also prevent federal agencies form acting cavalierly toward state interests. The Northwest Power Council was designed to prevent this problem. Recently, Alaska has again felt the brunt of federal insensitivity to state regulatory organs. In another natural resource field, wildlife management, the National Park Service violated the spirit of cooperative game management, enunciated after ANILCA, by unilaterally ending the land and shoot wolf hunting in National Preserve lands without first consulting the state Game Board last year. Whether one opposes or advocates wolf hunting, this lesson of federal condescension towards Alaska's state authorities bodes ill for hopes of amicable federal agency cooperation in oil activity regulation.

In addition to allowing states to travel waters normally reserved as a federal province, a compact necessarily increases an individual state's

address resource problems with regulations that compacting members could not do as individual states. For example, many of the Alaska state regulations (SB 406) concerning oil tanker regulation, risk avoidance charges, the coastal protection fund, and tanker searches, prohibited by federal district judge Fitzgerald in Chevron v. Hammond. in 1979, or dropped by the state after Ray v. Atlantic Rishfield could, theoretically have been permitted to stand had they been enacted by a compact to which Alaska was a member. Likewise Alaska, through authority delegated by the compact commission, could exert regulatory controls over the North Slope productin areas, the pipeline, terminal operations and off-shore production, even in areas otherwise pre-empted.

Not only may compacting states enter the realm usually reserved for the federal government, compact agencies may even exert a controlling influence over federal agencies when Congress has given a clear and unambiguous mandate to that end in the consent legislation. Seattle Master Builders at 1364. Currently, two compacts are now operating which possess and wield this impressive authority. One is the Northwest Power Council (16 USC 839) and the other is the Columbia River Gorge Commission (16 USC 544). The more powerful multi-state compact is the Northwest Power Council. Charged with the duty to develop and implement an energy and conservation plan for the states of Washington, Oregon, Idaho, and Montana, the Council is also empowered to oversee the operations of the federal Bonniville Power Administration, at least to the extent necessary as to ensure federal compliance with the compact's plan. Oversight authority is manifested through several provisions within the consent legislation. The Council may review the actions of BPA to determine whether BPA is consistent with the compact's goals and regulations. The Council may notify BPA if the Council deems federal conduct inappropriate in light of the plan's provisions. In such cases, the BPA may to continue with proposals or activity unless a formal written

representational power within a given context. Alaska, for example, is only a voice of 3 within a din of 535 legislators in the federal Congress. Whereas in a Pacific states compact, Alaska could compose fully 25% of the decision making body as one of four equal partners.

Equally important is a compact's role in increasing regulatory responsiveness to community needs and values. This sensitivity to the local population is achieved because of thee great accountability with a compact organization. Citizens can have direct access to the compact representatives appointed by their governor, much like contacting their state legislator, rather than having to deal with the labyrinth channels of a faceless bureaucracy. Due to the traditional tie between compact representatives and a governor, there is a closer link with the electoral process than would be under a bureaucratic regulatory regime. Because of this responsiveness, compact decisions would be expected to be more narrowly tailored to the specific needs of the region, and therefore more effective and efficient than generalized federal policy decisions. Sensitivity to local needs is a mandate in the wake of the Exxon Valdex, yet as Attorney General Doug Baily has pointed out, there is now a fear that the Trustee Council, established under federal law after the spill, may be frustrating the interests of the local communities in Prince William Sound.

The responsiveness of an interstate compact also outshines the effectiveness of the judiciary in most circumstances. The judicial instrument is simply too sporadic and static to deal with the dynamics of the continuously adjusting environment of regional resources management.

Enhanced oversight is another benefit. A good industry record for 12 years in Prince William sound led to complacency in enforcement of safety standards and preparedness which led to unsafe conditions and an inability to respond to the Exxon Valdez tragedy. If a particular state or agency is lulled into an ineffective

enforcement role, the interests and agents of other states could stimulate additional oversight. Compacts increase the number of watch dogs by increasing the number of participant within the regulatory and enforcement scheme.

Likewise, compacts pool the resources (personnel, equipment, financing, expertise, etc.) of member states, enabling activity impossible for any one state to accomplish on its own.

Compacts provide a unified and cohesive agency through which decision making is streamlined and coordinated. Such a management scheme would have enhanced oil spill recovery efforts this past March. The Skinner-Reilly Report, prepared by the National Response Team for President Bush, found that the various contingency plans for Prince William Sound did not refer to each other or establish a workable response command hierarchy. This situation resulted in confusion and delay during the critical first days of the response in the Exxon oil spills, exacerbating the devastating environmental consequences.

Another benefit of compacting as a means of dealing with regional problems is its role in reducing peripheral interests. In the compacting process, states negotiate directly with each other about issues which immediately affect them. This operational milieu excludes centrifugal forces beyond the region which may otherwise intervene if the controls were to take place on a national level.

Finally, compacts foster synchronization of state efforts in controlling regional problems. If states pursue their own independent regulatory program, Balkanization and duplication can undermine effective controls. More importantly, in the absence of a compact, the vigilance of one state may be thwarted by the inaction or lax administration of adjoining state.

HOW IS A COMPACT FORMED?

...questions of joining or not joining an interstate compact, or creating one, renewing or not renewing it, of appropriating money for its support, of sanctioning

and implementing activities, are uniquely the responsibilities of the states and their people, and it is the state and their people which should have an intense concern for what they may be gaining, losing, delegating or benefiting through the path of interstate compacts ...

M. Ridgeway

Interstate Compacts: A Federal Question

1971

There is no form or pattern for a proper compact, the process of its genesis if free from restriction aside from the Congressional consent criterion. Thus, states are arbiters of their own destiny. With over a hundred compacts now in existence, compacts of the future have a rich history to learn from in constructing agreements to meet the needs of emerging regional problems. The primary obstacle to effective use of compacts as regulatory device is the time period traditionally involved in bringing a compact to fruition. Often times, the period form initial negotiations to federal consent, has consumed more than eight years. Glacial slowness need not be the rule, and the avoidance of some common pitfalls can serve to greatly reduce delay.

One contemporary practice which has shortened the time frame for compact formation has been the shift away from formal compact negotiation commissions to extra-legal organizations composed of various state officials who share a common desire to rectify a particular problem. A most effective start is for each state's negotiating team to draft its own provisions for inclusion in an agreement to serve as a basis for negotiation.

Because Congressional consent to begin negotiations is not mandated by the Constitution, a compacting team ought not to seek this protracted strategy before beginning substantive consultations. Many feel that having prior Congressional

approval for negotiating enables Congress to guide the states and contributes significantly to eventual federal ratification chances. However, this advantage can typically be gained with the inclusion of a nonvoting federal official in the negotiating team.

Crucial to success has been the involvement of local leaders from potentially affected communities and interest groups. This does not mean allocating formal positions to such groups, but it does require the creation of a standardized mechanism of communication and meaningful participation This approach not only expands the information horizon contributing to better compacts, but serves a legitimization function, thereby reducing potentially disorientating opposition from within state. Rarely will Congress give its stamp of approval to a compact perceived as eviscerated internally by intra-state strife.

The experience of the Red river compact found that the early establishment of both legals and technical advisory committees for information gathering and processing was helpful in facilitating the negotiating process. The Red River example also demonstrated the need to guard against information gathering becoming an end unto itself, stymieing progress.

Once the compact document has been drafted, each state must pass enabling legislation conditioned upon the consent of the other involved sates. Each statute will require reciprocal action to be effective. Northeast Bancorp, Inc. V. Federal Reserve Board 86 LEd.2d. 112 (1985). Each statute must be virtually identical in form and wording. After approval by the appropriate governors, the compact is subject to federal consent.

Congressional approval is not required of all interstate agreements. Only those arrangements which are "directed to the formation of any combination tending to the increase political power in the States, which may encroach upon or interfere with the just supremacy of the United States" require consent under

the Constitution. Washington Metro Area Transit Authority v. One Parcel of Land 706 F2d. 1312, 1316 and Cuyler at 448. an agreement intended to regulate oil shipments on land and water within the Pacific states will most certainly encroach upon the federal province, and therefore must receive consent under the compact clause.

It is this encroachment which serves as the vehicle through which compact provisions become federal law. When Congress approves a compact, Congress exercises the legislative power that the compact threatens to encroach upon, and declares that the compact is co sistent with Congress's supreme power in that area. Intake Water Co. at 297.

After congress has bestowed is consent, tradition holds the President reserves a right to participate in the approval process, though presidential involvement probably could be avoided through a concurrent resolution serving as Congress's consent mechanism.

Congress has a duty to ensure that compacts do not proceed to impermissibly infringe upon critical federal interests not contemplated in the consent resolution Therefore, Congress retains the power to alter, amend, or repeal a compact. Cuyler at 439-440. Also, Congress may enact subsequent legislation which is expressly inconsistent with an interstate compact to which it had previously given its consent.

The extent of federal power to intervene in the internal affairs of an approved compact is the subject of much debate. While the courts have sidestepped this constitutional issue, dicta provides insight to the judiciary's hesitancy to permit wholesale federal intrusion into compact operations. "We have o way of knowing what ramification would result from a holding that congress has the implied constitutional power to alter, amend, or repeal its consent to an interstate compact. Certainly, in view of the number and variety of

compacts in effect today, such a holding would stir up an air of uncertainty in those areas of our national life presently affected by the existence of these compacts. No doubt the suspicion of even potential impertinency would be damaging to the very concept of interstate compacts." Tobin v. United States 306 F.2d 270 at 273 (1962).

WHAT ELEMENTS ARE NECESSARY FOR AN EFFECTIVE COMPACT DOCUMENT?

After the Clean Air act, a flurry of compacting activity erupted in the attempt to control regional air pollution. to assist congress in sifting through the flood of compact proposals, the Department of Health, Education, and Welfare created a set of Guidelines denoting key indicators of competent compact drafting. The indicators were expected to reveal which documents showed the highest potential for achieving their stated goals. See: Air Pollution, 1968 Hearings on Air Pollution Compacts, S2350, S.J. Res. 95 Before the Subcommittee on Air Pollution, 90th Congress, 2nd sess. 3 (1968). Combined with subsequent Compact debates, a beacon can be constructed which provides safe passage for would be compact drafters. An enumerated discussion of important draft criteria, based upon the foregoing, follows.

1. Any agency establishes by the compact should have broad standard-setting monitoring, and enforcement powers.

A compact document must articulate the mission and duties for which it is created and demonstrate the means by which these goals will be realized. The document should demonstrate that the mechanisms specified as tools for compact operation will both be effective in achieving the goals as well as being the best possible option available.

The multistate agreement needs to also explain what type of administrative agency will effectuate its purposes. Two basic options are available. Each party

state may use its own agencies if they appear to be fully equipped to carry out compact policy, or if the complexity of the arrangement necessitates, a special interstate agency may be crated. The compact should be able to delegate authority, but it should not be required to refrain from taking enforcement action until other entities have had an opportunity to do so. In order to coordinate its activities with the federal government, the compact ought to be authorized to designate liaisons to work and communicate with federal agencies involved with the same regional problems.

In order to attain its true potential, the compact document must contain a provision ensuring that federal activities and projects will be coordinated to the fullest extent possible with the policies of the compact.

Finally, in order to retain the flexibility demanded in the field of resource protection, a host of housekeeping provisions must be contained within the documents. The organization should have the power to conduct investigations, make studies, hold hearings, prepare findings, adopt rules and regulations, carry out enforcement actions (including litigation), and the ability to enter into contracts.

2. Each state must have equal representation

It is well settled that compacting states possess equal voting power, despite economic, population, and geographic disparities. Allocating several voting representatives to each state allows a greater range of expertise to be present on the authoritative body, as well as minimizing the potential of special interest capture of a particular state or representative. Another important provision concerning representation involves the ability of states to render their representative accountable and sensitive to their constituency. the accountability dilemma is a real quandary because interstate compacts transcend state lines and political units, thereby circumventing the accustomed channels and structures of

responsibility in the American political system. The apparent freedom that compacts enjoy from their home legislatures must be circumscribed to prevent administrative tyranny without emasculating the agency, rendering it unfit for achieving its mission.

3. Enforcement and business actions by the compact should not require unanimous consent.

Business and enforcement actions should not require unanimity on the part of the decision making board; however, a simple majority is just as undesirable due to the lack of protection it affords minority interests. Thus, a common trend is the 3/4 majority requirement. The requirement concerns the total number of voting representatives, not three-quarters of member states, permitting state delegations to split on a particular vote.

4. The compact must be able to demonstrate financial integrity.

Financial integrity incorporates the needs to be able to receive and dispense funds. It is imperative for a compact to be able to obtain financing beyond simple allocations by member states.

5. The federal government ought to have an avenue to participate in a nonvoting fashion.

6. A valid regionalist justification must be presented.

Compacts are intended to provide a solution for a problem of regional character which defies both federal and state oriented approaches. Congress must see that a set of unique forces (economic, social, ecological, or geographic) frustrates conventional contrivances. Regional interests, regional wisdom, and regional pride must serve as the foundation from which the most effective devices will spawn. it is imperative that the uniqueness of the region be clearly defended when proposing a compact, or the federal judiciary has left no doubt that differing

conditions in different geographic areas may provide a reasonable basis for different legislative treatment.

7. Miscellaneous

A host of other conditions require treatment in a compact document. Of particular importance will be the dedication of drafters in articulating clear definitions and intent for the articles of the compact. Because it is the federal court system which is the final arbitrator in compact disputes and interpretation, care must be taken to ensure that alternative constructions of compact articles do not wreak violence upon the purposes envisioned by the agreement's framers.

No clearer example exists of the consequences to Alaska due to curt misinterpreting of state intent that the Ninth circuit's inquiry into Alaska's definition of "rural" under the subsistence provisions found in ANILCA. Kenaitze Indian Tribe v. Alaska 860 F.2d. 312,316 (1988). In that case the court paid no special attention to the uniqueness of Alaska's remote bush regions, and held that what constituted rural in Iowa would serve as an appropriate definition for rural in Alaska. This decision, which devastated Alaska's state subsistence provisions in 1988, was a result due in part to the state's failure to adequately explain the rationale employed in reaching this particular definition. The lesson of this case ought not to be lost on compact designers attempting to protect resources under the unique conditions faced in the Pacific Rim Region.

IV POLICY APPLICATIONS FOR RESOURCE PROTECTION

This section attempts to portray the spectrum of possibilities available under compact theory for regulation the oil industry, federal agencies, and state government, in order to protect the natural resources for which the Pacific Rim is famed This is by no means an exhaustive analysis, rather, its intent is merely

informative and designed to reveal the changes that can be reaped, both minor and radical, under the case law offer by Cuyler and its progeny.

Establishment of the uniqueness of this region, justifying compact treatment should not be difficult. The presence of an extensive aboriginal population extremely dependent upon the anadromous fishery for subsistence and cultural survival, coupled with the large non-native subsistence population in Alaska, would alone justify special action But there are other ties that bond these states as well. Economically, the fishing industry in Alaska, Washington, and Oregon are entirely dependent upon the harvest in Alaska costal waters. Indeed, these are the most important fishing grounds in the nation and the continent. Sea Grant has estimated that over 70% of the Seattle based industry derives its fish from Alaska. Oregon's fishing industry is similarly dependent. This condition creates the economic bonds definitive for regionalism. Also, the unspoiled coastlines of the Pacific Coast, from the glaciated wilderness fiords of Alaska to the wild shores of Washington's Olympic Peninsula down to Oregon's protected ocean beaches and California's Big Sur, reveal a unique ecological treasure preserved for the world. Travelling past these environmentally sensitive shores, tankers carry one-fifth of the country's crude oil consumption. Cumulatively, these factors form a regional portrait, separate from the broad strode of the federal brush.

Canadian provinces, as well as states, may share in interstate compacts, serving as full participating members. This is currently the case in the Northeast Forest Fire Protection Compact, in which Quebec and New Brunswick are members. A regional compact could envision British Columbia and the Yukon Territory as potential members as well as the Pacific states.

when assessing these policy applications, bear in mind that some would require express federal consent acknowledging subtle changes to the scope of the Ports and Waterways Safety Act and the Clean Water Act. Finally, it is prudent

to note that the Alaska legislature has already invited the application of compact to the task of oil pollution control through AS Section 47.04.100 (1984), authorizing the Governor to pursue compacting in order to achieve the purposes of oil pollution protection. The basis of a compact may be premised upon the very effective Pacific Oil and Ports Group created in 1975 by Dennis Dooley of the Alaska Oil Tanker Task Force under the direction of Walt Parker. The group involved Alaska, California, Idaho, Oregon, and Washington, and promulgated a set of Tanker standards.

After the Exxon Valdex debacle, a host of federal, state, and independent entities conducted investigations and studies to determine what went wrong in Prince William Sound. Interestingly through the morass of accusations and finger pointing, several common themes surface with striking consistency. These findings can be organized into four general categories which shed light on a set of corrective recommendations.

Findings:

1. Contingency Planning

The shear multitude of plans and agencies involved in oil recovery stymied effective response because of a fundamental failure to unify under a coordinated command hierarchy. Organizational responsibilities were unclear, decision making wallowed as a "team concept" broke down into adversarial relationships.

2. Coast Guard

The Coast Guard routinely approved reductions in the number of sailors required on oil tankers, as well as reducing the level of experience for tanker operations. Pilotage standards for Prince William Sound were lowered to meet nationwide general standards. It appears that Coast Guard decision making is driven by industry initiative, rather than agency fact finding. Finally, the Coast

Guard failed to carry through its promises to develop radar installations and stricter tanker design standards.

3. Department of Environmental Conservation

The agency lacks the financial and personnel resources to effectively evaluate industry response capabilities and preparedness. In part, this is due to other priorities which DEC has responsibility towards. However, DEC apparently failed to enforce violations and deviations it detected with Alyeska operations.

4. Industry

The oil companies ignored recommendations to improve spill prevention and response. Alyeska, the company, cancelled contract with a company to maintain dedicated response teams in 1981, and disbanded is own teams in 1984. Equipment inventories were allowed to fall below what was adequate to deal with even moderate sized spills.

5. Interior Pipeline Maintenance and spill Prevention

Over the past 12 years, more than 1.5 million gallons of hot crude oil have boiled across fragile tundra and fouled miles on Interior streams. Innovations in leak detection and response technology have not been adopted by Alyeska. DEC has not pursued inspection of strategic spill equipment caches. A litany of spill examples bodes ill for the lands traversed by the pipeline. Past terrestrial spills have been surprisingly large, due in part to the company's reliance on visual or olfactory detection of leaks. The 650,000 gallons that poured out at Steel Creek and the 240,000 gallons that polluted 30 miles of the Atigun Valley were all detected by human inspection, rather than electronic or mechanical means. Pipe check valves and bends have all been the source of major spills totalling 1000,000's of gallons. Aging equipment and corrosion offer new sources for concern and need immediate regulation and monitoring. A spill on the Yukon or

Tazlina and their many tributaries could devastate the subsistence fishery upon which tens of thousands of rural Alaskans and an ancient culture depend.

Recommendations

1. Adoption of response equipment inventory system, which also monitors equipment readiness and maintenance.

2. Development of a comprehensive contingency plan incorporating all effected parties to stimulate a streamlined coordinated command structure

3. Creation of a single mission enforcement unit.

4. Move oil spill responsibility from the industry. An independent dedicated response team permanently stationed to respond to spills, both terrestrial and marine, is essential.

5. Establish an entity with oversight authority concerning Coast Guard standard setting.

6. Invoke technology forcing provisions which mandate the application of spill prevention and recovery innovations when they become available.

7. Adopt strict crew size and qualification standards.

8. Adopt an emergency requisitioning authority capable of mobilizing equipment, personnel, and logistical services

9. Develop a pre-authorization procedure for streamlined decision-making under exigent circumstances for burning and dispersant use.

10. Implement on-site and on-tanker surprise inspection authority vested in the appropriate state regulatory agency.

COMPACT APPLICATION OF RECOMMENDATIONS

1. Comprehensive Monitoring and Water Protection Interstate Authority

The duty of this compact option would be to provide a coordinated and unified command, regulating industry spill prevention and response capability along the TAPS route. The authority would be responsible for drafting a comprehensive contingency planning process and command hierarchy, superseding the fractured planning currently in place.

This entity would have authority to invoke priorities, regulatory criteria, and monitoring capability, which is binding on all member states, to ensure that adequate equipment, crew, and maintenance are available for spill prevention and clean-up. It could maintain a standing dedicated crew of its own, pooling the financial, personnel, equipment, and expertise resources of its member states and provinces; or, it could oversee and enforce standards controlling industry and state agency contingency operations.

Finally, a compact could, foreseeably, enact uniform tanker safety standards for the Alaska Oil Trade. Because this trade is domestic by nature and law, compact standards would not conflict with the PWSA, an act intended to achieve international uniformity. Compacts would provide the consistency in regulation which foreclose the argument that federal requirements are needed to prevent the costly impacts of diverse state standards.

In addition to streamlining regulatory mechanisms and molding them into an effective unified whole, the organization could be endowed with emergency requisitioning power to prevent industry lockup of response resources.

This approach would permit the flexibility to deal with all five sectors of oil activity, the North Slope, the pipeline, the Valdez terminal, tanker shipping in Cook Inlet and Prince William Sound, and off-shore activity.

2. Oil Pollution Control Standards and Review Council

A compact may be empowered to develop standards and regulations pertaining to crude oil shipment in the member states on both land and water.

Interstate compacts are formal agreements, ratified by Congress which enhance the power of member states. Compacting states may express regulations which carry the force of federal law, thus immunizing compact conduct from pre-emption and interstate commerce challenges. With this enhanced regulatory authority, compacts enable states to cooperatively resolve regional problems with powers unavailable to solitary states.

Compacts may serve as an effective vehicle permitting Alaska to regulate the oil industry in a unitary fashion consistent with the mandate encapsulated within AS 46.04.200, requiring a coordinated, master stateside plan.

The regulations may be embodied in a region-wide comprehensive plan, modeled after the Northwest Power council For example, the plan could establish policies regarding oil spill prevention, tanker design, crew size and qualifications, mandatory response and navigation equipment, etc.

The compact would be vested with the authority to review Coast Guard and other federal agency actions to determine whether their conduct was consistent with the plan. If the federal agency were found deficient in promulgating the plan's policies, the compact could hold hearings and issue a reviewable decision. Federal conduct determined to be inconsistent with plan mandates would be inconsistent until the Coast guard issued a formal, reasoned justification clearly and unambiguously articulating the compelling reason for the incontinency, linking the agency's activity to specific finding of fact.

This approach has enforcement teeth, and therefore, embodies a substantive advantage over any localized citizen's advisory councils currently contemplated in federal legislation. Due to its standardized and formal process, this approach achieves legitimization and formal realizability functions.

3. Risk Avoidance Charges and A Waters Protection Fund

A compact can accomplish what the Attorney General's office stipulated away in 1979 after the Ray decision and the Chevron litigation. The compact authority may establish its own fees for crude oil shipped across member's territory, regardless of origin, for the purposes of establishing a permanent fund to be utilized in spill recovery and mitigation, or prevention. An adjustable fee system may be used to create incentives for spill prevention technology. Alaska's dedicated funding prohibition could easily be avoided through direct fees imposed by the compact, or through the delegation of compact power to the state. See Washington Metro Area Authority at 1321-3122.

V. CONCLUSION

UNIVERSITY OF ALASKA SEA GRANT LEGAL RESEARCH TEAM

PROFESSORS HARRY BADER, FAIRBANKS
RALPH JOHNSON, SEATTLE
ZYGMUNT PLATER, BOSTON, COORDINATOR
ALISON RIESER, NEW HAVEN

ADMINISTRATION : RON DEARBORN, SUSAN DICKINSON U/A FAIRBANKS SEA GRANT (907) 474-7086

LEGAL RESEARCH REPORT

No. 4.2

"FEDERAL PRE-EMPTION CONSIDERATIONS FOR STATE OIL SPILL PREVENTION AND RESPONSE ARRANGEMENTS"

Submitted: December 1989

Principal Investigator: Alison Rieser

INTRODUCTION

In the aftermath of the Exxon Valdez oil spill disaster, States are reexamining their legal and institutional structures for preventing and responding to oil spills in marine and coastal waters. In particular, the question has arisen to what extent existing federal laws and regulations constrain the scope of State statutory and regulatory measures to improve oil spill prevention and response activities of oil tankers, marine terminals, and government agencies. A general answer to this question is that the States have considerable authority to enact tough controls and to require effective contingency arrangements. These standards must be designed, however, recognizing the strong possibility that oil shippers will challenge these enactments as preempted by federal law.

The federal preemption doctrine, as courts have developed it in the field of oil spill prevention and response, does not pose a significant barrier to most requirements that a State is likely to want to implement. There are some clear limitations on what the States may enact, but these are in a very narrow area of regulation. The federal courts and the Congress have recognized the extensive authority of States under their police power and public trust responsibilities to protect the resources of their coastal regions.

To clarify the effect the preemption doctrine has on State law it is necessary to consider two major oil pollution control decisions of the U.S. Supreme Court. It is also instructive to examine the federal court review of the State of Alaska's comprehensive oil spill prevention legislation, enacted in contemplation of the extensive crude oil shipments from the the Valdez terminus of the Trans-Alaska Pipeline. The bases for the court's invalidation of many of the law's provisions will be considered to for its possible influence on future enactments of the State. Finally, the legislation under consideration in California, whose ports receive crude oil shipments from the Trans-Alaska Pipeline, will be discussed, as a possible guide to the design of other State enactments.

SUMMARY OF FINDINGS

Under existing federal statutes, as interpreted in Supreme Court decisions in the 1970s, the State is precluded from the direct imposition of oil tanker design and construction standards, such as double hulls and segregated ballast tanks, as well as requirements for specific navigational equipment. The State is also precluded from adopting vessel traffic control systems that go beyond what federal authorities have consciously concluded are needed for a particular port. The State has greater latitude, however, in the field of oil spill contingency planning and the requirement of containment equipment and preparedness. The overlap between these two regulatory domains may cause to uncertainty with respect to a particular measure. The intersection of tanker design and equipment standards and spill contingency planning could take the form of a requirement of specific, on-board containment equipment and certification of crew training in the use of the equipment pursuant to a contingency plan. Such state requirements are likely to be upheld as long as they do not conflict with federal requirements. "Conflict" in this instance means the state requirement makes it impossible to meet the federal standard.

One of the two major court decisions from which these parameters are drawn, Ray v. Atlantic Richfield Co., in which several provisions of the Washington Tanker Act were invalidated under the preemption doctrine, would probably be decided differently today. A number of factual circumstances now exist that would support a court ruling that looked more favorably upon concurrent state regulatory jurisdiction in the field of oil spill prevention regulation. Just one indication that federal policy has shifted in favor of State power is the 1987 Executive Order, signed by President Reagan, that calls upon federal agencies to exercise their authority in a manner that does not interfere with the authority of the States over matters of critical importance to them.

Also, federal law is changing with respect to oil spill prevention and liability. Since much of the recent debate in Congress has centered around the question of state authority, and since non-preemption of state liability law seems a likely outcome, the new federal oil pollution legislation could reflect a different intent in Congress, one that is more favorably inclined toward state regulation, one that would supplant the preemptive intent that was found in Ray.

The pending federal oil pollution legislation includes specific provisions concerning vessel and terminal operations in Prince William Sound. It is possible, therefore, that the enumeration of federal protective standards specific to Prince William Sound will preclude the adoption of state regulations imposing different standards if those pose a conflict. If the federal provisions are enacted it will be necessary to analyze each one to determine if any actual conflict betweeen federal and state law exists. An analysis favorable to state regulation would be aided by any language in the statute or in committee reports or floor debate supporting broad state regulatory authority.

Given the uncertainty with respect to the "preemption-sensitivity" of any particular new requirement or institutional arrangement and the likelihood that courts will view recent events as demonstrating the need for the strongest and most effective oversight of oil shipment activities, it is recommended that the State proceed, as the State of California is doing, with the drafting of a comprehensive system of spill prevention and response control mechanisms without constraint under fear of federal preemption. Those areas of the recommended new control system that fall within the exclusive federal domain can be pursued through a multi-state strategy of legislative lobbying and administrative agency petitioning for significant improvements in Coast Guard regulatory controls and surveillance to complement a stronger, more vigilant system of State risk reduction and monitoring.

ANALYSIS AND DISCUSSION

A. Basic Principles

The doctrine of federal preemption is based upon the supremacy clause of Article VI of the U.S. Constitution which states that the Constitution and the laws enacted pursuant to it, as well as treaties made by the U.S., are the supreme law of the land. Thus, laws enacted by the Congress pursuant to one of its constitutionally delegated powers, such as the commerce power, take precedent over state law.

The basic criteria for federal preemption have been summarized by the Supreme Court in the following terms:

> [S]tate law can be pre-empted in either of two general ways. If Congress evidences an intent to occupy a given field, any state law falling within that field is pre-empted. If Congress has not entirely displaced state regulation over the matter in question, state law is still pre-empted to the extent it actually conflicts with federal law, that is, when it is impossible to comply with both state and federal law, or where the state law stands as an obstacle to the accomplishment of the full purposes of Congress.
>
> Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984)(citations omitted).

In addition to the above, there is a third form of preemption wherein Congress includes language in a federal statute making it clear that state law on a particular topic is prohibited. The three forms of federal preemption may be described as (1) express preemption where Congress spells out its intention to preclude state law, (2) implied preemption where congressional intent to preempt is made evident by its enactment of a comprehensive scheme of federal regulation that leaves no room for state law on the same subject (so-called "occupation of the field"), and (3) conflict preemption that occurs because the state law poses an actual conflict with federal law or regulation or stands as an obstacle to accomplishment of federal objectives. Tribe, American Constitutional Law (2d. 1988) at 481, n.14. Frequently Congress includes language in a statute that is ambiguous or which only partially addresses the question of concurrent state jurisdiction. Thus, preemption analysis must take place on a case-by-case basis, looking at the entire statute and comparing it against specific provisions of state law to determine whether any fatal conflict exists. It is also necessary to look at regulations enacted pursuant to the federal statute to find if any actual conflict exists.

B. The Supreme Court Decisions of 1973 and 1978

The U.S. Supreme Court addressed the preemption of state law to prevent oil spills in two major cases in the 1970s: Askew v. American Waterways Operators, Inc., 411 U.S. 325 (1973), considering state oil spill liability and clean-up laws in light of the Federal Water Pollution Control Act of 1970, and Ray v. Atlantic Richfield Co., 435 U.S. 151 (1978), addressing state oil tanker regulation and the federal Ports and Waterways Safety Act of 1972. (The Ray decision was responsible in large part for the federal district court's invalidation of the 1976 Alaska oil spill legislation which is discussed in Subpart B below.) A comparison of the two decisions indicates that the outcome of the preemption analysis depends upon the structure, comprehensiveness, and specific language of the federal statute. The court's consideration of these factors is likely to be influenced by its view of the nature of the problem the laws address and the comparative institutional capacities of federal and state authorities. Since these conditions have changed since the 1970s it is likely that a 1990s preemption analysis would reflect current realities, including the poor federal performance to date and the poor prospects for its improvement given budget and other institutional limitations, and could lean more favorably toward state protective regulation.

In Askew, the Supreme Court found the federal water pollution statute to reflect an intent by Congress that a coordinated federal-state effort be employed to combat the threat of coastal oil spills. The Florida Oil Spill Prevention and Pollution Control Act of 1970 imposed strict and unlimited liability for any private or state damages incurred as a result of an oil spill in Florida waters. The Act also authorized the Florida Department of Natural Resources to enact regulations requiring marine terminals and oil tankers to maintain oil spill containment gear and equipment to prevent oil spills. Shortly before the Florida law was enacted, the Congress adopted the Water Quality Improvement Act of 1970 (a predecessor to the Federal Water Pollution Control Act of 1972, now commonly referred to as the Clean Water Act, 33 U.S.C. 1251-1356). The 1970 federal law included a provision (now at 33 U.S.C. 1321) imposing strict but limited liability on marine terminal facilities and vessel operators for federal clean-up costs (up to $14 million and $8 million,

respectively). It also authorized the President to promulgate regulations requiring terminal facilities and vessels to maintain spill prevention equipment.

The Supreme Court rejected the oil shippers' claim that the Florida Act was preempted by the federal provision, noting that the federal law was concerned solely with the recovery of actual, federal clean-up costs, not damages to other parties. Writing for a unanimous Court, Justice Douglas found the federal act to contain a waiver of preemption in the following language, which is still present in the federal oil spill contingency planning and liability provisions of the Clean Water Act (section 1321(o); bills pending before Congress this session would, however, alter this provision):

> (1) Nothing in this section shall affect or modify in any way the obligations of any owner or operator of any vessel, or of any owner or operator of any onshore facility or offshore facility to any person or agency under any provision of law for damages to any publicly-owned or privately-owned property resulting from a discharge of any oil or from the removal of any such oil.
>
> (2) Nothing in this section shall be construed as preempting any State or political subdivision thereof from imposing any requirement or liability with respect to the discharge of oil into any waters within such State.
>
> (3) Nothing in this section shall be construed ... to affect any State or local law not in conflict with this section (emphasis added).

Justice Douglas found that the Act's directive that the President prepare a National Contingency Plan for the containment, dispersal, and removal of oil, contemplates cooperative actions with the states. Other evidence of intended state-federal cooperation is found throughout the statute. In his view the language in section (o)(2), quoted above, was included because "the scheme of the Act is one which allows-- though it does not require-- cooperation of the federal regime with a state regime. If Florida wants to take the lead in cleaning up oil spillage in her waters, she can use ... the [Florida] Act and recoup her cost from those who did the damage. ... It is sufficient for this day to hold that there is room for state action in cleaning up the waters of a State and

recouping, at least within federal limits, so far as vessels are concerned, her costs. ... If the coordinated federal plan in actual operation leaves the State of Florida to do the cleanup work, there might be financial burdens imposed greater than would have been imposed had the Federal Government actually done the cleanup work. But it will be time to resolve any such conflict between federal and state regimes when it arises." 411 U.S. at 332, 336.

With respect to Florida's ability to require specific containment gear of vessels and terminal facilities through regulations, Justice Douglas found that the Presidential authority to impose similar requirements did not strip the State of its spill prevention regulatory power, absent any specific conflict between federal and state requirements. The subject of oil spill prevention was not one in which uniform federal standards were required. Any finding of preemption would have to await a reviewing court's finding of a serious conflict between a specific Florida regulation and Coast Guard regulations promulgated under the federal statute. (These regulations, 33 C.F.R. Chapter I, subchapter O, had been promulgated only a few months before the Court's decision, thus the issue of any actual conflict between state and federal spill prevention regulations had not been litigated.)

Justice Douglas also found no per se conflict between applicable federal legislation and Florida's requirement of terminal facility licenses. The federal water pollution statute clearly contemplated state licensing, which the Justice referred to as "a traditional state concern," by requiring state certification of consistency with state water quality standards before issuance of federal discharge licenses. Moreover, Congress has recently enacted the Ports and Waterways Safety Act of 1972, Title I of which explicitly provided that the States were not precluded from prescribing for "structures" higher safety equipment requirements or safety standards. 33 U.S.C. 1222(b). While not elaborating on the meaning of this provision, Justice Douglas took it as supporting evidence of congressional intent to allow state regulation of marine terminal facilities to prevent oil spills. It is very likely that the Court was influenced by the limited scope of the federal

regulatory scheme under the federal statute. It was probably reluctant to create a significant legal vacuum by finding state regulation in the same field to be preempted. Tribe, supra, at 497, citing Askew at 336-37.

The Florida and federal statutes were enacted in 1970 in response to the growing threat of oil spill damage to the marine and coastal environments. Recent catastrophic oil spills such as the Torrey Canyon disaster and the tremendous grow in oil tanker shipments and the advent of super-tankers prompted their enactment. The State of Washington's Tanker Act was passed in 1975, in response to these as well as factors peculiar to the region. Canada had just announced that crude oil shipments to oil refineries along the Puget Sound would be curtailed. The State of Washington expected to replace these shipments with deliveries of North Slope crude oil through tankers loaded at the Trans-Alaska Pipeline terminal in Valdez, Alaska. Concerned about the devastating effect that a tanker accident and spill would have on the productive and fragile waters of Puget Sound, the State adopted a number of direct and indirect controls on the size, design, equipment, and operation of oil tankers.

The Washington law was challenged on the day it took effect by the owners of one of the Puget Sound refineries. They were joined by a major tank vessel owner and shipbuilder. The plaintiffs claimed the entire statute was preempted by the Ports and Waterways Safety Act of 1972, another law enacted at least partially in response to the North Slope oil discoveries. A three-judge federal district court agreed and found the law to be completely preempted. On appeal, the Supreme Court affirmed the lower court ruling in part and reversed it in part, upholding certain provisions of the state law. In Ray v. Atlantic Richfield Co., the Supreme Court found Congress' enactment of the 1972 law to signify an intent to establish uniform national standards for the design and construction, maintenance, and operation of oil tankers to provide vessel safety and to protect the marine environment, thus preempting more stringent state requirements. See Tribe, supra, at 486-487. It is from this ruling that the principal indices of federal preemption of state tanker controls are drawn.

The preemptive effect of the 1972 federal law varied with respect to the four major provisions of the Washington law: the requirement of a state-licensed pilot for all federally enrolled and licensed tankers over 50,000 DWT navigating in Puget Sound, the outright ban of supertankers (over 125,000 DWT) from transiting the Sound, the imposition of vessel design, construction, and navigational equipment standards on tankers between 40,000 and 125,000 DWT, and the provision of an alternative tug escort requirement for vessels not meeting these standards. Each was considered separately as they implicated different provisions of federal law and therefore raised individual questions of congressional intent.

The state-licensed pilot provision was dealt with easily, as the Court was able to find in the federal enrollment and licensing laws clear evidence of congressional intent with respect to state pilotage. While the federal law did not completely preclude state pilotage laws, it did expressly prohibit state pilotage laws for vessels enrolled in the coastwise trade (interstate shipping). 46 U.S.C. section 215. The Court held, however, that federal law left states free to impose pilotage requirements on foreign trade vessels that enter and leave their ports. Washington could therefore require "registered" tankers larger than 50,000 DWT to employ a state-licensed pilot while in Puget Sound.

The State's tanker safety standards presented a much more difficult questions of congressional intent. The relevant federal law, Title II of the Ports and Waterways Safety Act (PWSA), contains no express language regarding permissible state law. In Title II Congress required the Coast Guard to promulgate marine environmental protection regulations specifying standards for maneuverability and stopping that would reduce the risk of collisions, groundings, and other accidents that could lead to an oil spill. These regulations were also expected to reduce oil pollution resulting from normal operations, such as ballasting, deballasting, and cargo handling. 46 U.S.C. 391a(7)(A). Vessel inspections and certificates of compliance would indicate that a particular vessel complied with applicable design and construction standards and that its crew was qualified to handle oil as cargo. Id., section 391a(9).

The Washington Tanker Law required tankers between 40,000 and 125,000 DWT navigating in Puget Sound to have certain "standard safety features," including a particular shaft horsepower to dead weight tonnage ratio (1 to 2.5), twin propeller screws, double bottoms beneath all oil cargo compartments, two operating radars (one being a collision avoidance system), and other navigational position location systems as required by the State board of pilotage commissioners. These standards were not required of vessels while in ballast or while escorted by a tug vessel or vessels with a combined shaft horsepower equivalent to five per cent of the tanker's dead weight tonnage. These design features were more stringent than those under federal regulations.

The Supreme Court ruled that these tanker design and equipment provisions were preempted. The Court found in Title II a statutory pattern that revealed a congressional intent to entrust to the Secretary of Transportation the duty to determine which design characteristics render oil tankers sufficiently safe to be allowed to proceed in the navigable waters of the United States. That the Secretary alone was to make the risk assessment judgment was evident to the Court, as it wrote:

> Congress intended uniform national standards for [tanker] design and construction ... that would foreclose the imposition of different or more stringent state requirements.... Congress did not anticipate that a vessel found to be in compliance with the Secretary's design and construction regulations and holding a Secretary's permit, or its equivalent, to carry the relevant cargo would nevertheless be barred by state law from operating in the navigable waters of the United States on the ground that its design characteristics constitute an undue hazard.... The Supremacy Clause dictates that the federal judgment that a vessel is safe to navigate U.S. waters prevail over [any] contrary state judgment.
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> 435 U.S. at 163-164, 165.

To square its holding under Title II with Court decisions made prior to enactment of the PWSA, the Court concluded that State and local governments may enforce local laws against federally licensed or inspected vessels only if they are aimed at objectives that differ from those embodied in the federal law. As Title II was aimed at tanker vessel safety and environmental

protection, states may not, at least directly, mandate different or higher tanker design requirements. Can they impose them indirectly by requiring tankers not meeting the standards to be escorted by tugs? This question made it necessary for the Court to examine the congressional intent behind Title I of the PWSA concerning vessel traffic controls and port safety.

The regulation of vessel traffic and port controls has been delegated less exclusively to the federal government than has tanker design and construction. The Court found the language and structure of Title I to evince a much less preemptive effect on state law. Title I gives the Secretary of Transportation the discretionary authority to adopt vessel traffic systems (VTS) for particular U.S. ports for preventing damage to vessels, structures (a term not defined in the Act but most likely meaning bridges, piers, roadsteads, and other harbor installations), and shore areas, as well as prevent pollution of navigable waters and marine resources. Under a VTS, the Coast Guard controls vessel traffic during periods of congestion and hazardous conditions by specifying vessel movement times, size and speed limitations, vessel operating conditions, navigational equipment, and minimum safety equipment.

The Supreme Court viewed Washington's tug escort provision not as a design requirement but one "more akin to an operating rule arising from the peculiarities of local waters that call for special precautionary measures, and, as such, ... a safety measure clearly within the Secretary's [Title I] authority." 435 U.S. at 171. Unlike Title II, however, Title I contains explicit language allowing the state to exercise legal authority in the field of vessel traffic and port safety. Section 1222 (b) provides that Title I does not prevent a state from prescribing for structures higher safety equipment requirements or safety standards "than those which may be prescribed pursuant to Title I." 33 U.S.C. section 1222 (b). Higher state safety standards for the protection of structures are allowed even if the Coast Guard has enacted provisions to achieve the same objective in its regulations and applicable VTS. The implication is that state safety standards for vessels are also permissible but they may not impose higher standards than any that are adopted under the federal law. 435 U.S. at 174. (This is not entirely clear, however, as the Court's opinion later refers to legislative history that could be interpreted as precluding any state regulation of vessels. 435 U.S. at

174, citing House Report No. 92- 563, pt.2 (1971) at 15. But the Court's analysis regarding the supertanker ban, discussed below, indicates the Court's belief that state action respecting vessel safety and equipment is permissible as long as the Coast Guard has not considered and acted upon the particular measure.) Until the Secretary acts it is not possible to determine if the state standard imposes an impermissible higher safety standard.

Thus the federal PWSA allows states to regulate in the area of vessel safety and traffic controls as long as they do not conflict with federally-promulgated regulations. States may impose more protective standards with respect to structures even if they go beyond what the Coast Guard has deemed necessary in its regulations. Whether Washington's tug escort requirement, a provision concerning vessel traffic safety, was precluded by the authority of the Secretary of Transportation depended on whether the Coast Guard had either promulgated its own tug escort requirement for the Puget Sound VTS or had decided that such a requirement should not be imposed. Since the record revealed no evidence that either decision had been taken, the Washington tug escort provision was not preempted. The Court, however, left open the possibility that subsequent Coast Guard rulemaking (in 33 CFR Part 164, under Title I) setting minimum standards for tug escorts would oust the state provision. 435 U.S. at 172.

The members of the Court were divided on whether the tanker design standards were saved by the alternative tug escort provision that allowed tankers to avoid compliance with the design standards. The Court found the Puget Sound tug escort provision to be a requirement "with insignificant international consequences" as it did not coerce tanker owners into adopting the state's design standards. The provision was in effect just a tug escort requirement, a permissible local regulation that was not per se preempted as would be a direct state design standard. The tug escort provision could stand as long as it did not conflict with a federally promulgated tug rule. The 1972 Act authorized the Coast Guard to impose a tug escort rule but did not compel it, and no such requirement had yet been adopted for the Puget Sound vessel traffic system, nor had a policy decision been taken that such a requirement was unnecessary. Justice White's plurality opinion, joined in full only by three justices, Chief Justice Burger and Justices Stewart and Blackmun,

implied, however, that if the Coast Guard were to enact such regulation, the state tug provision would be preempted. 435 U.S. at 171-172. Because the state had the power to require all vessels to use a tug escort, it could also require only those vessels not meeting the specified design standards to use tugs. The Court also found that the tug escort provision did not violate the Constitution's commerce clause by imposing heavy costs on interstate shipping.

In a dissenting opinion, Justice Marshall, joined by Justices Rehnquist and Brennan, agreed that the tug escort provision was permissible. Because all affected tanker owners had opted to use tug escorts and thus had not felt forced to comply with the design requirements, it was unnecessary for the Court to address the question of whether the state design requirements were in conflict with the federal goal of national uniformity and thus not preempted.

The Court was also seriously divided on the question whether the federal law prevented the State from banning supertankers from Puget Sound. The majority found Washington's prohibition of tankers greater than 125,000 DWT to be preempted by the Coast Guard's authority under PWSA's Title I to establish "vessel size and speed limitations." Both the majority and the dissent agreed that Title I did not on its face preempt all state regulation of vessel size; preemption depended on whether the Coast Guard had addressed and acted upon the particular regulatory issue of size limitations. The justices disagreed, however, whether the Coast Guard had in fact considered the question and concluded that no size limitation was necessary. The majority concluded that the Coast Guard's local navigation rule controlling the number and size of vessel in Rosario Strait at any given time constituted federal action with respect to vessel size limit that precluded a higher state standard. The state could not have adopted the supertanker ban as a matter of state judgment that very large tank vessels unsafe generally. Such a blanket determination would be precluded under Title II as a judgment respecting tanker design. As a judgment reflecting consideration of local conditions and water depths, however, the ban would have been permissible had the Coast Guard not made its own judgment that the local conditions did not warrant such a prohibition. The Court was not concerned that the Rosario Strait rule was an unwritten policy and therefore did not clearly reflect an affirmative Coast Guard judgment that a supertanker ban was

unnecssary. The Secretary's failure to adopt a supertanker ban "takes on the character of a ruling that no such regulation is appropriate" because the Title I required him to give full consideration to numerous factors in setting vessel traffic controls. Because his responsibility to consider and balance factors was so broad, it was apparent that the the ban was determined to be unnecessary. This reasoning appears somewhat strained, however, as it seems to say that because the Act requires the Secretary to consider everything thoroughly he must have done so.

The dissent did not buy the majority's analysis either. It noted the Court's well-established principle in cases of supremacy clause analysis that state and federal statutory schemes should be read to the greatest extent possible as compatible and should only oust state law to the extent necessary to protect achievement of federal aims. The dissent took particular note that the Coast Guard's Puget Sound Vessel Traffic System, 33 CFR Part 161, Subpart B, contained no tanker size limitation. The Coast Guard comments on the System in the Federal Register during its promulgation indicated that no consideration of the need for a ban took place. To the dissenters the Coast Guard's unwritten rule prohibiting more than one tanker larger than 70,000 DWT from transiting Rosario Strait during clear weather reduced to 40,000 DWT during bad weather was insufficient to establish a federal policy that a supertanker prohibition was unwarranted. 435 U.S. at 183, n.3.

Contrary to the majority's conclusion that Title I preempted the supertanker ban, the dissent found support for the state ban in a provision authorizing local VTSs. Section 1222 (e) provides that "the existence of local vessel-traffic-control schemes must be weighed in the balance" [by the Coast Guard] in determining which federal regulations should be imposed. 435 U.S. at 184, n.4. Likewise, Title II of the Act, regarding tanker design and construction standards did not preempt the State's supertanker ban. The dissent rejected the suggestion to that effect made by the majority's statement that Title II preempted "a state judgment that, as a matter of safety and environmental protection generally, tankers should not exceed 125,000 DWT." 435 U.S. at 175. Justice Marshall wrote:

> It is clear, however, that the Tanker Law was not merely a reaction to the problems arising out of tanker operations in general, but instead was a measure tailored to respond to unique local conditions -- in particular, the unusual susceptibility of Puget Sound to damage from large oil spills and the peculiar navigational problems associated with tanker operations in the Sound. Thus, there is no basis for preemption under Title II (emphasis added).
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> 435 U.S. at 184-185.

The fact that the Court wrote three separate opinions weakens the force of the Ray decision. Moreoeever, the holding is not helped by the PWSA's lack of clear congressional intent with respect to state regulatory jurisdiction. Most important, however, is that the Court's most forceful argument for federal preemption of tanker design and construction standards was based upon the assumed need for uniformity in order to achieve international agreement on tanker safety standards. An argument could be made that vessels carrying North Slope crude oil from Valdez to ports on the West coast are engaged in interstate trade only. They are not competing with foreign tankers for international shipping. Many of these tankers, like the Exxon Valdez, were constructed specifically for the North Slope trade. Rather than frustrate the federal objective for uniform, international standards, the adoption of consistent state-imposed tanker standards by all States handling North Slope crude oil could help demonstrate the need for a higher, minimum international standard of tanker safety design. Consistent state tanker standards enacted by all the states receiving North Slope crude oil would eliminate the otherwise potent argument aired in Ray that national standards are needed to prevent the very costly impact on shipping of diverse state design requirements, for example, among Washington, Oregon, and California. See, e.g., Ray, 435 U.S. at 14-15.

The problem of costly, divergent state tanker standards was raised in the separate concurring opinion by Justice Stevens, joined by Justice Powell. They criticized the majority's decision not to preempt the tug escort alternative provision. They believed it to be of no consequence that the escort penalty imposed only a modest additional cost on tankers not meeting the invalid design rules. In their view, these additional costs would be magnified by the enactments of similar re-

quirements by other states attempting to impose more stringent standards. Evidence of this multiplier problem could be found in the fact that Alaska had just recently enacted an explicit system of economic incentives to try to get tankers to adopt safety and design standards similar to those required by the Washington Tanker Law. The decision in Ray despite its weakness was to have a serious impact on this newly enacted Alaskan law, although it is not entirely clear that it should have. It is to this story that we now turn.

C. Alaska's Experience with Federal Preemption: Chevron v. Hammond

To address the significant risks of oil spills posed by the imminent commencement of shipping operations from the terminus of the Trans-Alaska Pipeline in Valdez, the Alaska Legislature adopted SB 406 in 1976, enacted as Chapter 266, 1976 Alaska Laws. SB 406 was a comprehensive act covering all aspects of marine oil transportation and handling. Section 1, the Tank Vessel Traffic Regulation Act, required safety and maneuverability features on tankers and tug escorts for certain vessels, and the adoption of a state system of tanker traffic regulations. The Tank Vessel Act included a provision authorizing ADEC to adopt a comprehensive system of traffic regulations for tankers that did not conflict with regulations adopted by the Coast Guard and one authorizing the Governor to enter into interstate compacts to achieve the purposes of the Act. Section 2, the Oil Discharge Prevention and Pollution Control Act, prohibited the discharge of oil in state waters and required the payment of annual risk charges by terminal operators and vessel owners into a fund to pay for clean-up, research, and administration. The amount of the annual risk charges depended upon the presence or absence of the specified vessel features. Provisions of the new law also controlled the placement of ballast water in tankers and prohibited its discharge.

The new law took effect on July 1, 1977. On September 16, 1977, Chevron USA, Inc. and others filed suit in the federal district court for Alaska, claiming that key provisions of the law were unconstitutional. During the pretrial phase of the litigation in March, 1978, the Supreme Court announced its decision in Ray v. Atlantic Richfield Co. In response to the Ray ruling,

Chevron and the State stipulated that certain provisions of the 1976 Tank Vessel Traffic Regulation Act were preempted by the federal Ports and Waterways Safety Act and thus void. This agreement settled a significant part of the challenge to the state law.

Stipulated as preempted under the tanker design provisions (Title II) of the PWSA was the requirement that all tankers navigating Alaskan waters have on board what Alaska considered to be "standard safety and maneuverability features." The safety features included two marine radars systems, collision avoidance radar systems, LORAN-C navigational receivers, and other position location systems as prescribed by regulations by the Alaska Department of Environmental Conservation (ADEC). Provisions requiring tug escorts for tankers greater than 40,000 DWT that lacked such maneuverability and stopping features as lateral thrusters, controllable pitch propellers, and backup propulsion equipment were deemed preempted in light of the Coast Guard's promulgation of the Prince William Sound Vessel Traffic System under Title I of the PWSA. The parties also agreed on the invalidity of provisions controlling the placement of ballast water in vessel cargo tanks. They were not invalidated under the PWSA, however; they were deemed to posed an unreasonable burden on interstate commerce and were thus invalid under the commerce clause of the U.S. Constitution.

The parties did not agree with respect to the validity of the Oil Discharge Prevention and Pollution Control Act. They decided that a two-phase trial was necessary. The first phase of the trial would consider the validity of the annual risk charges and the Coastal Protection Fund. The second phase would try the validity of the ballast water discharge provision, loading and unloading requirements, the contingency plans and capability criteria, the certification provision, and the financial responsibility standards. This law authorized ADEC to take all necessary steps in cooperation with federal authorities to prevent oil spills, including the inspection and supervision of oil transfer activities, to arrange for the prompt and effective containment and removal of spilled oil, and to provide procedures to compensate victims. The key aim of the law was to provide economic incentives for oil terminal facilities and tanker owners to adopt the State-specified safety and maneuverability features by assessing annual risk charges and by requiring risk avoidance certifi-

cates and proof of financial responsibility. The certificates would be issued upon payment of an annual risk charge into the Coastal Protection Fund and upon proof of capability to carry out all required state and federal spill prevention and contingency plans. Oil terminal facility and marine carrier certificates would not be issued unless the owners could demonstrate their ability to provide all equipment, personnel and supplies to contain and clean-up any oil discharges. The statute provided for the establishment of differential risk charges based upon the presence of the risk-reducing equipment and design features.

The Act also authorized the State to undertake the immediate removal of disharged oil and to direct operations of all contractors and departmental personnel. The Coastal Protection Fund was created as a revolving fund consisting of all annual risk charges, payments for damages, penalties, and other fees established under the Act. The Fund's purpose was to finance ADEC's administrative, enforcement and clean-up expenses and to fund research on spill prevention and removal.

After a trial in the first phase, the U.S. District Judge, Judge James M. Fitzgerald, ruled in June, 1978, that the State's system of risk avoidance charges was preempted by the federal PWSA. The Coastal Protection Fund was invalid in light of Article IX, section 7 of the Alaska Constitution prohibiting the dedication of license fees for a special purpose. The State of Alaska filed an appeal of this ruling but later abandoned it. Details of Judge Fitzgerald's views on the risk charge system are presented below.

After this initial ruling, the remaining issues concerned the validity of the State's ballast water discharge regulations requiring onshore treatment, constitutionality of the warrantless ADEC searches and inspections of tankers, and the permissibility of State certification of tankers. Judge Fitzgerald ruled in September, 1979 that the ballast water provisions were preempted by the federal PWSA. Before he could rule on the other provisions, the Alaska Legislature repealed both the Tank Vessel Regulation Act and the Oil Discharge Prevention and Pollution Control Act. HB 205, Chapter 116, 1980 Alaska Laws, effective July 1, 1980.

The State ultimately appealed only one of the provisions that Judge Fitzgerald ruled unconstitutional, the ballast water discharge provision. Alaska eventually prevailed on this issue. The U.S. Circuit Court of Appeals for the Ninth Circuit Court reversed Judge Fitzgerald. It held that the federal Ports and Waterways Safety Act, as amended by the Ports and Tanker Safety Act of 1978, did not "occupy the field" of tanker discharge regulation in state waters, that the State's discharge prohibition did not pose an irreconcilable conflict with any regulations adopted by the Coast Guard pursuant to the PWSA nor prevented the achievement of that Act's objectives, and that the federal Clean Water Act reflected express congressional intent to achieve maximum state-federal cooperation in protecting the marine environment within three miles of the shoreline. Chevron v. Hammond, 726 F.2d 483 (9th Cir. 1984). The U.S. Supreme Court denied Chevron's petition for a writ of certiorari and the litigation was finally concluded.

It is difficult and probably unwise to speculate on what the Ninth Circuit would have held had the State decided to appeal Judge Fitzgerald's decision to invalidate the oil spill risk charge system. His preemption analysis was not particularly convincing nor detailed, however, and it seems clear from his opinion that his principal concern was for the adequacy of the statistical basis for the risk charge system. His reading of the Supreme Court's decisions overlooked the complexities of the Ray decision that could have limited its impact and it completely ignored the Court's strong endorsement of state authority in spill contingency measures in the Askew case. On these grounds it would have been more appropriate to appeal the decision to the Ninth Circuit for a more comprehensive reading of the applicable case law. It may be that the regulations' technical deficiencies revealed by Judge Fitzgerald's close scrutiny made the State reluctant to pursue their vindication in the Court of Appeals.

The judge seemed particularly bothered by the nature of the actuarial statistics and data on tanker accidents that were used as the basis for establishing the different risk charges by tanker size and construction. His discussion of the system and of the qualifications and methodology of the ADEC contractor who designed it, suggest that it was the program's execution rather than its legal basis that troubled him. That being the case, the more appropriate response would have been

to remand the risk charge regulations to the agency to correct the defects rather than invalidate the system entirely.

Judge Fitzgerald considered at length the ADEC methodology employed in setting the risk charges, emphasizing the Department's conscious decision, with the encouragement of the Attorney General, to develop the program as a system of insurance premiums rather than regulatory standards for tankers. This approach was taken in light of the potential for preemption under the federal regulatory statute, the PWSA. He was particularly persuaded by testimony of Chevron's expert witnesses that the ADEC contractor's report, which formed the basis for the risk charge regulations, was "statistically and actuarially unsound" and based upon inadequate and misapplied data. Memorandum of Decision, June 30, 1978, at 29. (These data concerned the casualty experience of the world-wide tanker fleet on the high seas, and did not take account of the performance of tankers in Alaskan coastal waters.)

The model employed in the report assumed a simplistic and unproven relationship between particular tanker design features and navigation equipment and their reduction of the risk of an oil spill. Judge Fitzgerald found the risk reduction estimates to be subjective, incomplete, and unsupported. He condemned the contractor's report as "devoid of merit" but faulted the ADEC decision to use an actuarial method for which the contractor was unqualified and for which he was given inadequate time (six weeks), resources, and staff assistance. Noting the complexity of the task of determining tanker standards to reduce oil spills, Judge Fitzgerald pointed out that the double bottom issue alone had consumed years of study and debate before it was ultimately rejected by the International Maritime Consultative Organization (IMCO) in February, 1978, just four months prior to his ruling. He was apparently influenced, at least in part, by the results of the IMCO deliberations, but he assumed, probably naively, that the IMCO decision was a technical rather than a political and economic one. See Silverstein, Superships and Nation-States: The Transnational Policies of the Intergovernmental Maritime Consultative Organization (1978) at 184-186 ("IMCO is an inherently sympathetic forum to maritime interests" which has not functioned effectively as a regulatory body because of its lack of an independent research capability).

Judge Fitzgerald gave significantly less attention to the legal question whether Alaska's risk charge regulations were preempted by the PWSA. Again he noted the international dimension of the problem of tanker oil spills, adding that President Carter's proposal for double bottoms on tankers had been rejected four months before at the International Conference on Tanker Safety and Pollution Prevention on safety grounds and in preference for further study of the selective placement of segregated ballast tanks. In his view the risk charge system was an attempt to influence the design characteristics of tankers, a subject that the Ray v. Atlantic Richfield decision of three months prior had indicated was completely preempted by Title II of the PWSA.

He rejected the argument that the risk charge system was similar to Washington's alternative design/tug escort requirement, and as an operating rule reflecting the peculiar conditions of local waters, it was not preempted under Title I until specific federal judgments to the contrary were made. Judge Fitzgerald merely concluded that because the risk charge system was designed to provide incentives for the incorporation of state-desired safety and maneuverability features it was contrary to the goal of Title II to achieve uniform national and international standards. In light of the divergence in opinion respecting the effectiveness of various design characteristics to prevent oil spills, he predicted that a widely varying array of conflicting state standards would result if states were allowed to enact their own tanker standards.

The actual impact the state regulations were having on tanker design was not considered, although this was an important part of the Supreme Court's consideration of the Washington's design/tug escort alternative in Ray. Judge Fitzgerald made no mention of the fact that tanker owners were paying the risk charges instead of incorporating the State's safety and design features. Moreover, he did not even discuss whether the risk charge system was effectively an oil spill contingency fund the contributions to which were assessed on the basis of the different risks posed by certain kinds of tankers. If he had undertaken this line of inquiry he may have upheld the risk charge system as a contingency fund provision authorized by the federal Clean Water Act as interpreted by the Supreme Court in Askew v. American Waterways Operators, as discussed above. A more thorough consideration of these issues could have been made by the Court of

Appeals, thus the State's failure to appeal the ruling is unfortunate. A ruling by the Ninth Circuit on all aspects of the Alaska law could have helped clarify the application of the Ray and Askew rulings and promoted the development of this uncertain area of the law.

D. California's Legislative Initiatives

The State of California is currently pursuing legislation to revise and strengthen the State's control over oil shipments through state waters. There is both a petition drive to get new legislation enacted by referendum and bills pending in the State Senate and Assembly. All of these proposals promise to enhance considerably the State's power to prevent an Exxon Valdez disaster in State waters. While these proposals may raise concerns regarding federal preemption, and are likely to be challenged by a litigious oil industry, they merit serious consideration by other States. They are likely to have a more positive reception in the federal courts, if the new federal oil spill legislation reflects a renewed spirit of cooperative state-federal responsibility for oil spill prevention and if the deficiencies of the federal regulatory performance since 1978 can be presented.

California's Environmental Initiative is currently being prepared for a citizens' petition drive and voter referendum in November, 1990. If adopted it would enact comprehensive environmental legislation to control pesticide use, reduce the production of greenhouse gases, protect old growth forests, prevent toxic water pollution, and reduce the risks of coastal oil spills. The oil spill provisions should be of interest to other states because they skillfully employ the strongest aspects of the State's legal authority to build a comprehensive oil spill prevention and response system.

Recognizing that most if not all oil development and transportation facilities are located on state tidelands (including offshore exploration and production facilities, pipelines, tanker terminals, and refineries), the new law would forbid the renewal of any state lands lease for such facilities until a State Oil Spill Prevention Plan is adopted. The Plan must be implemented by all agencies with authority over potential sources of oil pollution. It will include at a minimum tug escorts

for oil tankers, the establishment of emergency stations for disabled tankers, and periodic inspections for all oil-related facilities.

Permit approvals for facilities that pose the risk of oil spills will be withheld in the absence of an approved oil spill contingency plan that meets requirements specified by the California Coastal Commission, prepared in consultation with the State Lands Commission and the Department of Fish and Game. (Together the heads of these agencies will form a State Oil Spill Coordinating Committee to oversee implementation of the new law.) Local governmental and port contingency plans will be developed and incorporated into local coastal management programs, giving them the force of federal approval and consistency under the federal Coastal Zone Management Act.

In the event of a spill, the Act contemplates that state agencies will direct all containment and clean-up operations, including those of the responsible party, subject to the overriding authority of the U.S. Coast Guard. A new agency within the Department of Fish and Game, the Office of Oil Spill Response, would direct spill response, interagency coordination, and most importantly, oil spill contingency training and plan implementation. The Office would have available funds from an Oil SPill Prevention and Response Fund created by a variable fee on oil deliveries by tanker and offshore pipelines. The variable fee provision adopts a relative risk approach that is similar in philosophy to the 1976 Alaska legislation. The fee of up to twenty-five cents per barrel "shall be commensurate with the oil spill risk posed by the method of transportation and volume of oil transported." Initiative Measure, Section 24, adding Public Resources Code, section 6232 (a).

Bills pending in the California legislature should also be noted. They reflect a new boldness and a willing to exercise the maximum state authority to prevent the occurence of catastrophic oil spills. The pending Senate and Assembly bills use the State's regulatory authority over shoreside terminal facilities to impose risk-reducing standards on tankers. This approach, if tested in the courts, will bring into direct focus the somewhat conflicting policies on state authority that are reflected in the federal Clean Water Act and the Ports and Waterways Safety Act/Port and Tanker Safety Act.

Clearly the aim of the California law is to influence tanker design and construction but does so through the state's police power and public trust responsibilities as applied to marine terminal facilities. The impact of the Ray and Askew decisions on this approach is uncertain. A reviewing court is likely to be influenced by the ineffectiveness of existing federal and state controls as revealed by the Exxon Valdez disaster. Whether it concludes that the is greater scope for state control could depend on the language Congress adopts in enacting the 1989 Oil Spill Prevention Act. These developments should be followed closely.

WORK IN PROGRESS 12/1/89

COMPARISON OF HOUSE AND SENATE OIL SPILL LEGISLATION

STATE POSITIONS	HOUSE BILL H.R.1465	SENATE BILL S. 686
Liability We advocated liability to cargo owner, higher limits, and simple negligence. Recommend: Support House position.	**Liability (Title I)** Liability goes not only to tanker but also to cargo owner. Tanker and cargo split liability equally. Limits are $1200 per gross ton, but not less than $10 million. Limits pierced for willful misconduct or gross negligence or violation of federal safety standards or regs.	**Liability (Title I)** Liability only to tanker owner, not to cargo. Liability limits are $1000 per gross ton, but not less than $10 million. Liability limits pierced for willful misconduct or gross negligence or violation of standards or regs.
Uses of Fund We advocated no per incident limit, higher State draw, and Alaska strike teams. Recommend: Support House position on unlimited payment per incident; support Senate position on strike teams.	**Uses of Fund** Removal, clean up, damages. No per incident limit. Includes provision for state draw up to $250,000. Uses include payment of cost of at least seven Coast Guard strike teams: New Jersey, North Carolina, Great Lakes named.	**Uses of fund** Removal, clean up, damages. Per incident limit of $1 billion. State draw up to $250,000. Fund to be used to set up and operate regional response teams: Alaska, Pacific Northwest, California, Gulf of Mexico, South Atlantic, mid-Atlantic, New England named.
Natural Resource Damages We supported the trust fund, but advocated a measure of damages that was not included in either formulation. Recommend: continue to advocate a measure of damages that assures full compensation and restoration.	**Natural Resource Damages** Measure of damages is cost plus diminution in value pending restoration; funds held in revolving trust account.	**Natural Resource Damages** Measure of damages is cost, diminution pending restoration, "and the need for individual assessments."

WORK IN PROGRESS 12/1/89

Relationship to State Law
Although the Senate bill did not preempt state law and the House bill did, after the House bill was amended to take care of preemption it has emerged as the better bill as far as state rights.

Recommend: Support the House position.

Relationship to State Law
No preemption of state law, financial responsibility requirements or standards. Federal clean-up to be accomplished according to applicable state standards. Governor to consult on how clean is clean; although federal official makes final decision, the standard shall be state standard and shall be compensable from fund even if costlier than clean-up to federal standard.

Relationship to State Law
No preemption of state law. Federal official decides when cleanup complete in consultation with Governor, but no provision for applicable state standard.

PROVISIONS SPECIFIC TO ALASKA

TAPS Fund
We have supported retaining the TAPS fund as long as it was used in Alaska and did not result in an additional tax on Alaska oil. The two bills are significantly different, the issue is tied up in the tax provisions, and there is potential for conflict here.
Recommend: Support the House position, since it allows the greatest flexibility and preserves the TAPS fund until all claims are resolved. Leaving the provisions of the TAPS Fund unchanged at this stage does not prejudice the eventual disposition of the money, and also preserves the more favorable liability provisions in the TAPS Act.

ALASKA PROVISIONS (TITLE II CONFORMING AMENDS)

TAPS Fund
Does not include any changes to the TAPS Fund, though it creates new programs for pipeline monitoring, spill response, and other in-Alaska activities. These activities would be paid for out of the overall federal fund.
After date of enactment , any future claims for spills of TAPS oil would be filed against federal fund, but the liablity provisions of the TAPS Act would apply.
The disposition of leftover money in the TAPS Fund would be subjet to subsequent act of Congress, if there is any money after satisfaction of outstanding claims, but does not set out what that disposition should be.

ALASKA PROVISIONS (TITLE IV CONFORMING AMENDS)

TAPS Fund
Includes changes to TAPS Act. Owners of oil at time loaded on vessels receive credit; pro-rated according to contribution to TAPS fund; amount equals amount transferred from TAPS fund to new fund. (minus outstanding claims against TAPS).
Preserves right of recovery against TAPS fund by municipalities for taxes, even though TAPS fund rolled into new federal fund.
The credit would not be available to the State, since the ownership is at time of loading to vessel, not at beginning of pipeline.
The savings clause on outstanding claims against the TAPS fund may be ambiguous enough to extinguish some claims against Exxon.

Navigation Safety
We have worked with both Senator Stevens and Rep. Young as they developed these two versions. There are some good elements in each, but the two are not identical.

Recommend: Support Senate position which is more detailed but add non-conflicting elements from House bill.

Navigation Safety
(TITLE V PRINCE WILLIAM SOUND)
Requires at least one escort vessel; VTS plan from DOT four months after enactment; requires prepositioned containment and removal equipment; response organizations at Cordova, Tatitlek, Valdez, Chenega; training for locals; practice twice a year.
Requires use of local people and services.
Contains savings clause for State law.
NOAA authorized to spend $5 million a year for three years to conduct resource damage assessment work.

Navigation Safety
(PROVISIONS APPLICABLE TO ALASKA Subtitle B of Title III)
Requires DOT rulemaking on pilotage; requires installation of Bligh Reef light; requires installation and operations of additional VTS equipment.
Establishes Oil Spill Recovery Institute. Preserves right of recovery against TAPS fund by municipalities for taxes, even though TAPS fund rolled into new federal fund.

Citizen Oversight
These two titles contain various approaches to citizen participation and oversight. We have not taken a position heretofore on citizen advisory committees. The affected communities have advocated an approach that was not included in either bill, but is somewhere between the two approaches.

Recommend: Work with communities to determine most acceptable compromise between two bills and support the approach communities advocate.

Citizen Advisory Group
(In Title VIII as part of pipeline oversight)
Amounts in federal oil spill Fund available for Alaska pipeline compliance and monitoring activities, including up to $2 million for State if matched on dollar-for-dollar basis.
Establishes Presidential Task Force to conduct audit of pipeline system; creates terminal advisory council (funding for council by appropriation from TAPS Fund); increases penalties and allows Secretary of Interior to collect civil penalties for discharges along pipeline corridor.
Calls for study by Secy of Interior and Gov of Alaska regarding transshipment of oil in Arctic Ocean, potential impacts of spill on Alaska Natives, review of contingency plans.

Citizen Advisory Group
(In Title V, Oversight and Monitoring)
Provides for three-tier citizen advisory system at Valdez and in Cook Inlet: Association, Advisory Council, Scientific Committee for Environmental Monitoring. Up to $3 million per year to be made available through EPA grants for operation of advisory system.

The industry has opposed double hulls/double bottoms, because of the added expense, and the U.S. Coast Guard has opposed it because of questions concerning tanker safety. One or more members of the Alaska congressional delegation has questioned the desirability of requiring double hulls/double bottoms. The cost of retrofitting the tankers in the Alaska trade would have a significant effect on the tariff and therefore on state royalty income.

Recommend: since there is new information and since the agencies have not previously concluded any position on this issue, it would be useful for the Governor and Cabinet to determine the state position

OIL SPILL PREVENTION AND REMOVAL

Both bills incorporate most of what the State recommended in Governor's and other testimony throughout the hearing process. The one item that differs significantly and on which we need to develop a position is the requirement for double hulls/double bottoms.

The issue was discussed briefly by the Resources Cabinet just after the oil spill, but at that time, not enough information was available to indicate clearly that double hulls/double bottoms made a significant contribution to safety. No position was taken at that time, nor in subsequent State testimony. Whether we advocate double hulls/double bottoms, turns on the State's roles as an oil owner and as a regulator. Is the environmental benefit to be achieved by the requirement worth the cost in increased costs of transportation and therefore reduced income?

The Oil Spill Commission likely will advocate the requirement, as have fishermen's groups, environmental groups, and many of the communities in the Prince William Sound, Gulf of Alaska, Cook Inlet area. The Coast Guard has released a report that indicates that the EXXON VALDEZ spill would have been greatly reduced had the tanker had a double bottom.

TITLE IV PREVENTION AND REMOVAL

Prevention Measures

Coast Guard review of alcohol and drug abuse violations in licensing; licensing renewal, suspension, revocation; manning standards; pilotage; USCG review use of VTS; conduct study on tanker navitagion safety to include:
--crew size, training and cleanup capability;
-- navigation equipment, systems and procedures;
-- vessel design and construction.
In addition, double hulls would be required on new tank vessels of at least 10,000 grt; retrofitting of others in 15 years. Double bottoms would be required on new self propelled tank vessels of at least 20,000 dwt; seven years to retrofit.

TITLE III OIL TANKER NAVIGATION AND SAFETY

Prevention Measures

Most of the same provisions. Major difference is that Senate bill requires Secretary of Transportation to complete rulemaking within a year to require double hulls and double bottoms on new tankers "except to the extent the Secretary determines that such requirements will not enhance oil tanker navigation safety."
An attempt by Sen. Brock Adams to impose a double hull requirement failed by only one vote on the Senate floor.

Oil Spill Response
We have advocated both immediate Presidential (Coast Guard) assumption of control and active state and citizen involvement in spill response.

Recommend: support Senate position on response; support Senate position on contingency planning; support House requirement that vessels may not operate without approved plans; support Senate position giving plans legal effect.

Oil Spill Response
President to "ensure" effective and immediate removal; spiller in charge; President directs; responsible parties act in accord with national contingency plan.

Contingency Plans
Calls for improved local plans; owners or operators of vessels and facilities required to prepare plans; seven regional strike teams established; no role for States in contingency planning. President required to approve plans; vessel may not operate without approved plan.

Oil Spill Response
(In Title II of S.686)
President in charge unless determines that removal will be done by State or spiller. Response by regional response teams.

Contingency plans
Required to address worst case (discharge of entire cargo of any vessel covered by plan) spill; must provide details and be capable of promptly and properly removing entire spill and minimizing environmental damage; clearly describe how plan relates to other plans. President must approve contingency plans; state consultation on plans; President may delegate plan approval to States. Plans have legal effect.

INTERNATIONAL PROTOCOLS

We have opposed the protocols to the extent that they would preempt state law.

Recommend we need not have any current position on protocols, since the preemption issue is apparently resolved.

IMPLEMENTATION OF INTERNATIONAL CONVENTIONS (TITLE III)
House bill would implement international protocols. The Committee claims that it can do so without preempting state law by the joinder provision in Sec. 3002(b) that would enable a claimant to substitute the Fund for a party defendant the Fund would otherwise indemnify.

IMPLEMENTATION OF INTERNATIONAL CONVENTIONS

There is no comparable provision in the Senate bill. Some Senators claim that no treaty implementation action can originate in the House, and therefore the provisions in Title III of H.R. 1465 are invalid.

MISCELLANEOUS
No State position; probably not necessary.

TITLE VI MISCELLANEOUS
Waivers, savings clause, authorizing legislation.

TITLE VI GENERAL PROVISIONS
Cooperative agreements between U.S. and Canada, civil penalties.

RESEARCH AND TECHNOLOGY
We have not taken a position on the R&D elements heretofore. D.C. office has forwarded copies of the relevant portions of both bills to the Governor's science advisor and the UA for review and comment.

Recommend: Support approach that amalgamates best parts of each bill, promotes to maximize [illegible] involvement and minimize creating new federal programs.

RESEARCH AND DEVELOPMENT (TITLE VII)
Establishes federal interagency coordinating committee; requires plan to be submitted to Congress; establishes R&D program for "innovative oil pollution technology," including 10-year monitoring and research program on effects of EXXON VALDEZ spill. Calls for six regional research centers (at least one in Alaska) to be established through competitive grants to universities or other research institutions.

RESEARCH AND DEVELOPMENT (TITLES II AND III)
Establishes national council on oil spill technology; creates federal research and development program on scientific and operational aspects of oil spill prevention, response, containment and recovery; cooperation with industry, academia, and private research groups; money for program to come out of Fund, maximum $25 million a year.

TAXES AND FUNDING

We have supported a uniform, nationwide tax that will create a fund capable of meeting the fiscal demands placed upon it by the legislation. We also have advocated full compensation for damages and full restoration of natural resources.

We have opposed any rebate or credit plan that is based upon ownership at the point oil is loaded on the tanker, since that cuts out state credits for contributions to TAPS.

The conferees on the reconciliation bill not only approved the 5-cent per barrel, nationwide tax, they also appear to have authorized a transfer of excess TAPS fund money (after all claims have been paid) to the new fund, even though the committee report clearly states it does not incorporate the Senate authorizing language. The reconciliation bill also provides for a tax credit, as would the Senate bill.

FUNDING MECHANISM

The funding mechanism for both the Alaska portions of the bill as well as for the overall national fund was contained not in this bill, but in the budget reconciliation bill. House and Senate negotiators agreed on a 5-cent per barrel nationwide tax, and a $1 billion compensation fund. However, they adjourned before reaching agreement on whether compensation and natural resource damages would be limited, and came to no resolution on how amounts paid into the new fund could be spent. The House bill would not limit compensation to be paid out of the fund, while the Senate bill would cap the per incident payout at $1 billion. The House bill would allow the balance in the TAPS fund to ride without any disposition on credits or rebates until after all claims have been settled and paid out. The Senate bill would transfer excess TAPS to the new oil spill fund, then credit amounts transferred from TAPS against amounts due the new federal fund.

FUNDING MECHANISM

See comments under House bill. The funding elements of oil spill legislation are being worked out in budget reconciliation.

Because the Senate provision would apply only to fund owners at the time oil is loaded on a vessel, and because the credit only applies to fund owners at the time they incur a federal tax obligation, the State may be precluded from the calculation of both the amount of excess in TAPS, and from receiving a credit or other recognition of its contribution to the TAPS fund.

Recommend: Support House position to provide unlimited payout; support general House approach that would leave TAPS untouched and dispose [illegible] undecided [illegible] time. Failing that, work with conference committee to revise [illegible] definition of owner of oil; work with Ways & Means Committee to modify the credit system in a way that acknowledges the State's contribution.

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STATE AND REGIONAL OIL AND HAZARDOUS SUBSTANCE DISCHARGE PREVENTION AND CONTINGENCY PLAN

OUTLINES FOR JULY 1, 1990 COMPLETION

Outline for State Plan

I. Immediate Actions

II. Background/Purpose/Authorities/Scope

III. Spill Notification Procedures
  a. Agency Notification Callout Numbers

IV. Spill Response Organization Chart

V. Brief Description of Organizational Structure and Responsibilities

VI. Brief Description of State Agency Roles and Responsibilities

Annex - Statewide Equipment Inventory

Annex - Interagency Agreements/Memorandums of Understanding

1. Memorandum of Agreement between Alaska Department of Environmental Conservation and Alaska Department of Military and Veterans Affairs, Division of Emergency Services

Outline for Regional Plans - Appendices to the State Plan - Cook Inlet, Prince William Sound, and Southeast Alaska Regions

I. Introduction

II. Description of Region

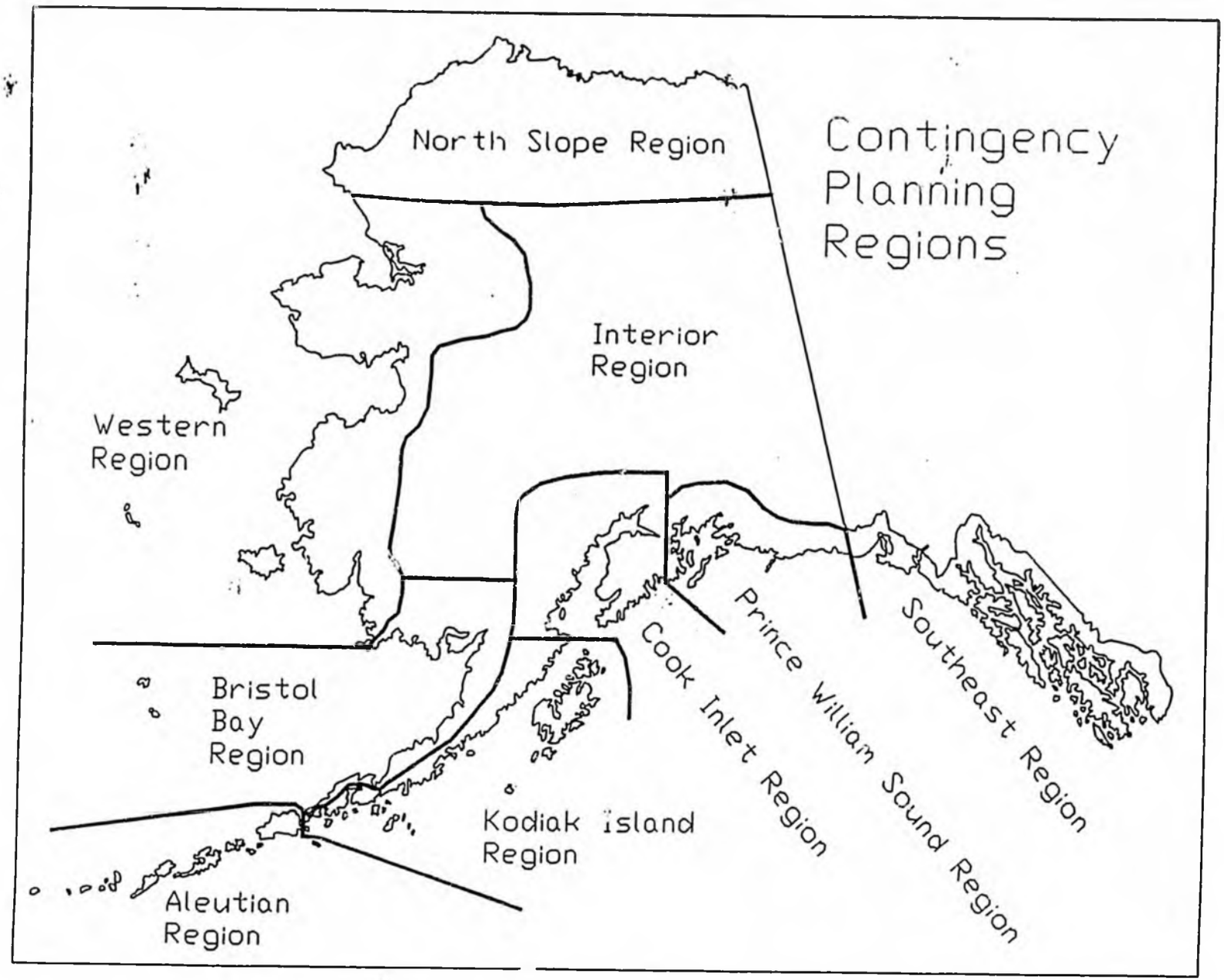
  a. Map of Region

III. Regional Notification Procedures

  a. Regional Agency Notification Call-out Numbers

IV. Regional Organizational Chart

V. Regional Equipment List


Contingency
Planning
Regions
North Slope Region
Interior
Region
Western
Region
Bristol
Bay
Region
Kodiak Island
Region
Aleutian
Region
Cook Inlet Region
Prince William Sound Region
Southeast Region

RESPONSE ORGANIZATION

for Oil and Hazardous Substance Discharges

Alaska Department of Environmental Conservation (1/1/94)

DRAFT

COMMAND

On - Scene Coordinator (ADEC)

DUTIES
- set policy
- establish objectives

As an incident escalates, a formalized command is instituted. Committee members include:

ADFG, ADNR, ADPS, DES, ADOL, ADOLaw, LEPC

Other state agencies, the USCG/EPA, and other federal agencies, the spiller, local officials, and other experts may be asked to sit in on command briefings as advisors.

STAFF

Information Officer (ADEC)
- public information/relations
- media contact

Liaison Officer (ADEC)
- contact point for federal agencies, volunteer groups, other advisors

Legal Advisor (ADOLaw)
- advice on legal implications

Project Coordinator (ADEC)
- liaison between Command and MACs

Safety Officer (DOLabor)
- worker health and safety

DRAFT

LOGISTICS

DES (Section Head)
ADOT/PF, ADNR, ADPS, LEPC

DUTIES
- communications
- camp and staging site selection
- air, ground and water transportation and support
- equipment and fuel needs
- facilities
- food
- procurement of equipment and supplies
- emergency medical services
- security

(Note: During a large incident there will be a unit head and staff for each duty.)

PLANNING

ADEC (Section Head)
ADNR, LEPC, ADPS, DES

DUTIES
- all incident response planning
- provides information to command
- identify support and communications needs for logistics
- spill surveillance, tracking and trajectory prediction
- identify and prioritize environmentally sensitive areas
- identify natural/cultural resources of concern
- coordinate environmental studies
- sampling and monitoring
- shoreline assessment

(Note: During a large incident there will be a unit head and staff for each duty.)

OPERATIONS

ADEC (Section Head)

DUTIES
- implement policy, objectives, plans
- hold meetings to coordinate and organize response operations with all Operations groups and Planning and Logistics sections

DRAFT

ADMINISTRATION

OMB / ADOA / ADEC
ADOL, ADOLaw, OMB, ADOA, ADEC, DES

DUTIES
- all incident response planning
- provides information to command
- identify support and communications needs for logistics
- spill surveillance, tracking and trajectory prediction
- identify and prioritize environmentally sensitive areas
- identify natural/cultural resources of concern
- coordinate environmental studies
- sampling and monitoring
- shoreline assessment

(Note: During a large incident there will be a unit head and staff for each duty.)

DRAFT

CONTAINMENT AND CLEAN-UP

ADEC (Group Head)
ADEC, ADNR, ADPS, VOL. COMPS, LEPC

DUTIES
- oil and hazardous substance containment
- oil and hazardous substance clean-up
- shoreline clean-up
- disposal permitting
- oil and hazardous substance disposal

(Note: During a large incident there will be a unit head and staff for each duty.)

HEALTH AND WELFARE

ADHSS (Group Head)
ADHSS, ADCRA, ADPS, LEPC, ADOL, DES

DUTIES
- medical services
- safety
- post-event/long term impacts
- mental health

(Note: During a large incident there will be a unit head and staff for each duty.)

NATURAL RESOURCE DAMAGE ASSESSMENT

ADFG (Group Head)
ADFG, ADNR, ADEC, LEPC

DUTIES
- injury determination and quantification
- economic value assessment
- restoration

(Note: During a large incident there will be a unit head and staff for each duty.)

WILDLIFE RESCUE

ADFG (Group Head)
ADFG, VOL. COMPS

DUTIES
- organize treatment centers
- wildlife search and rescue
- primary care and feeding

(Note: During a large incident there will be a unit head and staff for each duty.)

DRAFT

INTERIM REPORT
of the
STATES/BRITISH COLUMBIA
TASK FORCE
on

OIL SPILLS
December 1989

State of Alaska

Province of British Columbia

State of Washington

State of Oregon

State of California

CONTENTS

SUMMARY

The States/British Columbia Oil Spill Task Force was established to provide cooperative and coordinated spill response and prevention efforts. Since its formation in March 1989, the task force has grown to include British Columbia and the states of Washington, Oregon, Alaska and California.

The task force has established four subcommittees, each charged with the responsibility for completing a wide variety of studies on oil spill prevention alternatives, financial recovery, technology sharing and emergency response.

Significant progress has been achieved to date, and many of the originally mandated tasks will be completed in early 1990. This report gives an update on the status of the task force work.

PURPOSE

The purpose of this document is to provide an interim report on the cooperative process and preliminary findings of the States/B.C. Task Force on Oil Spills.

It outlines the tasks undertaken by the subcommittees to evaluate and improve spill prevention and response mechanisms, and describes the efforts of the individual partners of the task force - Alaska, British Columbia, Washington, Oregon and California - to find ways of responding more quickly within their own constituencies to any oil spills that may occur in the future.

A more encompassing document will be available in the new year after the tasks and reports of the subcommittees have been completed.

THE NESTUCCA SPILL

Shortly before midnight on December 22, 1988, the barge Nestucca was struck by its tug, the Ocean Service, on the Grays Harbor Bar, Washington.

The collision resulted in one of the largest oil spills in Washington history as 5000 barrels of fuel oil spilled out into the Pacific Ocean.

Not only were the nearby ocean and shoreline polluted, but the resulting oil slick affected over 800 square miles and came ashore on more than 110 miles of the Washington coast.

Drifting northward into British Columbia waters, the oil slick polluted the entire outer edge of the western shoreline of Vancouver Island.

The spill has had a detrimental impact on the lives of both Americans and Canadians, on wildlife in the affected areas, and on the beauty of a largely unspoiled coastline.

The far-reaching effects of this oil spill (effects that are still being assessed and litigated a year later), and the lessons learned in dealing with the implications of the disaster, suggested that Washington and British Columbia should work jointly to assess the adequacy of existing prevention and response mechanisms. They should also make suggestions for improvements in the coordinated response to any similar incidents in the future.

FORMATION OF THE STATES/B.C. TASK FORCE

The Nestucca spill provided the motivation and impetus for Premier Vander Zalm of British Columbia and Governor Booth Gardner of Washington to establish an international task force in March of 1989.

The mandate of the task force was to investigate ways and means of preventing oil spills; to review oil spill response procedures; document and assess the mechanisms for handling compensation claims; and develop a coordinated contingency plan for preventing and responding to oil spills in the future.

Four subcommittees were established at that time:

1) **the Prevention Alternatives Subcommittee** to evaluate ways and means of improving spill prevention through changes in operating procedures, regulations and laws;

2) **the Emergency Response Subcommittee** to identify existing response procedures and policies, to explore how they could be modified to complement each other, and to recommend an agreement to ensure a timely and effective coordinated response to future spills;

3) **the Financial Recovery Subcommittee** to examine and share existing information on procedures, laws and administrative mechanisms available to recover costs and damages from responsible parties; and

4) **the Technology Sharing Subcommittee** to identify and share existing technologies used by different agencies, and state-of-the-art equipment available for responding to spills.

EXXON VALDEZ RUNS AGROUND

Hardly had the task force been struck when the tanker Exxon Valdez ran aground on Bligh Reef about 25 miles from the port of Valdez, Alaska, just after midnight on March 24, 1989.

Eight of the 11 cargo tanks on the vessel were torn open by the rocks, releasing some 260,000 barrels of crude oil into the waters of Prince William Sound.

As is well documented elsewhere, the effects of this spill on the people and environment of Alaska have been devastating; the total cost to the physical and psychological health of the state may take years to evaluate and repair.

One positive result of the incident was that Alaska, Oregon and California joined the international task force in its efforts to find improved means of preventing and responding to such disasters.

Another positive outcome for the task force was that recently formed oil spill response teams were able to participate in the Alaskan cleanup operations, thereby providing assistance at a time when the Alaskans' response personnel were spread very thin. In doing so, Canadian teams and other task force members were able to observe actively and learn in a situation from which they could gain valuable experience for the future.

MEMORANDUM OF AGREEMENT

The first major accomplishment of the task force was the signing on June 16, 1989, by Premier Vander Zalm for British Columbia and Governor Booth Gardner for Washington of a memorandum of agreement on how their governments would deal in the future with transboundary environment and wildlife issues.

They were joined on July 3 by Governor Goldschmidt for Oregon and on August 3 by Governor Cowper for Alaska. Finally, on September 21, California was added to the task force.

Under the terms of the memorandum, the signatories agreed to appoint representatives of each government to maintain the memorandum. Representatives are to meet annually to review and plan cooperation, and written notification of appointments will be sent to all signatories to ensure effective coordination.

The memorandum reiterated the importance of:

- enhancing the environment and protecting it from oil spills;
- sharing and managing common transboundary fish and wildlife;
- protecting transboundary fish and wildlife from damage caused by spills and other discharges of oil;
- maintaining and improving a coordinated response to oil spills; and
- pursuing the above in cooperation with the federal governments of Canada and the United States.

Issues to be addressed by the subcommittees were outlined in the memorandum as:

- the creation of a joint emergency response plan;
- an evaluation of capabilities and technologies for spill prevention, response and containment;
- a review of tanker safety, routing and operating requirements;
- an inventory of equipment, material, and personnel available to either the province or the states for use in oil spill control and clean-up operations; and
- joint spill response drills and training.

The duration of the memorandum is intended to be perpetual, although each party has the option of terminating its involvement in the agreement.

THE WORK OF THE TASK FORCE SUBCOMMITTEES

Over the past year, the four subcommittees have been bringing together information for their respective tasks.

As of the end of November when this report was compiled, all the tasks were well in hand. Many will be completed by year's end as originally scheduled, while others are expected to be completed in the new year.

The tasks undertaken by each committee and the status of the studies are outlined below.

Prevention Alternatives Subcommittee

Task 1 - Oil Supply Alternatives Study: Identify and analyze all crude oil and product delivery and receipt points, routes and modes of transport on the west coast between Oregon and Alaska, and anticipated changes to the system. Consider other opportunities for moving crude oil or product that would reduce the existing and potential risks of the present system. Identify costs, benefits and constraints of alternative options.

Task 2 - Independent Review of Tanker and Barge Construction and Operating Standards: Evaluate all means for improving the operational safety of tankers and barges carrying crude oil or product on the west coast. Include in the review assessment of double hull construction, vacuum systems, navigational systems, emergency response systems, and crew conduct and training. Determine the reduction of spill risk that would be achieved through the implementation of various proposals for improvement of tanker/barge construction and equipment, and the enforcement of regulations, standards and guidelines.

Task 3 - Review of Tanker/ Barge Routing, Monitoring, and Emergency Response: Incorporate tanker traffic routing; emergency response capabilities for disabled tankers; adequate traffic systems; weather forecasting and navigational aids.

Task 4 - Oil Transportation Assessment: Incorporate navigation risk analysis with spill distribution and environmental risk evaluation. Develop menu of practical alternatives for risk reduction and recommend priorities for implementation.

1. Progress Report on the Oil Spill Alternatives Study

A contractor was hired to collect data from a number of government and industry sources. The data includes type, number and size of vessels as well as types of oil and product. This data has now been collected.

Economic and regulatory factors underlying current exports and imports, and forecast future trends have been analyzed to develop "status quo" forecasts of future traffic patterns.

Finally, by the end of December the contractor will be identifying some alternative measures that might alter those patterns to reduce the risk of future oil spills. Some of the options being considered are: pipeline supply of oil to replace Puget Sound tankers and a common-use terminal located outside the high-risk Puget Sound/Strait of Georgia basin.

Results of this study will be used in the navigation risk assessment.

2. Progress Report on Tanker/Barge Safety

A contractor was hired to review key reports on tanker and barge safety and has identified 28 priority issues to be examined in terms of cost, feasibility and potential risk reduction.

The contractor is also studying several key issues for licensing guidelines, training for personnel, and operating guidelines in transit and port. In addition, the contractor is acquiring a breakdown of accident statistics in order to identify those areas where a reduction in casualty risk will have the most significant impact in reducing spill frequency and volume.

The intention is to provide estimates of the percentage risk reduction, or decrease in volume, of spilled oil possible for each suggested improvement.

A final report is expected by the end of March 1990 and data from this study will also be incorporated into the navigation risk assessment task in the new year.

3. Progress Report on Routing and Emergency Response

This study is being conducted in-house by the B.C. Ministry of Environment in conjunction with Canadian Coast Guard and Environment Canada. The final report, due before the end of the year, will be incorporated into the oil transportation assessment task.

Offshore tanker routing is being considered in relation to Coast Guard initiatives to establish a tanker exclusion zone off the west coast of B.C. (see map following page)

The effectiveness of **vessel traffic service monitoring** for tankers entering the Strait of Juan de Fuca is being assessed with consideration being given to expanded radar coverage.

Part of this study also includes looking into **pre-spill emergency response measures, inshore tanker routing and barge routing.** Recommendations for improvements in these areas will follow review of the issues by the prevention alternatives subcommittee.

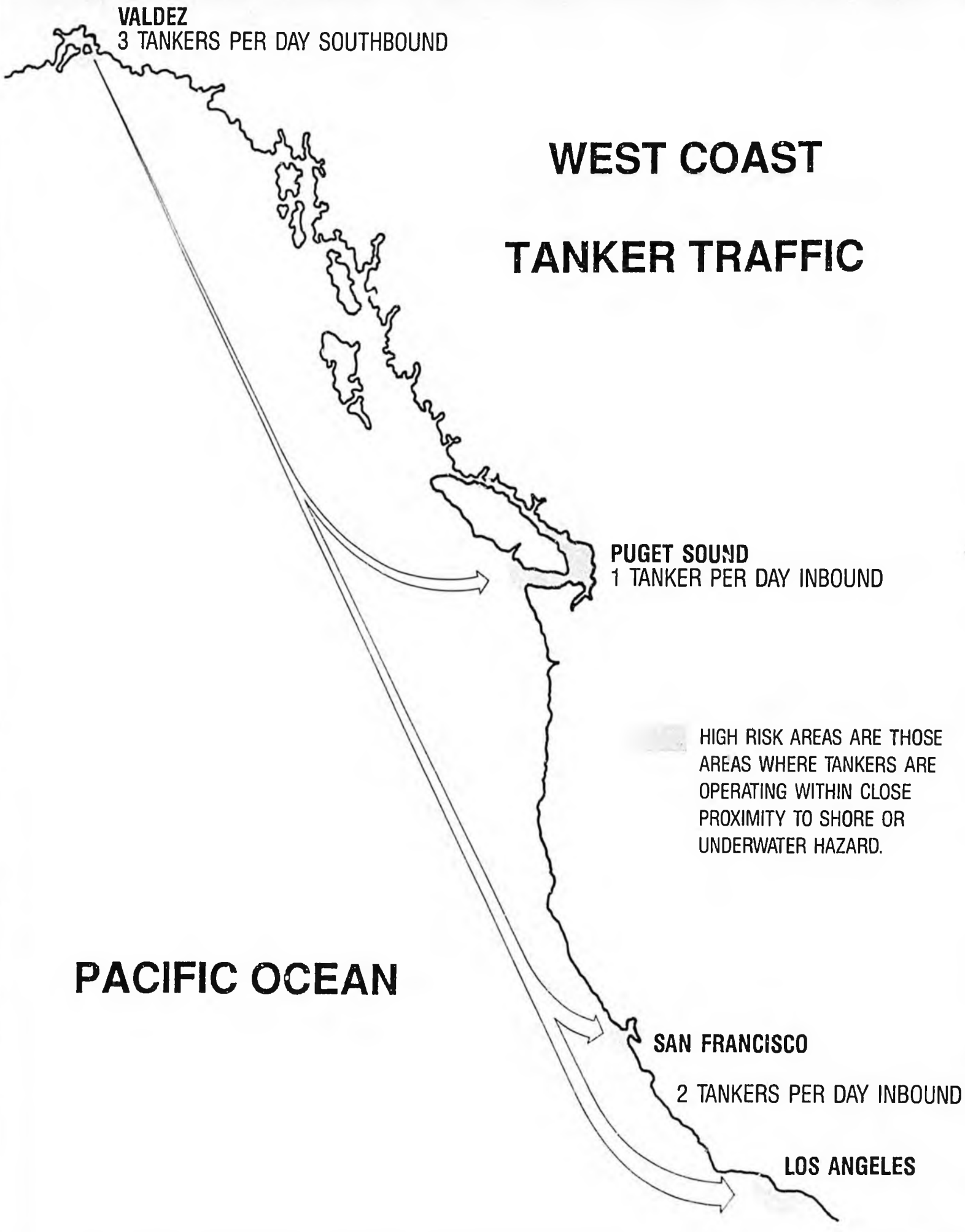
4. Progress Report on Oil Transportation Assessment

Phase 1 of the Oil Transportation Assessment incorporates the results of the first three tasks into a comprehensive oil transportation risk assessment.

- A **navigational risk assessment** will estimate the expected size, location and number of spills on the west coast.

- An **environmental risk evaluation** will: a) evaluate and rank the consequences of the most probable expected spills on the west coast from Oregon to Alaska with estimates of potential damage and clean-up costs included; and b) review existing and proposed spill prevention reduction measures to determine if they are commensurate with the level of risk.

  The contract is expected to be awarded in early December 1989 with a final report due at the end of April 1990.


VALDEZ
3 TANKERS PER DAY SOUTHBOUND
WEST COAST
TANKER TRAFFIC
PUGET SOUND
1 TANKER PER DAY INBOUND
HIGH RISK AREAS ARE THOSE AREAS WHERE TANKERS ARE OPERATING WITHIN CLOSE PROXIMITY TO SHORE OR UNDERWATER HAZARD.
PACIFIC OCEAN
SAN FRANCISCO
2 TANKERS PER DAY INBOUND
LOS ANGELES

Phase 2 of the Oil Transportation Assessment will develop a menu of practical alternatives for reducing the risk of future spills with cost/benefit estimates for each option. Priorities for implementation will be recommended. The final report is expected by the beginning of June 1990.

A key facet of the Prevention Alternatives studies will be their review by a study panel composed of members from the Washington Department of Ecology, the U.S. Coast Guard, the B.C. Ministry of Environment, Canadian Coast Guard, Environment Canada, the British Columbia Ministry of Energy, Mines and Petroleum Resources, and the oil industry.

The focus of the panel will be to assist the contractors in weighting risk factors, to help build consensus and to ensure the implementation of recommendations for reducing risks and preventing oil spills. Industry representation on the study review panel will be expanded in phase two to include producers and shippers as well as refiners.

Emergency Response Subcommittee

Task - To identify existing policies/procedures in Washington, British Columbia, Oregon and Alaska, to explore how they can be modified to complement each other, and to recommend a mutual aid plan to ensure a timely and effective response to future spills.

Progress on Joint Emergency Response Plan

The committee has reviewed the Canada/US Coast Guard agreement and each jurisdiction is submitting a matrix of agency functions and response mechanisms currently in place. They will form the body of the plan.

The plan outlines a concept of operations and is intended to be a living document with provisions for appropriate review, updating and annual joint exercises. It identifies which jurisdictions at the provincial, state and local levels need to be involved in support of existing and future federal and international agreements. British Columbia is drafting the first section to introduce the concept of operations and how it relates to the Canada/US agreement.

All jurisdictions involved in the subcommittee support the adoption of the process known as the Incident Command System as a basis for providing consistency of procedure for alerting and monitoring, and for the provision of mutual expertise.

Progress on Joint Notification/Fan-out List

A joint notification list has been assembled and is currently being edited prior to publication. It will contain criteria to be used in notifying the appropriate personnel within all designated agencies. The list will be updated annually.

Progress on Oil Spill Response Exercises

The committee has agreed to a tiered approach to oil spill exercises, and full cooperation with all other concerned parties. A five-year schedule for exercises, starting January 1990, is currently being drawn up.

Financial Recovery Subcommittee

Task 1 - **Cost Recovery and Damage Assessment Options:** Review existing information on procedures and laws for recovering costs and damages from responsible parties.

Task 2 - **Generic Field Contract:** Provide a short contract for field use to allow spiller to assume responsibility.

Progress

British Columbia and the federal government of Canada have now completed a draft synopsis of the law of British Columbia as it would pertain to cost recovery matters arising out of oil spills.

The synopsis outlines the various enactments, both federal and provincial, and the common law principles that relate to the assessment and recovery of environmental damage. It reviews the various limitations and international conventions of which Canada is a participant, and outlines procedures in the federal court, which is the most important forum for admiralty actions in Canada.

The state of Washington has completed a draft manual of recovery options outlining the historical development of admiralty law in the United States. The manual deals with the issue of legal standing and the concept of "public trustee" as it pertains to state resources. It contains a comprehensive review of the statutory causes of action under both federal and state statutes, as well as the common law relating to maritime negligence and nuisance.

Consideration is also given to legislation regarding the assessment of environmental damage and the various funds available in the United States to deal with the consequences of a major oil spill.

Briefs relative to the statute law of Alaska, Oregon and California are expected prior to the final report of the subcommittee.

Technology Sharing Subcommittee

Task 1 - Oil Spill Equipment Inventory: Obtain an inventory of private and cooperatively held response equipment, including an assessment of the capabilities of the equipment and recommendations for further needed equipment needs.

Task 2 - Technology Evaluations: Provide consensus opinions on which technologies can and cannot work for the task force members. Review technology submittals and evaluate promising proposals.

Progress

An equipment inventory has been received from Washington. Inventories have been requested from British Columbia and Columbia River cooperatives. Once all the inventories are compiled (including the upgrades and the PIRO major spill equipment), the subcommittee will make an evaluation of the capability of spill response equipment. If there are obvious shortcomings, they will be pointed out in the final report.

Numerous new and innovative suggestions and proposals for clean-up technology and oil spill response were received by provincial and state governments. These proposals encompassed a wide range of technologies including absorbent materials, marine transportation concepts, clean-up devices and others.

Many of the proposals were forwarded to the Environmental Emergency Technology Division of Environment Canada in Ottawa, Ontario, and the US Coast Guard testing facility in Groton, Connecticut, for professional technical review.

These suggestions, along with the thousands of proposals submitted to Alaska, will be thoroughly evaluated at the federel level. If appropriate, the results will be shared through federal channels. Task force members will need to be aware of these reviews as they are made available.

The subcommittee will hold forums to discuss beach cleanup techniques and resource damage assessment methodology. These forums have been delayed due to the loss of our coordinator. The purpose is to bring together experts in these areas to foster consistency and comparison of ideas.

In addition to the above tasks, the technology sharing subcommittee has undertaken to make a study of oil supply routes in the Washington/B.C. area. This study, which was commissioned by the Western States Petroleum Association, is now complete. The study shows oil supply routes in the Puget Sound and off the coasts. The contractor was the University of Washington's Marine Studies Institute.

INDIVIDUAL ACCOMPLISHMENTS

Since the Nestucca oil spill, personnel from Alaska, British Columbia, Washington, Oregon and California have been working together on the task force to find ways of cooperatively responding to spills in the future. Each has also been occupied with coordinating its own state/provincial response and drafting legislation that will clarify responsibility for clean-up operations.

The following reports describe what each is doing in these areas.

Alaskan Initiatives

The Oil and Hazardous Substance Spill Response Section of the Alaska Department of Environmental Conservation is currently organizing and staffing two new projects charged with implementing emergency response and contingency planning legislation passed in the wake of the Exxon Valdez disaster.

Senate Bill 264 directs the establishment of an office of emergency response, a volunteer emergency response corps, and state-wide strategically located emergency response equipment depots.

Senate Bill 261 provides for the production and annual review and revision of a state master contingency plan, and regional master contigency plans for selected areas of the state.

Funding for these projects is provided by the Oil and Hazardous Substances Response Fund, which has been increased by a .055/bbl charge on TAPS oil. The new legislation also permits the funding by contract for research and training in the area of oil spill containment, cleanup and assessment.

In addition to the above projects, the department has undertaken an extensive reevaluation of individual vessel and facility contingency plans. A contract is being let to examine the criteria for contingency plan review and approval, and to develop a state-wide computer data base to facilitate the tracking of every installation and operator required to submit a plan.

The department continues to work diligently with the Alyeska Pipeline Service Company to produce an acceptable oil spill contingency plan for Prince William Sound. It is expected that Alyeska will submit a revised plan for approval in January 1990.

The Dispersant Functional Working Group to the Alaska Regional Response Team (ARRT) is re-evaluating the dispersant use guidelines for Alaska and dispersant use zones for Prince William Sound and Cook Inlet to determine if any changes are necessary based on recent use of the guidelines and the pre-approval agreement with the Environmental Protection Agency (EP) and the Coast Guard.

Other legislation passed during the 1989 session provides improved protection and compensation laws.

House Bill 68 sets liability similar to CERCLA specifying owners, operators, past owners, and those who arrange contracts for transport and disposal as responsible for damages to persons, property and the environment. Exclusions were made for acts of God, war and actions of a third party not under control of a diligent owner or operator.

Senate Bill 271 increased civil penalties for crude oil discharges to $8 per gallon up to 420,000 gallons and $12.50 per gallon in excesss of 420,000, to a maximum of $500 million. In addition, the court may assesss four times the penalty amount for negligence, failure to take reasonable cleanup measures, or failure to follow a contingency plan.

Senate Bill 277 established a special commission to investigate the Exxon Valdez disaster and recommend changes to Alaskan laws; propose legislation to encourage and fund prevention and cleanup of spilled oil; and to identify steps necessary to handle better oil and oil spills.

British Columbian Initiatives

The States/B.C. Oil Spill Task Force has been a focus of the B.C. government effort in the area of oil spill prevention and response since the Nestucca spill in December 1988. However, it has also undertaken several other initiatives that fall outside the task force mandate.

Immediately following reports of Nestucca oil stranding on Vancouver Island beaches, a federal-provincial team was assembled to assess the short- and long-term environmental impacts of the spill. Several projects and activities were instigated to determine the immediate impacts of the oil on the environment.

Environment Canada and the B.C. Ministry of Environment have jointly published a report, *The Nestucca Oil Spill, Preliminary Evaluation of Impacts on the West Coast of Vancouver Island,* prepared by Environmental Sciences Ltd., which describes the results of many of these studies. Longer-term research programs are still in progress.

Another direct result of the Nestucca spill was the appointment of David Anderson as the special advisor on oil spills to the Premier. Through a series of public hearings, and through private interviews and correspondence, Mr. Anderson has investigated a broad range of matters dealing with oil spills and tanker safety. His report to the Premier in December contained over 180 multi-jurisdictional recommendations for action dealing with:

- preventing oil spills by reducing consumption, recycling oil products, reducing tanker traffic, and improving ship safety;

- responding to spills by a variety of improved methods and by the establishment of an independent oil spill response agency; and

- improving oil spill compensation and insurance.

British Columbia has taken some very positive steps in the matter of response and clean-up to those spills that may occur despite our best efforts at prevention. In the spring, a preliminary oil spill contingency plan was prepared. Two oil spill response teams were formed (north and south coast teams), made up of technical, professional and managerial staff of the Ministry of Environment and the Provincial Emergency Program (PEP).

At the present time, B.C.'s contingency plan is being expanded into a more comprehensive document, and a full training program in oil spill resonse is being drawn up for the two response teams.

In the general area of contingency planning, a new focus at the Ministry of Environment is to ensure that all industries that store or transship petroleum products have taken appropriate measures to avoid spills and also have workable contingency plans to esta . timely and effective response to those spills that do occur.

A steering committee, which includes federal and provincial agencies and representatives of major industry associations, has been struck to establish rigorous standards for industry contingency plans. The committee will also develop an effective process for auditing industry contingency plans.

A major long-term goal of the Ministry of Environment is the development of a computerized oil spill response information system, critical in oil spill contingency planning for the identification of high risk shoreline, protection methods for all types of shoreline, simulated oil spill reponse tests, assessment of oil impact for clean-up operations, and long-term monitoring of the effects of oil. The immediate tasks being undertaken in the achievement of this long-term goal are:

- cataloguing and editing of coastal videos, which will make biophysical data readily accessible in the event of an oil spill;

- preparation of a hard-copy oil spill response atlas for southwestern Vancouver Island;

- identification, compilation, cataloguing and summary of existing environmental data (pertinent for planning and implementing oil spill countermeasures) in the southern portion of the Strait of Georgia;

- preparation of an appropriate coastal resources and sensitivity mapping system on a pilot scale for the Queen Charlotte Islands (along with Environment Canada through the Environmental Coordinating Committee); and

- analysis of feasibility and requirements for an oil spill response information system for the Ministry of Environment.

The provincial government is confident that these initiatives, in conjunction with task force activities, will contribute significantly to an improved preparedness in dealing with future spills.

Washington Initiatives

Contingency Plan Review and Revision

- The state is revising its contingency plan to more accurately explain the roles of ecology spill responders. The plan will be consistent with local, regional and federal plans. The state has revised its response organization and management scheme to assume effective response for major spills.

- The state has reviewed the US Coast Guard contingency plans for: MSO Puget Sound, MSO Portland, Region X, and the CANUS plan. Detailed comments have been forwarded to the USCG for their use in revising their plans.

Dispersant Policy

- This task was originally a part of the task force, but was deferred to the Regional Response Team (Ecology is a member of the RRT and will be involved in the policy developments.).

- The state has obtained agreement from all Washington state resource agencies that dispersants, with appropriate conditions placed on their use, may be an effective tool for spill response,

- A major consideration will be State Environmental Policy requirements, which require an environmental impact statement.

Puget Sound Water Quality Authority Issue Paper

- Comprehensive listing of oil spill prevention issues.

- The state has asked for further details and some priorization.

- A final paper is to be submitted to the States/B.C. Task Force.

- Recommendations and a worklist for implementation will follow.

Nestucca Report

- The state has completed the final report on the spill, which assesses the state's response and presents recommendations for improvements.

- Major recommendations include definition of roles among state and federal agencies, volunteer management policy, and revision of the spill response plan.

- Ecology will work with the Department of Wild Life to develop policies for bird rescue and rehabilitation. Major parts of these policies will be state trustee roles and protocols for the setting up of bird rescue centres.

- Ecology will work with the Division of Emergency Management to develop an effective volunteer management policy. including liability concerns.

Legislative Efforts

- HB 2242 requires owners or operators of vessels over 300 gross tons, which transport petroleum products in the state, to provide evidence of financial responsibility. Liability limits are one million dollars or $150 per gross ton, whichever is greater.

- ESHB 1853 directs Ecology to adopt an oil spill compensation schedule of up to $50 per gallon on spilled oil to compensate the state for damages that are unquantifiable or very difficult to quantify at reasonable cost.

- Ecology has spent considerable time with our key legislators to develop these bills and other legislation. Ecology has worked through the National Governors Association and our federal delegation to eliminate state preeemption for liability limits. Ecology will continue to work with state and federal legislators to enact comprehensive and responsible oil spill prevention and response bills.

Washington Conservation Corps Training

- Corps members have completed a training session on bird cleaning techniques. The Environment Youth Corps of British Columbia was included in this training. The WCC was very valuable in bird and beach cleanup during the Nestucca spill, and the training will provide a skilled work force to assist in future spills. Corps members who have received this training could conceivably train other responders.

Oregon Initiatives

Oregon Emergency Operations Plan: Oil and Ha. rdous Materials Emergency Response Plan (DEQ, 1987)

- This plan describes local, state and national communications networks for reporting spills of any kind.

- The plan details roles and responsibilities for local, state and federal agencies as well as industry and volunteer responders during minor, medium and major spills.

- The plan describes how the response system will work from local level to the national level for all types of spills including oil.

Natural Resource Protection Plans

At present, three coastal areas and one river system have plans specifically designed to protect the sensitive resources of those areas. These areas are: the Columbia River to Bonneville Dam, the Willamette River to Willamette Falls, Yaquina Bay and Coos Bay.

All of the above plans identify sensitive natural resources, priorize them for protection on a seasonal basis, suggest methods for protection, identify boom sites and possible containment sites, locate access points, and identify available equipment, personnel and response needs.

New Initiatives

The Oregon legislature recently mandated the Department of Environmental Quality to develop oil spill contingency plans for the entire Oregon coast and all the estuaries, the Columbia River to Pasco, and the Willamette River to Willamette Falls.

The plans will build on and supplement existing planning documents utilizing Geographic Information Systems (GIS) mapping systems. They will focus on natural resource protection, emphasize interstate coordination, and will deal with issues such as wildlife rehabilitation, debris disposal, dispersant use, and damage assessment. The plans are due to be completed by July 1, 1991.

New legislation also requires DEQ to develop rules to require all ships carrying bulk petroleum products over 300 gross tons to provide financial assurance of $1 million or $150/ton.

Another piece of legislation requires DEQ to develop rules to impose additional civil penalties for the unlawful discharge of oil. All monies collected would be placed in a newly created fund to be used for damages to the environment.

Californian Initiatives

Each day, California consumes over two million barrels of oil , much of which is imported into the state by oil tankers to the principal processing areas around Los Angeles and San Fransico Bay. There are some 2,500 tanker trips through state waters each year.

As all the production, transportation, and processing of crude oil is done in the private sector, federal and state laws require that responsible parties assume primary obligation for the prevention, control, and cleanup of oil spills, and the consequent rehabilitation of affected areas.

Current Capabilities

Spill Prevention through Permitting and Planning

Stringent laws and regulations control platform and pipeline design, and construction and operation, as well as the operation of vessels and marine terminals and harbors.

The Harbors and Navigation Code makes provision for the control and cleanup of oil spills in all harbors and navigable waters of the state. State Lands Commission (SLC) requires, reviews and approves plans for operations and equipment for platforms, pipelines and terminals for state leases. SLC personnel monitor compliance and effectiveness of those requirements by performing regular inspections and drills. The Minerals Management Service (MMS) imposes similar requirements on operations in federal waters.

The Coastal Commission (CCC) is empowered by Section 307 of the Coastal Zone Management Act (CZMA) and Section 30232 of the California Coastal Act to make provisions for "effective protection against the spillage of crude oil, gas, petroleum products, or hazardous materials...."

CCC has, in the past, used the consistency process to require spill prevention requirements, such as the use of pipelines rather than tankers, adoption of an approved oil spill contingency plan, and adoption of terminal/platform/pipeline operation manuals. Similar measures have been negotiated by the governor as lease sale stipulations under Section 19 of the OCS Lands Act.

Spill Response Capabilities

Industry response equipment and materials are available at two levels. Every production/processing facility, whether onshore or in state or federal waters, has on-site response equipment that may include spill containment booms, skimmers, storage vessels, response boats, and fire-fighting equipment.

To supplement on-site capabilities and to respond to large spills off-site, the industry has established four oil spill cooperatives that have regional response plans, extensive response equipment, full-time staff, and regular training and drill exercises.

Clean Coastal Waters - with three depots in southern California - maintains 15 large skimmers, several thousand feet of boom of various specifications and applications, one large (145 feet) and three smaller (34 foot) response vessels, storage tanks, and a large stock of dispersants.

Clean Sea - with six centers including Carpinteria, Santa Barbara and Ventura in central California - has 28 skimmers, 45,000 feet of containment boom of 13 different sizes and types, three large (1300 to 180 feet) and several smaller (15 to 46 feet) response vessels, as well as other items that include firefighting, oil transfer, communications, dispersant and storage equipment.

Clean Bay - based in San Fransisco - maintains similar quantities of equipment and stocks as the other two southern cooperatives. Response vessels and oil storage capacity is provided mainly through outside contractors.

Humboldt and Morro Bay Oil Spill Cooperatives - maintain equipment adequate to respond to smaller local spills, primarily in Humboldt and Morro Bays. Their offshore capabilities are limited.

Response Coordination and Funding

Pursuant to the federal Outer Continental Shelf Lands Act (OCSLA) and state laws such as the State Lands Act and the California Coastal Act, oil and gas developers are required to prepare comprehensive oil spill contingency plans, make adequate equipment available, and train personnel in proper response procedures.

Tanker operators, facility owners, and offshore oil developers are generally required to post bonds in the order of $100 million to insure that adequate funding is available for cleanup, resource rehabilitation, and compensation for losses sustained as a result of a spill.

Several federal and state funds may be accessed by responsible agencies if needed t upplement or even take over the response by the spiller where necessary.

Currently, oil spill contingency plans are not required to be prepared by tanker owner/operators. Tanker operations are required to follow certain procedures enforced by the coast guard, and may be included in permit requirements if the oil is transported from a platform or to an onshore facility by tankers.

All tanker operators are required to file a certificate of financial responsibility (bond) based on the gross tonnage of the vessel. In the event of a spill, the tanker operator will be required to deposit monies into a fund from which the coast guard may withdraw clean-up costs.

The federal revolving fund used for cleanup is determined by the aspect of liability of the spill - e.g. Outer Continental Shelf (OCS), Trans Alaska Pipeline Service (TAPS), deepwater, or general oil transportation operation.

The Offshore Oil Spill Pollution Fund, administered by the Minerals Management Service, stands around $200 million. Funds come from a levy on all OCS production, and is available to spills resulting from OCS operations. This includes tankering from OCS rigs.

The 311 K fund, administered by the coast guard, is available for deepsea and general oil and/or hazardous materials spills. The balance in this fund was about $6 million before Valdez. Exxon has recently been ordered to maintain it at the pre-Valdez level throughout the cleanup operation.

Figures on the TAPS fund. The federal superfund may be used only if oil has been contaminated with CERCLA-designated (Comprehensive Environmental Resource Compensation and Liability Act) hazardous substances.

California has the Fish and Wildlife Pollution Cleanup and Abatement Account, administered by Fish and Game, and the State Water Pollution Clean-up and Abatement Account administered by the State Water Resources Control Board (SWRCB). Both accounts have low balances of around $600,000 and $4 million respectively. The SWRCB account may only be applied where no other source exists and where surface or ground water is threatened. The state superfund has basically the same applications limitations as the federal superfund.

State and Federal Involvement in Oil Spill Response

While the primary responsibility for the containment and cleanup of a spill rests with the spiller, federal, state and local agencies play a central role in the coordination and monitoring of the spiller's response. In the event that the response is deemed inadequate, these agencies may assume responsibility for the cleanup and restoration efforts.

If the spill occurs in internal waters, the lead federal agency generally is EPA. In coastal waters, the coast guard takes the lead.

The Department of Fish and Game (DFG) has been designated as the state's operating authority responsible for federal/state coordination and the direction of all state responses to oil spills.

The National Contingency Plan (NCP) and the state Oil Spill Contingency Plan (OSCP) require that the federal National Response Center (NRC) and State Office of Emergency Services (OES) be notified of all reportable spills. Where appropriate, the State Land Commission (SLC), Environmental Protection Agency (EPA), US Coast Guard (USCG) and other state and local agencies may need to be notified.

Small spills will generally be handled entirely by the spiller on-site or with the assistance of the cooperatives. In the case of exploration and production processing facilities, lease stipulations and permits generally require a one-hour response time for on-site spills, and two to six hours for other spills. The location and size of the spill, environmental threat, and weather conditions may predicate a more rapid response time.

If, in the opinion of the on-scene coordinator, the spiller is unable to respond adequately to the spill, the appropriate state or federal agency may take over the management and, if necessary, the funding of the operations. This last line of defense may occur within a 24 - 48 hour time frame. The extensive manpower and equipment of the US Navy, the Pacific Strike Team (USCG) and other private contractors may be summoned.

Current Oil Spill Prevention/Response Activities in California

Industry Action

The American Petroleum Institute (API) has proposed a number of improvements to current procedures and capabilities. All their proposals would affect California and would enhance oil spill prevention, response and cleanup in the state. The major points are:

- mandatory and expanded vessel traffic systems, pilotage, tug assistance, drug and alcohol testing and automatic pilot capabilities;
- investigation of feasibility of double hulls and on-board oil spill response equipment; and
- establishment of regional response centres.

As part of the offshore exploration/production activities, additional oil spill response activities have been undertaken by the industry. A major contingency plan covering the Santa Maria Basin and its resources was prepared by WOGA (now WSPA). Additional cleanup facilities, drills, and prevention measures have been provided as a result of the negotiated lease sale stipulations. These facilities include sea otter rehabilitation capabilities being planned currently.

Legislative Proposals

On the state level, SB 1482 (Keene) has been introduced to:

- create an office of oil spill response in the Department of Fish and Game;

- enact the Oil Spill Prevention and Response Act, which would prohibit any marine terminal or facility from being used by large tankers unless prescribed prevention requirements are met;

- create a $500 million oil spill and response fund from $.50 per barrel fee on marine terminal operators;

- authorize SLC to issue cease and desist orders on facilities that are not operating in a manner consistant with the act and\or regulations; and

- require that a state oil spill contingency plan and terminal facility contingency plans be established and updated annually.

This bill is the same as one introduced by Assemblyman Lempert (Preprint AB8). Both bills are currently being analyzed and will be heard before committees in 1990.

Sb 1193 (Marks), signed in 1989, enables DFG to integrate fishermen into oil spill cleanup operations by training charter boat operators and commercial fishermen in oil spill response and by making provision for establishing compensation for this service. This type of training is also now being provided by Clean Seas.

State Agency Actions

- SIOSC -- pursuant to SB 92 (Marks) enacted prior to Valdez, a report is being prepared on California's capability to respond to oil and hazardous materials transportation and storage disasters. The final draft is due in late 1989.

- DFG -- another effort begun prior to Valdez, the revised State Oil Contingency Plan 01 is in draft form and will be released for agency and public review shortly. Both documents have been delayed in order to incorporate recommendations made from experience gained from Valdez.

- Pursuant to SB 686 (Chapt. 1429, California Statutes of 1985), DFG has been conducting several studies: obtaining, cataloguing, storing and examining oil samples and cargo manifests from vessels operating in state waters; oil spill command, control and communication; cleaning of oiled birds and marine mammals; response personnel training; damage assessment manual; damage evaluation and assessment manual; envirnomental effects of chemical dispersants; and mapping and surveys of sensitive fish and wildlife habitats.

- DFG is currently negotiating with the University of California, Davis for a small veterinary research vehicle for wildlife.

- SLC, CCC and several legislators have sponsored workshops and public hearings on California's capability to respond to a major spill. SLC is also addressing oil spill capabilities as part of their California Comprehensive Offshore Resource Study (CCORS).

- OES is in the process of convening a task force to prepare an emergency disposal procedure to deal with cleanup wastes from oil spills and other emergencies. OES is also in the process of initiating a study with the Air Resources Board on the relative air impacts of burning a large oil spill vs the natural evaporation of such a spill.

Local Agency Actions

Several local governments are preparing oil spill contingency plans and establishing cleanup facilities through the Coastal Resources and Energy Assistance Program under the Secretary of Environmental Affairs.

Santa Barbara county has completed its own marine emergency management study and has just released a draft of its crude oil transportation analysis as part of the Gaviota Marine Terminal/Point Arguello Project permitting.

UNIVERSITY OF ALASKA SEA GRANT LEGAL RESEARCH TEAM

PROFESSORS HARRY BADER, FAIRBANKS
RALPH JOHNSON, SEATTLE
ZYGMUNT PLATER, BOSTON, COORDINATOR
ALISON RIESER, NEW HAVEN

ADMINISTRATION : RON DEARBORN, SUSAN DICKINSON U/A FAIRBANKS SEA GRANT (907) 474-7086

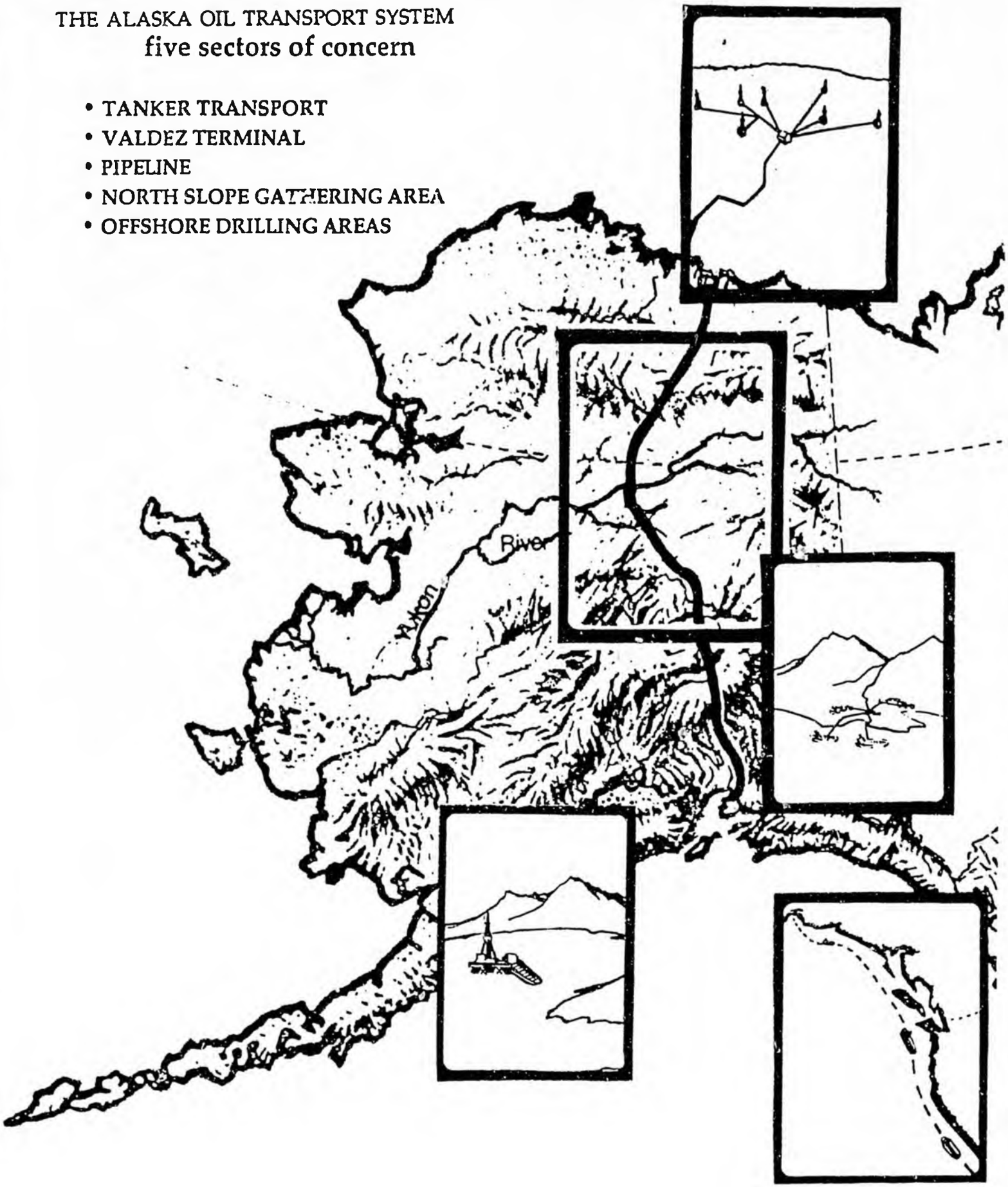
LEGAL RESEARCH REPORTS

December 1989

THE ALASKA OIL TRANSPORT SYSTEM

five sectors of concern

- TANKER TRANSPORT
- VALDEZ TERMINAL
- PIPELINE
- NORTH SLOPE GATHERING AREA
- OFFSHORE DRILLING AREAS



DEC

TESTIMONY FOR HOUSE RESOURCES COMMITTEE
January 17, 1990
Kelso's testimony

Thank you for the opportunity to testify. With me is Larry Dietrick, Director of the Department's Division of Environmental Quality. Larry's staff is responsible for oil spill contingency planning and for oversight of responses to spills when they occur.

Background

The Department of Environmental Conservation (DEC) responds to about 400 of the 3,000 oil spills reported each year. Under Alaska law, more than 400 oil handling facilities, barges, or tank vessels must have approved oil spill contingency plans.

When a spill occurs, the Department staff oversees the adequacy of the spill response. In the case of the T/V Exxon Valdez spill, DEC personnel went on-scene immediately, boarding the tanker at about 3:00 a.m. with the U.S. Coast Guard. The DEC spill response team mobilized immediately and set up operations in the state court building in Valdez. They initiated surveillance of the spill, monitoring of the response and interaction with the responsible parties, Coast Guard, fishermen, and other agencies. DEC personnel demanded repeatedly that Alyeska Pipeline Service Company implement the oil spill contingency plan. Alyeska claimed repeatedly that they were on the way; this was not true. Before the end of the first day, DEC requested the Regional Response Team to re-evaluate the capability of the responsible parties to conduct the necessary containment and recovery work.

On the second day, Exxon took over the response from Alyeska. This was done without consulting the state. Exxon also failed to follow the oil spill contingency plan for Prince William Sound, and valuable opportunities were lost. The Department and other state agencies then began an unprecedented effort to push the spill response to an effective level. With the cooperation and active assistance from local residents of Prince William Sound and from other state agencies, we simply began taking matters into our own hands, carrying out portions of the contingency plan that Exxon and Alyeska had abandoned. The Division of Emergency Services (DES) provided communications, air transportation, and other support. The Department of Fish and Game and the Cordova District Fishermen United joined us in our temporary spill response office in the court building. The Department of Natural Resources supplied field staff and offered equipment. Other departments -- Administration, Labor, Transportation and Public Facilities, Health and Social Services, Community and Regional Affairs, Public Safety, and others -- provided help or advice. We made contact with local officials in Valdez, Cordova, Tatitlek, and Chenega. During the first week, we began expanding

those contacts to other communities that would be threatened by the spill.

This was a very intense, highly technical response effort. It evolved as the oil went ashore in Prince William Sound, moved into the Gulf of Alaska, and hit the Kenai Peninsula, Kodiak, and the Alaska Peninsula. At that time the emphasis shifted to shoreline assessment and cleanup. Following Exxon's pullout in August and September, the emphasis changed again. Between mid-September and the end of 1989, the Department concentrated on updating information about shoreline condition, locating oily debris, reviewing available cleanup technology, and gathering scientific data.

Numerous firsts were achieved since the spill response began on March 24:

* By the time Exxon was able to deploy its response effort, the state had already put in place most of the infrastructure for responding to the spill, including communications, oil tracking systems, computer data handling, technical and scientific assessments of the oil, air operations, and sampling and laboratory support.

* Emergency orders were issued requiring tug escorts for tankers in and out of Prince William Sound, daylight tanker operations, and increased spill response capability.

* The Department initiated air surveillance of the oil and set up a computer mapping and tracking system that became the standard reference.

* DEC wrote agreements with local communities to compensate them for spill response activities.

* Field staff identified the need for aircraft spotting to position skimmers, set up a barge in Prince William Sound as a helipad and refueling depot, and deployed boom by helicopter.

* The Departments of Environmental Conservation and Fish and Game worked together with federal agencies to initiate a fish, vessel, and processor inspection program to guarantee that no contaminated fish reached market.

* DEC worked with local fishermen on a spill response strike team to protect three hatcheries and Eshamy Bay by deploying boom to exclude oil from these sensitive areas.

* In "The Battle of Sawmill Bay", DEC with the help of local fishermen and other volunteers deployed a ferry borrowed from the Alaska Marine Highway and protected the hatchery using a "mosquito fleet" of skiffs and fishing vessels.

* DEC staff, contractors, and local fishermen pioneered

the use of vacuum trucks mounted on barges as an alternative to Exxon skimmers that were unavailable, clogged, or out of service.

* DEC staff put together a computer system to record information about condition and movement of the oil, its location on the shore, and other information. This system is the first one of its kind developed anywhere in the world.

Since mid-December the effort has moved to a new phase: evaluation of the data already gathered in field work, consolidation of information on maps, and preparations for spring and summer 1990.

Spill Response Preparations

Based upon our experience with the Exxon Valdez and other major spills, we have several observations about strengthening spill contingency planning and other response preparations. Many of these are already being implemented; others will be brought on line at the appropriate time.

Incident Command System

We believe the Incident Command System (ICS) can provide the organizational framework for the state's overall spill response effort. ICS methods were developed to provide an efficient, multi-disciplinary command structure as a civilian alternative to military command. The system worked well this summer in communities such as Seward, and the Department's staff were involved directly in those operations. The Incident Command System can be adapted specifically for use in responding to oil and hazardous substance releases. Planning for its use can be accomplished prior to major spill events, and it can be designed to be useful in spills smaller than the Exxon Valdez.

Involvement of Local Communities

The T/V Exxon Valdez spill demonstrated the importance of a role for local officials and other residents in spill response. Plans for spill response should include local governments and other local resources. Residents of areas affected by a spill often have local knowledge and specialized skills that may not be available from other sources. Spill response preparation can be strengthened by laying out ahead of time the role of local authorities, the nature of the working relationships among agencies, and the kind of assistance likely to be needed.

Planning for Solid Waste Disposal and Other Needs

Arrangements for needs associated with response activities should be detailed in the industrial facility's approved oil spill contingency plan and pre-approvals should be initiated. For example, methods for solid waste collection or disposal, including oily solid waste, should be identified in the

contingency plan. Applications for these facilities should be made as part of the contingency planning process, and approvals should be secured ahead of time. This would help prevent conflict between local governments and the responsible party.

Communications, Logistics, and Other Support

Under the Incident Command System, there is an important role for logistics. Preparations for oil spill response should take account of that function and make adequate plans for communication and other logistical services. For example, the Division of Emergency Services and the Department of Administration provided valuable assistance by establishing communications links in Prince William Sound. In preparing for spill response, the State should utilize the existing expertise and resources of state agencies. Delivery of this support can be strengthened by laying out ahead of time the nature of the working relationships and the establishing mutual expectations.

Statewide and Regional Response Preparations

The legislature enacted several pieces of legislation last session that authorize improved spill response preparedness. At tomorrow's committee session, we will report to you on the implementation of those measures.

Oil Spill Contingency Planning Required of Industry

The Department issued emergency orders to Alyeska in April and May requiring immediate actions to increase spill response capability and longer term revisions to the Alyeska oil spill contingency plan for the oil terminal and tankers. Response capacity has been substantially increased. Alyeska has also submitted a new oil spill contingency plan. We have required the company to plan for a likely spill event of no less than 250,000 barrels. The plan is under review, discussions with the company are underway, and public hearings are planned for February.

Cook Inlet is another area that has considerable risk of oil spills and was the site of a major spill from the tanker Glacier Bay in 1987. The Department has initiated a full review of the situation in Cook Inlet, including evaluation of all contingency plans. Working with local governments, fishermen, and the oil and gas industry we are identifying specific steps to strengthen spill response capability. We have established a task force with Kenai Borough officials and other local residents.

Cook Inlet needs an integrated regional spill response capacity. This should be a comprehensive, region wide spill response capability that pulls together the efforts of shippers, producers, and facility operators.

Oil Spill Contingency Plan Reviews

As a starting point in improving the facility contingency plans required of industry, we are negotiating a contract to assist with the review of vessel and facility contingency plans. This effort includes:

* Recommendations for possible revisions to the contingency plan regulations;

* Development of guidelines for facility and vessel inspections;

* Development of Guidelines for spill drills and evaluation of drill performance;

* Reviewing all contingency plans against the new criteria.

Individual vessel and facility contingency plans are the primary line of defense in a spill. Rigorous plan review is essential, coupled with drills to test actual performance and formal inspections to make sure that the equipment and resources are available and operation. Containment and cleanup resources absolutely must be ready and immediately available. Availability in the lower 48 is not sufficient.

Contingency plan reviews can be more effective if the prevention side of the equation is strengthened. Currently contingency plans focus on response capability and not on preventive aspects such as vessel integrity, navigation aids or vessel monitoring.

The Legislature has taken important steps to strengthen the oil spill program, increasing the funding for the Oil and Hazardous Substances Release Response Fund and authorizing the use of the fund for response preparations. The Governor's FY 91 budget request includes money for oil spill contingency plan review on a continuing basis. State law requires all contingency plans to be reviewed and updated every three years. Along with the Legislature's previous actions, the Governor's request would enable the department to field a full oil spill contingency plan program.

Conclusion

The Exxon Valdez spill teaches many important lessons. Along with prevention measures, spill preparedness and contingency planning are essential elements of protecting Alaskans. We look forward to working with you to ensure that Alaska is ready for future challenges.