

SCOMM

78:25

May 7

ginny - I had one question after reading the Work
Draft of CS^{SP} 102. The change for Page 9 - line

18-19 according to the 5-6 memo "Establishes a
standardized cost recovery formula for damages..."

I don't think that is what you want to say because
it merely says the compact may establish a formula.

Beyond that, I am puzzled by why you'd want
a restriction of the type of formula in the compact.
Current language ties it to amount spilled. This is
only one of many ways to determine damages and is
certainly not the way damage assessment is being
pursued under the Exxon Valdez situation.

I'll go back to the older version to see if I can
figure out where this limitation came from.
Please give me a call to shed light on this.
It might be good to run this suggestion
through the Fish and Game + Dept. of Law staff

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(c) Provide a forum for discussion and recommendation to resolve conflicts among member parties or the federal government regarding various ocean resources programs that have been or may be established by each party.

(d) Provide opportunities for public participation in compact activities by holding meetings of the compact in various locations within the territorial limits of the parties, providing opportunities for public comment at meetings and developing a public outreach program.

(e) Designate state or provincial agency officials to act on behalf of the compact as liaisons with federal agencies.

(f) Identify the regional data needs related to ocean resources and recommend a method for compiling the data in a format that can be shared by all parties.

(g) Consult with and advise any pertinent party or federal agency with regard to problems connected with ocean resources management and recommend the adoption of any rules or regulations the compact considers advisable that are within the jurisdiction of the agency.

(h) Establish sanctions and a schedule of civil penalties for violations of the rules or regulations of the compact and impose such sanctions or civil penalties in accordance with 5 U.S.C. §§551 to 559 and §§701 to 706.

(i) Request the United States Coast Guard to enforce or assist in the enforcement of any regulations adopted by the compact.

(L) Establish a schedule of reasonable fees to be assessed for the review of a contingency plan submitted under paragraph (c) of this subsection. The fees shall be sufficient to recover the costs of reviewing the plans and conducting any related inspections. The fees may be assessed in increments up to the maximum amount."

(2) In addition to the authority granted under paragraph (1) of this Article, the compact may:

(a) Accept grants and gifts.

(b) Enter into contracts for whose performance the compact shall be solely responsible in order to support its operations.

(c) Conduct and prepare, independently or in cooperation with others, studies, investigations, research and programs relating to the purposes of this compact.

(d) Conduct public hearings on matters pertaining to the purposes of this compact.

(e) Establish a standardized cost recovery formula for damages to other resources based on the amount of oil spilled.

(f) Establish a uniform level of proof of financial responsibility to be provided to each party to the Compact.

(g) In accordance with the provisions of 5 U.S.C. §§551 to 559 and §§701-706, enforce the rules and regulations adopted by the compact to carry out the authority of the compact as set forth in this Article.

(h) Appoint technical and advisory committees for the purpose of advising the compact on regional ocean resources issues, data needs and format and other purposes related to the compact's activities. A technical or advisory committee appointed by the compact shall not be subject to the provisions of the Federal Advisory Committee Act (P.L. 82-463, as amended).

(i) Allow a variance from the provisions of this compact or rules or regulations adopted by the compact pursuant to this Article. A variance shall be based on a showing by the person or entity seeking the variance that the activity allowed under the variance will have no regional impact and that the variance is economically necessary. Under no circumstances may a variance result in the regulation of the transportation of oil or hazardous substance according to standards less stringent than standards imposed under federal law.

Final Report of the States/British Columbia Oil Spill Task Force

*Province of British Columbia
State of Washington
State of Oregon
State of Alaska
State of California*

October 1990

RECOMMENDATION 18: Proof of Financial Responsibility

Raise state/Canadian federal proof of financial responsibility requirements to ensure spillers can finance oil spill related cleanup and damage costs.

SOURCE: Puget Sound Water Quality Authority, Spills Issue Paper

AUTHORIZING AGENT: State legislatures/Provincial Cabinet/Canadian Parliament

IMPLEMENTING AGENT: State/Provincial/Canadian environmental agencies

RATIONALE: Some state and federal requirements mandate operators of oil tankers and facilities to prove their ability to meet financial liability requirements through insurance, bonds, or other means. This increased level of financial commitment protects federal cleanup cost recovery, but does not necessarily protect individual states or provinces. Increased proof of financial responsibility requirements also promotes insurance and bond company interest in spill prevention methods (Puget Sound Water Quality Authority, 1990). In California, newly enacted legislation (SB 2040, statutes 1990 - Chapter 1248) requires proof of available financial assets or insurance of at least \$500 million for tankers.

RECOMMENDATION 19: Natural Resource Valuation

Develop and require use of methods of natural resource valuation which fully incorporate non-market and market values in assessment of damages resulting from spills.

SOURCE: Public Comment

AUTHORIZING AGENT: State legislatures/Provincial Cabinet/Canadian Parliament

IMPLEMENTING AGENT: State/Provincial/Canadian natural resource and environmental agencies

RATIONALE: Large but accurate natural resource damage assessments can motivate industry to self-impose safety practices such as improved training and vessel maintenance. For the most part, natural resource damage assessments historically have excluded non-market costs (e.g. "non-consumptive" considerations such as aesthetic damage), reducing the effectiveness of financial responsibility requirements, and passing unassessed costs to non-responsible parties. A large body of non-market valuation techniques exist, each with various weaknesses. Without a standardized technique, non-market valuations will continue to be inconsistent and challenged. B.C. and Washington are currently using a common approach to identify non-market values of resources damaged by the Nestucca barge spill.

RECOMMENDATION 20: Cost Recovery

Develop responsible party contracts to aid in the recovery of all natural resource damage and cleanup costs.

SOURCE: Financial Recovery Subcommittee

AUTHORIZING AGENT: State administrative agencies/Canadian Parliament

IMPLEMENTING AGENT: State/Provincial financial management, natural resource, justice, and environmental departments/Canadian Federal Agencies

RATIONALE: Following a spill, disagreements over costs, reimbursement, and financial responsibility can impede cost recovery efforts. A field contract developed by the Financial Recovery Subcommittee can be used on-site to expedite cost recovery. This short contract provides a method for a government jurisdiction and an oil spiller to agree that the spiller take financial responsibility for all or particular portions of costs and damages incurred by the government jurisdiction.

RECOMMENDATION 21: Liability Limits

Remove any ambiguity in federal law and guarantee a state's right to fully exercise its own liability standard. Increase the maximum limit of liability for oil pollution damage under Canadian law.

SOURCE: Alaska Oil Spill Commission, Final Report

AUTHORIZING AGENT: U.S. Congress/Canadian Parliament

IMPLEMENTING AGENT: State legislatures/U. S. Congress/Canadian Parliament

RATIONALE: Spill liability is not an effective deterrent unless it entails costs above those of prevention measures. The Task Force believes spillers should bear the full burden of liability for damages against other parties. Parties responsible for oil spills currently face limited financial responsibility for cleanup and resource damage costs. Until recently, the federal Clean Water Act limited liability for spill-related costs for vessels (excluding inland barges) to \$150 per gross ton, or \$250,000, whichever is greater. Based on this figure alone, the Exxon Valdez would face total liability of \$14.25 million, in contrast to reports that Exxon has already spent over \$1 billion (Puget Sound Water Quality Authority, 1990). Recent federal legislation raises these ceilings and removed federal preemption of state liability limits (Puget Sound Water Quality Authority, 1990). The U.S. Congress passed legislation, which was signed by the President on August 18, 1990, raising federal financial responsibility evidence requirements from \$150 per gross ton to \$1,200 per gross ton. Liability is unlimited where willful misconduct or negligence occurs. In the case of Canada, federal legislation could be amended so as to provide for increased liability for oil pollution damage.

RECOMMENDATION 22: Coast Guard Enforcement

Increase the Coast Guard's ability to conduct routine on-water surveillance patrols by increasing funding to U. S. Marine Safety Offices and Canadian Coast Guard Regional Offices.

EXPLANATION OF CHANGES: Recommendation, and authorizing and implementing agents amended to correct inadvertent omission of Canadian jurisdiction.

SOURCE: Public comment

AUTHORIZING AGENT: U.S. Congress/Canadian Parliament

IMPLEMENTING AGENT: Canadian/U.S. Coast Guards

RATIONALE: Visible enforcement operations can raise levels of safety in mariner operations. Wenk et al. (1982) linked severe penalties and strong enforcement by the Canadian Coast Guard and Royal Canadian Mounted Police to improved seamanship. Drug interdiction and other expanding national security duties have reduced U.S. Coast Guard resources devoted to maintaining safe transportation of oil and other hazardous materials. U.S. Coast Guard testimony regarding the Exxon Valdez described reduction of enforcement activities in Alaska since 1984, while budget decreases have limited on-water patrol activities in Puget Sound (Puget Sound Water Quality Authority, 1990). Vessel inspection

**THE FOLLOWING PAGES MAY
NOT FILM LEGIBLY BECAUSE OF
THE POOR QUALITY OF THE ORIGINAL**

DAMAGE ASSESSMENT STRATEGY PAPER

BACKGROUND

Damages resulting from an oil spill are ultimately reflected in and measured by their impact on human values. These impacts may include a threat to public health or the loss of income from decreases in fisheries, recreation, and/or tourism, and damages to natural resources such as birds and other wildlife, including threatened or endangered species, and to aesthetic values such as scenery. The purpose of a damage assessment is to evaluate the impact on these human values, to obtain compensation from the party responsible for the damage, and to restore the impacted resources. There are several existing strategies designed to obtain compensation.

State regulations (Oregon Revised Statute 468.745) state that the party responsible for an oil or hazardous substance spill is liable to the state for any injury, death, contamination, destruction of natural resources in the state caused by the spill, and for the restoration of those resources. Authority for enforcing the regulation is shared by the Department of Environmental Quality (DEQ) and the Department of Fish and Wildlife (ODFW). Historically, oil spill damage assessments have been done by ODFW and have relied solely on field study methods (i.e. dead fish counts) to determine the extent of damage and compensation to be obtained for those damages. State regulations (Oregon Revised Statute 466.890) provide specific values for some wildlife (See Figure 1, page 9).

There are numerous "grey areas" within this process. When a lawsuit is brought against a responsible party to obtain damage compensation, the assessment is typically challenged. Methodology is frequently questioned, as well as true "fish counts", and timing of the assessment in relation to the spill. The general lack of background information has led to questions regarding the verifiability of actual damage incurred by the spill.

The problems inherent in conducting an assessment under existing state laws make the securing of adequate compensation problematic. When compensation for damages is secured, it is commonly much less than the actual cost of assessment. Therefore, state agencies conducting the assessments ultimately pay the difference. For example, although \$181,000 were spent assessing the damage done by the 1984 Mobiloil spill in the Columbia River, the state of Washington was able to claim only \$35,000 in damages. This strategy is obviously cost ineffective. Unfortunately, the ultimate price is paid by the natural resources whose restoration is not comprehensively addressed or achieved.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is the federal legislation which provides an opportunity for State and Federal natural resource trustees to assess damages for injury or loss of natural resources resulting from a discharge of oil or a release of a hazardous substance. The Department of the Interior has two types of regulations for assessing damages to natural resources.

The simplified "Type A" procedure is typically used in marine and coastal environments and uses a computer model that determines natural resource injury. The damage determination is then given value through an economic damages submodel. It's downfall is that it is generic; it is not site specific with details of the natural resources of Oregon.

The more expansive "Type B" procedure is used on a case-by-case basis and is a site-specific, field oriented assessment. The focus is on compensation for resource injury based on restoration or replacement costs or the loss in use value of the resource. It is advantageous in that it is a comprehensive program that will not likely undervalue resources. However, it is both time consuming and expensive; funds recovered will have to pay the high cost of the assessment before they can be dedicated to the restoration of resources. Typically, these damage assessments have been conducted by the United States Department of Fish and Wildlife, who have run across similar "grey areas" and complications that State officials have experienced.

THE WASHINGTON APPROACH

The state of Washington has developed a new damage assessment methodology that appears to address some of the "grey" areas. The Department of Ecology has created a compensation table designed to be consistent with legislation developed in Washington (SHB 1853) to compensate for unquantifiable resource damage from oil spills. The following is a description of the development of the compensation schedule. It includes:

- ♦ A method for scoring the relative potential of various oils for causing environmental harm based on physical and chemical properties.

- ♦ A method for scoring the relative vulnerability of shorelines, wildlife, fisheries, recreation and other ecological features which might be exposed to oil as a result of spills.

- ♦ A method for scoring the effects of environmental influences specific to the particular circumstances of a spill which act to intensify or lessen the potential for resource injury.

- * A method for aggregating the scores defined above.
- * A method for transforming aggregate scores into dollar values is currently based on a \$1 to \$50/gallon assessment; this range needs to be raised to avoid undervaluing the resource.

The ranking method of environmental sensitivity was devised to establish the importance of the species, habitat, and/or use of the area, as well as to establish seasonal differences. The first step in the analysis of the use and sensitivity of biological systems was to establish and identify the analytical units (called elements) to be ranked. These units must be specific, ecologically sound, geographically deliniable and capable of being classified as to the relative importance of the damage caused by oiling. Differentiation by season is also useful to the overall ranking system. To successfully use these rankings elements, a system must be in place for identifying and labeling them in the study area.

The following elements were selected as the best available units for this analysis:

- Recreation - Recreation is defined as public recreation with all rating criteria keyed to public waters and adjacent public land (private and Indian lands are excluded).
- Birds - Birds are defined as those species either directly associated with marine and coastal waters and adjacent habitats or dependent on those waters for some aspect of their life sustainability.
- Fish - Fish are defined as those species inhabiting coastal and marine waters during some portion of their life. Indicator species (commercially harvested species) have been selected as being representative of the community as a whole.
- Marine Mammals - Marine mammals are defined as those species inhabiting coastal and marine waters during some portion of their life.
- Habitat - Habitat refers to the place occupied by the entire community of organisms.

The attributes of these elements that are necessary to make them useful analytical units are:

- The elements' boundaries can be defined and their areal extent can be determined either directly or indirectly.
- An assessment of the effects of oil can be made for a small representative sample population or habitat area, and the results can be extrapolated to larger or similar populations or habitats elsewhere.

Element criteria were chosen by analyzing the nature of the element, its distribution pattern and numerical relationships with the overall zone. Once environmentally sensitive elements were defined and selected for coastal and offshore areas, criteria were scored. To be generally useful, these criteria should be relevant to measuring ecological and use damage, or loss, easily determined from existing information, flexible enough to incorporate new information and capable of differentiation between the criteria. Initial numerical values represent actual measurements of the criteria listed under each element.

The criteria selected for each element are:

- | | |
|----------------|--|
| Recreation | <ul style="list-style-type: none">- Number of camping units- Number of miles of public beach/tidelands- Number of boat launches/mocrages- Sport fishing use- Camping use |
| Birds | <ul style="list-style-type: none">- Diversity- Breeding colonies- Bird Oil Index- Population total- Estimated density in zone- Unusual species concentrations- Rare and endangered species |
| Fisheries | <ul style="list-style-type: none">- Species diversity- Number of species w/ pelagic life stages- Number of species spawning in less than 20 fathoms of water- Per cent of total statewide harvest- Concentration of endangered species |
| Marine Mammals | <ul style="list-style-type: none">- Diversity- Breeding colonies- Unusual species concentrations- Rare and endangered species |

- | | |
|---------|---|
| Habitat | <ul style="list-style-type: none"> - Time period for the structural recovery of the habitat from oiling - Time period oil persists within habitat - Degree of damage to a habitat resulting from attempted cleanup - Rarity of the habitat type expressed as area - Number of important species supported by a habitat |
|---------|---|

Once element criteria were measured numerically, they were converted into a common ranking system. Consequently, the actual numerical values described in the ranking element section were then converted to a 1-5 numerical ranking system. Each criterion was expressed as a low (1) to a high (5) value, designed to describe resource/use significance. During ranking discussions it was determined that use of a smaller range of values (ie. 1-3) would not adequately represent somewhat subtle differences between zones.

The choice of numerical ranking values was based on best professional estimates of authorities in their respective fields. Scores were then aggregated to express the importance of that element to the overall zonal value. Finally, the five elements were then aggregated to establish an overall zonal value by season.

The following assumptions were made while developing the compensation schedule:

- ♦ the spill of concern was a sizeable spill capable of impacting many species and habitats with significant oiling,
- ♦ the spilled oil was treated as a surface (6 fathom deep) phenomena, and
- ♦ each habitat and species had an equal opportunity to be oiled.

Figure 2 on page 10 shows a hypothetical coastline and demonstrates how the valuation system would be applied for different biological zones.

WASHINGTON APPROACH VS. OTHER APPROACHES

The approach that the state of Washington has adopted has several advantages over other strategies currently in

- ♦ The downfalls of the current Oregon system (counting dead fish) are that it is both limited in scope and costly in practice. The Washington system, however,

comparison, is cost effective and comprehensive. It is a collective way of looking at the state's natural resources because it takes into account marine mammals, birds, fish, habitat, and recreational areas that are impacted by the spill.

- ♦ The advantage of the Washington strategy over the existing federal damage assessment program is its cost effectiveness and its ability to be site specific. The Washington process is less time consuming and is limited in cost, allowing a larger portion of the collected funds to go toward restoration of damaged resources. Additionally, the Washington system utilizes specific information on state resources as the basis for its environmental sensitivity ranking.
- ♦ Another advantage to this strategy is that it is an ongoing process. The initial system will create a framework for long-term studies and data collection to add to and update for a comprehensive environmental sensitivity index.
- ♦ This damage assessment strategy has numerous applications beyond that of compensation procurement for oil spill damage. This same system can be applied to other pollution events and is applicable for all the waters of the state. In addition, it can be used as a guideline for determining natural resource sensitivity for other planning efforts including (but not limited to) oil spill response strategies for dispersant use and protection prioritization.

DISADVANTAGES OF THE WASHINGTON APPROACH FOR USE IN OREGON

There are several drawbacks to the Washington approach that need to be addressed.

- ♦ It is possible that the current process, based on a \$1-\$50/gallon fee, will undervalue the resources; this undervaluing could potentially make it advantageous for the responsible party to pay the fee and do a lesser job of cleaning up the spill. On the other hand, if the resources are overvalued, responsible parties will undoubtedly question those values through the court process. It is a difficult process to attach a dollar value to an invaluable natural resource.
- ♦ Another drawback is the varying levels of information available to construct the ranking system. Again, it should be recognized that this is an ongoing process.

- ♦ The DEQ could be put in the difficult position at the helm of this program, being responsible to make value judgments for every spill occurring in the state. This is a heavy burden for the agency. A decision body (like Washington's MRDA team) must be put together as a steering committee for this project. It should include representatives from state and federal agencies and native corporations to provide guidance and function as the decision making body in a spill situation.
- ♦ Finally, it is important to determine if and how the Washington system and the CERCLA system will interact. It is possible that they will not be compatible and that the familiar "grey" areas will come up; questions will be raised about double-charging for resources, etc. The Washington system will not be any more beneficial to the restoration of Oregon's natural resources from spill damage than our current system if responsible parties tie up assessments in litigation. It is paramount to the success of the system to coordinate with federal and tribal trustees to ensure that either the two systems will be compatible or the Washington system will meet the needs of all trustees. As this determination process progresses, it is important to keep the restoration of our natural resources as the top priority.

ADVANTAGES OF THE WASHINGTON APPROACH FOR USE IN OREGON

There are several obvious advantages to the adoption of Washington's system for use in Oregon.

- ♦ This program is viewed as one option in a spill situation; it is an additional choice to enhance current state and federal options.
- ♦ As the Columbia River is a shared border between the states of Washington and Oregon, a consistent approach to dealing with oil spills on the river is desirable, both from state and industry perspectives.
- ♦ A comprehensive, predesignated approach to damage assessment is clearly more desirable than the ineffective assessments of the past. Industry will have the opportunity to know, in advance, what the cost will be for spilling oil in areas throughout the state; their insurance companies will be able to adjust their insurance according to the risk levels of their areas of operation. Less time will be spent in litigation. The assessment itself will be more extensive, taking into account damage to habitat and to aesthetic values. The state will be able to obtain compensation for damages

without incurring astronomical costs and the funds obtained will be used to restore damaged resources.

IMPLEMENTATION STRATEGY

In order to successfully develop such a damage assessment program for Oregon, several things must be accomplished:

- ♦ Oregon natural resource agencies (particularly ODFW) must agree in principle to the concept. It would be beneficial to have federal agencies involved in damage assessment (particularly DOI) to agree to the concept, as well.
- ♦ The scope of the process must be decided. The program could be utilized strictly for oil spills or it could incorporate a broader context to include other needs, including ECD issues.
- ♦ A compensation table must be developed:
 - An oil classification schedule must be created. The final objective is to develop a "table look-up" pre-classification system emphasizing crude and refined products in common haulage through Oregon waters.
 - A matrix must be developed to rank environmentally sensitive marine, coastal and freshwater resources. All available data sources must be reviewed, interviews and reconnaissance surveys are necessary to establish resource distribution and sensitivity.
 - Resource value determination techniques need to be developed.
 - Aggregation rules for combining scores on individual items into an aggregate score must be developed. The resulting formula or schedule will be calibrated by applying it to past and/or hypothetical spills.
- ♦ Draft rules to implement the program must be developed with public and industry input. Technical rules are needed for guidance in the use of the table itself. Administrative rules concerning the broader context in which the compensation schedule operates are also necessary.
- ♦ Public hearings.
- ♦ Rule adoption.

Figure 1. Civil penalties for damage to wildlife resulting from contamination of food or water supply (ORS 466.890).

♦	Each game mammal other than mountain sheep, mountain goat, elk, or silver gray squirrel	\$ 400
♦	Each mountain sheep or mountain goat	\$3500
♦	Each elk	\$ 750
♦	Each silver grey squirrel	\$ 10
♦	Each game bird other than wild turkey	\$ 10
♦	Each wild turkey	\$ 50
♦	Each game fish other than salmon or steelhead trout	\$ 5
♦	Each salmon or steelhead trout	\$ 125
♦	Each fur-bearing mammal other than bobcat or fisher	\$ 50
♦	Each bobcat or fisher	\$ 350
♦	Each specimen of any wildlife species whose survival is specified by the wildlife laws or the laws of the United States as threatened or endangered	\$ 500
♦	Each specimen of any wildlife species otherwise protected by the wildlife laws or the laws of the United States, but not otherwise referred to in this subsection.	\$ 25