

ALASKA LEGISLATURE COMMITTEE FILES, 1989-1990 8672
6032 HOUSE RESOURCES

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OWNER/OPERATOR	BARGE NAME OR NUMBER	PROOF FOR FINANCIAL RESPONSIBILITY
Exxon Corporation P.O. Box 3342 Houston, TX 77253	Exxon Barge #502	Self-insure
Samson Tug & Barge Co., Inc. P.O. Box 559 Sitka, AK 99835	ANNAHOOTZ	Insurance
Texaco Marine Services, Inc. 2000 Westchester Ave. White Plains, NJ 10660	Valiant/Pennsylvania Victory/Texas (tug/barges)	Self-insure
Smith Lighterage Co., Inc. P.O. Box 106 Dillingham, AK 99576	Skip I	Ray 'Sons
Insurance		
Moody's Sea Lighterage, Inc. Aleknagik, AK 99555	Sealite I	ST 20
Insurance		
Kugkaktlike Limited General Delivery Kipnuk, AK 99614	Chalin	Kangitsuk
Insurance		
Alaska Marine Charters, Inc. 106 110th Place S.E., Suite B Belluvue, WA 98004	Investigator	<i>GT 172147 14,619</i>
Insurance		
Northland Services, Inc. 601 South Myrtle Street Seattle, WA 98124	ZPC 401	Kvichak Trader
Insurance		
Bering Sea Fisheries, Inc. 4413 83rd Avenue, S.E. Everett, WA 98205	King Salmon	Insurance
Brice Inc. P.O. Box 668 Fairbanks, AK 99707	OBS-4000	Insurance
Bering Marine Corporation P.O. Box 3757 Seattle, WA 98124	KC-4	KC-251
Insurance		
<i>White Star Transportation, Ltd. 2-24-80</i>	<i>Alaskan Spirit</i>	<i>Insurance</i>

MEMORANDUM

State of Alaska

TO: ADEC Staff

DATE: November 20, 1989

FILE NO:

TELEPHONE NO: (907)465-2630

THRU:

SUBJECT: Oil Terminal with approved Proof of Financial Responsibility

FROM:

Glenn Adams *Glenn Adams*
Oil Pollution Control

The following Oil Terminals have approved proof of financial responsibility through June 30, 1990.

<u>Owner/Operator</u>	<u>Fuel Storage Location</u>	<u>Proof for Financial Responsibility</u>
Alaska Pulp Corp. P.O. Box 1050 Sitka, AK 99835	Sitka	Surety bond
Alyeska Pipeline Service Company 1835 S. Bragaw St. Anchorage, AK 99512	Valdez Marine Terminal (TAPS)	Self-insurance and Guaranty
Anchorage Fueling and Service Company 810 "N" Street Anchorage, AK 99501-3243	Port of Anchorage and Anchorage International Airport	Insurance
Crowley Maritime Corp. P.O. Box 2287 Seattle, WA 98111	Captain's Bay Terminal Nome Tank Farm Kotzebue Tank Farm	Surety bond
Chevron U.S.A. Inc. 225 Bush St., Rm. 1015 San Francisco, CA 94104	Anchorage Terminal Valdez Terminal	Guaranty
Kenai Pipeline Company 555 Market Street San Francisco, CA 94120 -7141	Kenai Pipeline Terminal	Self-insurance

<u>Owner/Operator</u>	<u>Fuel Storage Location</u>	<u>Proof for Financial Responsibility</u>
Delta Western P.O. Box 102916 Anchorage, AK 99501 -2916	Dillingham Bulk Plant Juneau Bulk Plant Dutch Harbor Bulk Plant Wood River Tank Farm Naknek Bulk Plant Yakutat Bulk Plant Captain's Bay (offshore)	Self-insurance
Ketchikan Pulp Company P.O. Box 6600 Ketchikan, AK 99901	Ward Cove	Self-insurance
Mobil Oil Corporation 150 East 42nd Street New York, NY 10017-5666	Ketchikan Terminal	Self-insurance
Marathon Oil Company P.O. Box 102380 Anchorage, AK 99510	Trading Bay Production Facility Granit Point Production Facility	Self-insurance
Yutana Barge Lines, Inc. P.O. Box 220 Nenana, AK 99760	Fort Yukon Oil Terminal (Yukon Fuel Inc.) Galena Oil Terminal (Nenana Fuel Co.) St. Michael Fuel Co.	Insurance
Phillips Petroleum Co. P.O. Box 66 Kenai, AK 99611	Kenai LNG Plant	Self-insurance
Reeve Aleutian Airways, Inc. 4700 W. International Airport Road Anchorage, AK 99502-1091	Cold Bay Airport Terminal (Frosty Fuel Company)	Self-insurance
Shell Oil Company 601 W. Fifth Ave., Suite 810 Anchorage, AK 99501	Onshore Gathering System facilities (Middle Ground Shoal Field) Cook Inlet	Self-insurance
Tesoro Alaska Petroleum Company 3380 "C" Street Anchorage, AK	Kenai Terminal Anchorage Terminal Valdez Terminal Fairbanks Terminal	Self-insurance
Texaco U.S.A. P.O. Box 7812 Universal City, CA 91608-7812	Anchorage Sales Terminal	Self-insurance

<u>Owner/Operator</u>	<u>Fuel Storage Location</u>	<u>Proof for Financial Responsibility</u>
UNOCAL Refining & Marketing P.O. Box 76 Seattle, WA 98121	Juneau Bulk Plant (Taku Oil Sales) Ketchikan Terminal Sitka Bulk Plant (Sitka Sound Seafoods, Inc.)	Self-insurance
White Pass & Yukon Corporation, Ltd. P.O. Box 4070 Whitehorse, Yukon Y1A 3T1	Skagway (Pacific & Arctic Railway & Navigation Company) Haines, Skagway, Sitka, Ketchikan, Petersburg, Wrangell (Haines Terminal & Highway Company) Craig (Southeast Alaska Oil Companies, Inc.)	Self-insurance
Eskimos Inc. P.O. Box 129 Barrow, AK 99723	Block B Tank Farm Browerville Tank Farm Wainwright Storage Facility	Insurance
Saupe' Enterprises, Inc. P.O. Box 510 Fairbanks, AK 99707	Fairbanks Bulk Plant Fairbanks Bulk Lube Oil Plant	Insurance
oco Alaska Petroleum, Incorporated Pouch 720 Fairbanks, AK 99707	North Pole Refinery Fairbanks Bulk Facilities Anchorage Bulk Facilities <i>GALENA BULK STORAGE 11/4/90</i>	Self-insurance
Naknek Electric Assn., Incorporated P.O. Box 118 Naknek, AK 99633	Tank Farm in Naknek	Insurance
Municipality of Anchorage P.O. Box 6650 Anchorage, AK 99519-6650	George M. Sullivan Power Plant	Self-insurance
Harbor Enterprises, Inc. P.O. Box 389 Seward, AK 99669	Seward (Harbor Fuel Serv.) Dutch Harbor Main Plant-RESOFF Dutch Harbor-Ballyhoo (Petro Marine Services) Nikiski (Arness)	Insurance
Nushagak Electric Coop- erative, Inc. P.O. Box 350 Dillingham, AK 99576	Tank Farm in Dillingham	Insurance

<u>Owner/Operator</u>	<u>Fuel Storage Location</u>	<u>Proof for Financial Responsibility</u>
Conoco Incorporated 3201 "C" St., Suite 200 Anchorage, AK 99503	Milne Point Central Facilities pad	Surety bond
TriCent Seafood Corp. 5303 Shilshole Ave., N.W. Seattle, WA 98107	Sand Point (Popoff Is. Fuel Co.)	Insurance
Kodiak Oil Sales, Inc. P.O. Box 1487 Kodiak, AK 99615	Kodiak Bulk Plant (North Pacific Fuel)	Insurance
Nome Joint Utility Systems P.O. Box 70 Nome, AK 99762	Nome Tank Farm	Self-insurance
Golden Valley Electric Association, Inc. P.O. Box 1249 Fairbanks, AK 99707-1249	North Pole Fuel storage facility	Self-insurance
North Slope Borough P.O. Box 69 Barrow, AK 99723	Barrow Tank Farm Point Hope Tank Farm Wainwright Generator Plant	Self-insurance
Peter Pan Seafoods 1000 Denny Building Sixth & Blanchard Seattle, WA 98121-1802	King Cove False Pass	Self-insurance
Highland Resources, Inc. P.O. Box 636 Haines, AK 99827	Haines Terminal	Insurance

(2)

Owner/Operator Name	Facility Name	Location
Shell Oil Company P.O. Box 2463 Houston, TX 77252	Onshore Gathering System at Middle Ground Shoal Field Platforms: Shell "A" and Shell "C" Goose Island Tern Island	Cook Inlet Cook Inlet Beaufort Sea Beaufort Sea
B.P. America, Inc. 200 Public Square Cleveland, OH 44114	Niakuk Island (Manmade) Well #4 Endicott Development, Main Production Island, Satellite Drilling Island Endeavor Island, SAG Delta #9 Niakuk Island (Natural), Wells 1, 1A, 2, and 2A	North Slope North Slope North Slope North Slope
Union Oil Co. of Calif. 309 West Ninth Anchorage, AK 99501	Grayling Platform Monopod Platform Granite Point Platform	Cook Inlet Cook Inlet Cook Inlet
Union Pacific Resources Company c/o Nortec 750 W. Second Avenue, Suite 100 Anchorage, AK 99501	"Diamond M. Falcon" Jackup Rig at No. 1 WECO-UPRC Cannery Creek 42-36 Exploratory Well	Cook Inlet

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**THE ROLE OF INSURANCE FOR
THE PREPAREDNESS AND RESPONSE TO OIL SPILLS:
LIABILITY AND COMPENSATION ISSUES**

**PREPARED FOR
THE ALASKA OIL SPILL COMMISSION
UNDER CONTRACT #026**

BY

THE MITIGATION ASSISTANCE CORPORATION

DECEMBER 1989

**THE ROLE OF INSURANCE FOR
THE PREPAREDNESS AND RESPONSE TO OIL SPILLS:
LIABILITY AND COMPENSATION ISSUES**

INTRODUCTION

The insurance industry can potentially be an important partner in a comprehensive program to reduce oil spill losses by providing insurance incentives for the safe transportation of oil and other hazardous cargo. This research paper seeks to examine the current state of the maritime insurance industry -- in general and in Alaska -- and offer suggestions on how insurance can play a role in reducing losses and improving preparedness and response. Information on pollution insurance was gathered from reports in insurance journals, congressional testimony, and articles and analyses by insurers, academics, newspapers, and government publications. In addition, telephone interviews were conducted with insurance representatives from Exxon, the Lloyd McClennan Insurance group, and the National Flood Insurance Program.

Exxon has accepted responsibility, but not liability, for oil damages resulting from the accidental grounding of the Exxon Valdez in March of 1989. To date, Exxon has spent \$1.25 billion in cleanup and in the payment of damages to individuals and businesses that suffered from the direct impacts of the oil spill, including economic injury due to lost business (Wall St. Journal November 30, 1989). In addition to further cleanup and unresolved private claims, Exxon faces potentially huge fines and penalties under numerous state and federal statutes governing water pollution. The Alyeska Pipeline Service Company may be as liable as Exxon since it is obligated under the Prince William Sound Contingency Plan to respond to, contain, and clean up spills in the Sound. "Alyeska handed off the spill response to Exxon without approval by the state, and Exxon's subsequent response was not according to the state-approved plan" (Oil Spill Chronicle November 14, 1989). In any case, judgments regarding liability and compensation are sure to be discussed in the courts for years.

INSURANCE THEORY

Insurance offers a means of managing risk by distributing it among large numbers of individuals or enterprises. Risk is the possibility of injury or loss. Through the payment of insurance premiums, "the insured avoids the risk of suffering a large loss by substituting the certainty of suffering a small one... in effect, the insurer distributes risk among all of its insureds" (Abraham 1986).

It should be noted that there are a number of ways besides insurance to manage risk. In oil transportation, optimizing safety through advanced technology, training programs, adequate staffing, repair and maintenance, response plans, and other methods is a particularly important means of risk management. Within the insurance industry, risk pools, deductibles, and policy limits are risk management techniques.

In theory, insurance assigns the costs and benefits of risk exposure to those who experience the risk, stimulates the policy holder's motivation to avoid risks "through a differential rate structure which rewards prudence and penalizes imprudence," and provides for accumulation of reserve funds to meet large payout requirements associated with rare catastrophic occurrences. In practice, however, insurance functions depend on the price of the service, the appeal of the service, the industry's willingness to provide the service, and industry's assessment of its capacity to meet extraordinary payouts without sacrificing its economic viability (Petak and Atkisson 1982).

As the industry's assessment of its ability to accurately predict risk declines, the prices for the service rise, or may not be offered at all. When a solid actuarial base of information concerning the probability of loss to particular persons or properties under particular defined circumstances is missing, the price goes up or the industry's willingness to engage in the service goes down (Petak and Atkisson 1982).

When such prohibitive conditions exist, the federal government may become involved in order to help remove disincentives to purchase, assist in assessing risks, and assist in developing reserves, or "capacity," for meeting very large payouts (e.g., flood insurance and earthquake insurance, discussed below). The federal government could also assume a more direct role by: (1) having in premium payments (with state and local governments), (2)

acting as a direct reinsurer for prime oil spill insurance carriers, or (3) providing research, technical assistance, and financial support in the establishment of state insurance programs (Petak and Atkisson 1982).

Currently, there is pending federal oil spill legislation that exceeds these possibilities. The legislation is titled the "Oil Pollution Prevention, Response, Liability, and Compensation Act of 1989." It has been passed by the House of Representatives as HR 1465 and is currently before the Senate for modification, amendment, and passage. This legislation will combine, supercede, and improve a host of earlier laws.

A stronger regulator role (than Petak and Atkisson's or the pending legislation) might require the purchase of a particular type of insurance as a condition for receiving federally insured loans, federally subsidized loans, and/or loans provided by federally regulated financial institutions. The insurance industry strictly opposes such "mandation," unless it is accompanied by means to protect insurers from huge payouts in catastrophic incidents. There exists, however, many examples of mandatory insurance: states require purchase of no-fault automobile insurance, lenders require purchase of fire insurance, states require purchase of workmen's compensation insurance, etc. A variation of required insurance is contingent insurance, where coverage (either private or federal) is provided only when certain conditions, such as licensing, manning, training, and equipment standards are met.

HAZARD INSURANCE

Insurance as Hazard Policy

The development of the National Flood Insurance Program (NFIP) and the investigation into a national earthquake insurance program has grown out of a recognition that these hazards are national problems with far-reaching economic impacts. These federal programs also attempt to fill the void created by the private insurance industry's inability to market this type of service profitably. These programs also recognize the limited means that potential victims otherwise have to protect themselves and reduce their vulnerability to hazard risks. These programs are designed to meet needs similar to those posed by a potential oil spill.

The primary difference between federal flood and earthquake insurance and federal oil spill insurance is that in the former, insurance is purchased by those at risk from losses resulting from unpredictable natural events. Oil spill insurance (if it were to become available) would be purchased by those responsible for losses resulting from preventable human error or mechanical failure. Insurance from floods and earthquakes (potentially) gives those at risk from losses some control over their own protection. Oil spill insurance would protect the spiller from liability claims resulting from those at risk to losses, who have no way to protect themselves other than placing the responsibility for compensation with those responsible for the damage. Under these programs, potential victims can protect themselves against flood or earthquake, but not the effects of oil spills. In the latter instance, the victim's only protection is being provided by the perpetrator. Thus, the latter is really compensation, not insurance.

Vulnerability is the susceptibility or exposure to injury, loss, or liability from a hazard. Alaska's vulnerability to oil spill hazards is largely a consequence of national energy needs and the development of Alaska's oil reserves, the Trans-Alaska Pipeline, and the transportation of oil through the state's sensitive coastal environment. People, businesses, economics, natural resources, and the environment are potentially vulnerable. The considerable risks are nonetheless acceptable to local, state, and national interests, who share with private industry in the benefits and risks involved. As a petroleum-dependent society, it is said that "we're all in the oil business" because to some degree, all Americans are affected by Alaska's oil trade, which accounts for nearly one quarter of U.S. petroleum production. Considering this, and the possibility that private industry may not be able to insure oil pollution liability in the future, arguments for a user's tax or national insurance program to compensate oil spill losses may deserve further examination, and in fact, is an element of the pending federal oil spill liability legislation.

Insurance as a Mitigation Tool

Hazard mitigation "is a management strategy that balances current actions and expenditures with potential losses from future hazard occurrences" (Petak and Atkisson 1982). Mitigation activities go further than distributing or sharing the risk and are intended to

eliminate or reduce the probability of occurrence of a hazard event, or reduce the impacts of hazards that do occur. Successful mitigation usually involves a combination of approaches in a coordinated, cost-effective strategy. Providers of fire insurance, for example, offer mitigation incentives by basing a community's fire coverage premiums partly on factors such as proximity to fire stations and hydrants, available water pressure, hose diameters, and number and type of fire trucks. Local governing boards maintain favorable fire insurance rate classes for their communities by ensuring that fire alarms, water supplies, facilities, staffing, equipment, and training exceed industry standards. While the cost to a community for these improvements could easily be \$1 million, each structure owner's premium might be reduced by \$25.00. In a community of 50,000 insured structures, this would represent an *annual* savings of \$1.25 million.

Some general insurers are encouraging comprehensive prefire plans for large facilities, businesses storing hazardous and flammable substances, and structures containing costly assets, such as computers. The two objectives of prefire planning are to identify potential fire hazards in specific facilities and to familiarize firefighters with these hazards in advance. Prefire plans consider building characteristics, fire suppression systems, available public fire protection, warning systems, evacuation plans, hazards in proximity, assignment of emergency duties, coordination with law enforcement, emergency medical services and local media, and types, quantities, and locations of hazardous and flammable materials (Brotzman 1989). Both approaches to fire insurance provide incentives to reduce fire losses by maximizing the firefighting capabilities of the response system. Provisions in the national flood and earthquake programs offer additional examples of how risks may be balanced with proactive efforts to prevent or reduce losses.

National Flood Insurance Program (NFIP)

The 1968 National Flood Insurance Act (Public Law 90-448) made nationally-subsidized flood insurance available to individuals in communities that enforced federally approved floodplain management regulations. Following passage of a 1969 amendment, floodprone communities could become eligible for limited amounts of flood insurance under an "emergency phase." As detailed flood maps and local regulations were developed,

communities could enter the "regular" program, whereby larger amounts of insurance coverage became available to policyholders (May and Williams 1986).

The Flood Disaster Protection Act (Public Law 93-234) in 1973 mandated that floodprone communities regulate their floodplains or forfeit access by its residents to federal loans and loans from federal institutions. This regulation was softened in 1977 to prohibit only federal disaster flood relief, unless flood insurance was purchased.

The Federal Emergency Management Agency (FEMA) is the federal agency responsible for managing the flood insurance and disaster relief programs. FEMA's responsibilities in implementing the program fall under two categories: insurance activities (e.g., enrolling individual participants, establishing rates, paying claims) and floodplain management activities (e.g., establishing flood zones, enrolling communities, establishing standards). Flood insurance is available only to individuals in communities that have adopted a floodplain ordinance and regulations developed under FEMA guidelines. The objective of the ordinance is to ensure that proposed development does not aggravate existing flood hazards and that new buildings will be protected from future floods. Communities that do not adhere to the floodplain management standards may be suspended from the NFIP. Communities and individuals may appeal suspensions or locations of structures on FEMA maps. Of the roughly 20,000 floodprone communities in the U.S., over 17,000 participate in the NFIP (May and Williams 1986).

In an effort to recognize and encourage community activities that go beyond minimum program standards to reduce flood losses, the NFIP has developed a Community Rating System that awards flood insurance premium credits to communities that undertake: (1) public information activities, such as outreach projects; (2) mapping and regulatory activities, such as open space preservation; (3) flood damage reduction activities, such as flood control projects; and/or (4) preparedness activities, such as flood warning systems. Like fire insurance incentives, there is an enormous potential savings to constituents of a jurisdiction willing to fund some major improvements that will mitigate the risk.

Earthquake Insurance

In response to the limited availability and high cost of earthquake insurance in high risk areas of the U.S., a federally-supported system has been developed to cover catastrophic losses and protect insurers and reinsurers from "institution-destroying loss levels," where reserves are insufficient or the magnitude of an accident exceeds worst-case scenarios (Petak and Atkisson 1982).

Underwriters of earthquake insurance need to establish the Probable Maximum Loss for each hazard zone and for individual locations in order to determine total earthquake exposure and reinsurance needs. The most important and most elusive factors affecting earthquake underwriting decisions are probability that an earthquake will occur and estimated maximum intensity. However, utilizing probability studies, seismic building codes, and hazard mitigation recommendations, geologists today are much more capable of making these projections. Other factors that influence the underwriting include: proximity to known faults, height of structure, soil conditions, age of structure, type of construction, type of materials, and the value of contents (Holtom 1989).

Although earthquakes are beyond anyone's control, the selection of risks, underwriting standards, retentions, deductibles, and rates are not. Careful consideration of these factors can take some of the unknowns out of earthquake underwriting (Holtom 1989).

Currently the federal government is investigating the possibility of establishing a national earthquake insurance program, similar to the flood program, where insurance would be made available at a subsidized rate, but only after a community adopts regulations that require new construction to meet seismic safety standards and perhaps the retrofitting of certain classes and types of older, more vulnerable structures.

Development of an "actuarially sound national catastrophe fund" to compensate oil spill victims from federal and state and oil industry contributions might accomplish essentially the same ends "as a more conventional insurance system" (Petak and Atkisson 1982).

MARITIME INSURANCE

Commercial insurers provide maritime insurance to cover the hull, cargo, and, to some extent, the liability associated with the transportation by commercial vessels. The U.S. hull insurance market grew up following World War I in order to accumulate capacity, develop underwriting expertise, and keep expenses under control. The American Hull Insurance Syndicate, comprised of 55 member companies, was formed to create a single agency for the underwriting of hull business, such as issuing policies, collecting premiums, and settling claims on behalf of its member companies. There is also a market of independent insurance companies writing hull business. Together, they have a capacity of over \$80 million (about \$40 million each). The Syndicate also insures ship owners outside the U.S. and is active in reinsurance relationships with European nations and other international markets (Schumacher 1984).

In order to determine adequate premium levels to meet exposures presented by a particular shipowner, the Syndicate typically reviews:

1. The background of executive and operating officers of the fleet;
2. The age, classification status, and condition of fleet ships;
3. The operations, training, and origin of fleet crews;
4. The trading patterns of the company;
5. Cargos carried;
6. The distribution and frequency of the routes used;
7. The maintenance and repair policies of the company (Schumacher 1984).

Pollution Liability Insurance

Prior to the 1970s, the insurance industry provided comprehensive general liability policies for U.S. businesses which covered a broad range of commercial liability due to accidental personal injury or property damage. In the early 1970s, certain pollution-related liabilities were specifically excluded as the nature and cost of pollution incidents and associated liabilities became more evident. Some insurers developed separate policies, specifically to cover pollution risks, that imposed dollar limits per incident (General Accounting Office [GAO] 1987).

By the mid-1980s, however, few insurance companies were offering pollution insurance due to the uncertainties regarding potentially enormous claim payments, "unfavorable" legal trends involving liability standards and insurance coverage, and the broad liability established by federal and state environmental laws. The insurance industry has maintained that the basic concerns of underwriting a risk -- the process of identifying and evaluating risks and setting the premium to be charged for risks accepted by the insurer -- cannot be satisfied when assessing pollution risks, thereby making them uninsurable (GAO 1987).

Commercial pollution insurance is generally unavailable and when it is, coverage is limited and expensive and selectively provided to clients that carry coverage by the insurer for other risks. One option to traditional insurance coverage is participant-owned and operated risk pools that cover catastrophic liability losses. It is unclear from the literature examined in this research how effective risk pools have been in meeting the insurance needs of the oil transportation industry. Another option for pollution liability coverage, when available, is reinsurance. Reinsurers are companies (or governments) that assume a portion of the potential liability risks that the insurance companies underwrite in exchange for a share of the premium (GAO 1987).

In the absence of available and affordable liability coverage, many oil shippers operate without it once they have demonstrated financial capability to the limits of liability set forth in applicable federal laws. These financial requirements ensure that operators have assets on hand to cover the pollution liabilities faced. In essence, these shippers are self-insured.

Ocean maritime insurance differs from property and casualty insurance in that there are no regulations regarding the filing of rates and policy forms with state insurance authorities (partly due to great variations in commodities, vessels, distances, etc.) (Picone 1989). Liability insurance premiums are calculated according to the type of vessel and the degree of risk of different classes of vessels. Oil carriers are rated at the high risk end of the scale. In spite of these differential ratings, owners with poor loss records have generally paid only slightly higher premiums (Schenker 1981).

In light of California's Proposition 103 rollback of automobile insurance rates, the U.S. marine insurance market is concerned about the political climate for retaining its exemption from rate and form regulations. The U.S. market is very slow relative to the international insurance market, primarily due to the unpredictable future of U.S. trade. All quotas on imports, for instance, impact the business of cargo underwriters (Picone 1989).

The potential for huge catastrophic payouts has probably had the greatest impact on the market. According to John Hickey, President, American Hull Insurance Syndicate, "There is no way that we can continue to pay tomorrow's catastrophe claims with today's inadequate premiums." The hull syndicate had a profitable year in 1988 because they were selective and "lucky," and because they had no major casualties for two years. "We shall continually strive to write marine business the only way we know how -- profitably. We are a unique organization with a long tradition and we are perfectly positioned to pick up the pieces when the current market explodes -- which it will," said Hickey (Picone 1989).

Although the Exxon Valdez is a relatively new tanker, the average age of most ships, according to Lloyd's Register, is over 10 years old, and the high costs of shipbuilding will preclude any rapid modernization of the fleet. Due to the poor economic condition of the shipping industry, according to Walter Kramer, Vice President of the American Institute of Marine Underwriters, the emphasis "is on cost-cutting measures and economies of scale." Kramer maintains that the aging fleet and smaller crews on more automated ships will contribute to more accidents in the future. The research being conducted for the paper, "The Impact of Fatigue and Other Factors on Human Performance and How They Relate to Maritime Accidents," also supports this. Higher underwriting losses will then lead to higher insurance rates, compounding problems in the industry. Ship owners and insurers need to work together to reduce the chances of accidents, and those "practicing sound hull loss prevention techniques should receive credit for their efforts" (Picone 1989).

OIL SPILL LIABILITY AND COMPENSATION

International Conventions

The myriad international, national and state laws, statutes, and funds that address pollution from oil spills has been widely characterized as a "patchwork quilt" of overlaying standards and liability limits. The following is a discussion of the various acts, treaties, and funds potentially applicable to U.S. oil transportation interests or to accidents in U.S. waters.

The Convention on Civil Liability for Oil Pollution Damage (1969) and Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage (1971) provide a means of sharing oil pollution costs among countries that are parties to the Conventions. The two international oil spill treaties establish maximum liability amounts of oil shippers (Smets 1983). The 1984 Civil Liability Convention (CLC) establishes a financial responsibility regime where each party is required to ensure that ships in its ownership have insurance or other financial security to cover the owners' liability under the Convention up to the prescribed limits.

The 1984 CLC and FUND Protocols implement the provisions of the above conventions. They allow member nations a way to enforce judgments that affect foreign vessels and help ensure that the assets of the owner or insurer liable for oil pollution will be available to meet damage claims. The U.S. has failed to ratify the 1984 Protocols. Opponents maintain that the Protocols would provide coverage beyond current federal and state laws under only a limited set of circumstances and, in some cases, they would preempt state liability laws. Supporters argue that the Protocols offer a way to share the costs of U.S. oil spills worldwide by allowing the U.S. access to the international oil spill compensation fund and would also allow the U.S. to influence international maritime negotiations. Amendments to the Protocols, they claim, could be added in the future to increase liability limits (U.S. Senate 1989).

The Bush Administration favors adoption of the 1984 Protocols but opposes the preemption of state liability laws beyond the extent necessary to implement the Protocols. Secretary of Transportation Skinner has testified that any claims for damages in excess of the owner's

limit of liability could be brought directly to the international fund, which, according to Skinner, has an excellent record of payment (on average, eight months) (U.S. Senate 1989).

The French government ratified the 1984 Protocols within two months of their introduction, but unfortunately six years after the Amoco Cadiz accident. Eleven years later, the lawsuits are being settled for a fraction of what France spent dealing with the spill (U.S. Senate 1989).

Federal Laws

The Federal Water Pollution Control Act, 1970, as amended by The Clean Water Act, requires owners to file a certificate of financial responsibility for each tank ship owned that demonstrates financial capability to the extent of the owner's minimum cleanup liability.

The Clean Water Act of 1977 provides liability of up to \$50 million for the actual costs incurred by federal and state governments to remove the oil and restore natural resources and the environment. Section 311 provides that the vessel owner is liable to the U.S. Government at \$150 per gross ton unless the spill is the result of "willful negligence or willful misconduct within the privity and knowledge of the owner," then the liability of the spiller is unlimited. At \$150/gross ton, the liability limit for the Exxon Valdez is approximately \$14 million. The 311 (k) revolving fund is maintained by federal appropriations at a targeted balance of \$35 million and is administered by the U.S. Coast Guard. Only one-half of the \$143 million from the fund spent since 1971 has been recovered from responsible parties. The fund currently stands at only \$2 million (House of Representatives 1989a).

The Federal Limited Liability Act allows ship owners to petition to limit liability for damages to the value of the vessel and freight on board following the accident, thus disallowing liability for any damages. This legislation has been enforced inconsistently in past oil spill litigation.

The Offshore Oil Pollution Compensation Fund is a renewable fund of up to \$200 million administered by the Secretary of Transportation to cover oil removal costs and damages to fishing, recreation, ecosystems, and related activities. These funds, as well as those under Section 311 of The Clean Water Act and the following two acts, would all be combined into one large oil spill compensation fund under the pending federal legislation.

Other federal laws that may be applicable in major oil spills are the Outer Continental Shelf Lands Act Amendments (OCS) of 1978 and the Deep Water Ports Act of 1974.

State Liability Systems

The Trans-Alaska Pipeline (TAP) Fund was established in 1973 by the Trans-Alaska Pipeline Authorization Act to pay damage claims, including cleanup costs resulting from oil spills from vessels carrying oil to ports from the pipeline system. The Fund is liable without regard to fault for damages in excess of \$14 million but not more than \$100 million per incident. To date, the Fund has never paid a claim. Exxon has agreed to administer all claims it receives and may submit claims to the Fund before the two-year application deadline in March of 1991. Since the act exempts the Fund from liability arising from a claimant's negligence, Fund officials intend to contest any claims filed by Exxon (GAO 1989).

Alaska Statute 46.03.780 Liability for Restoration provides that a spiller is liable to the state for damages related to the sum of money required to "restock," "replenish," and "restore" the environment to its previous condition. Damages are recovered by the State Attorney General on behalf of the citizens of Alaska (Graham 1989).

Alaska Statute 46.03.822 Strict Liability for the Discharge of Hazardous Substances provides that the "person owning or having control over" a polluting vessel may be relieved of strict liability only if the spill is due to act of war, negligence of a third party, negligence on the part of the state of Alaska or the United States, or an Act of God (Graham 1989).

Alaska Statute 46.03.758 Civil Penalties for Discharges of Oil, enacted in 1977, establishes "substantial civil penalties" in order to provide a "meaningful incentive for the safe handling of oil" and to insure compensation for the state. The regulations establish a range of penalties, depending upon "toxicity, degradability, and dispersal characteristics" of the spilled oil and the "sensitivity and productivity of the receiving environment." Alaska Statute 46.03.758(b)(2) provides that penalties can be multiplied by a factor of five if the spill is due to an intentional or grossly negligent act or if the spiller did not make reasonable attempts to contain and clean up the spill (Graham 1989).

Variations in the maximum penalty amounts are designed to accommodate recovery needs in the most sensitive environments:

1. Maximum \$10.00 per gallon for oil entering most freshwater environments;
2. Maximum \$2.50 per gallon for oil entering most confined saltwater environments;
3. Maximum \$1.00 per gallon for unconfined saltwater or other environments without significant aquatic resources (Graham 1989).

Other features of the Civil Penalty statute include:

1. A vicarious liability provision that holds owners liable for actions of their contractors. Intended to provide a further incentive for safe operations, this feature also increases the likelihood the state will be able to recover for damages to the environment;
2. A liability limit of \$100 million was added under strong pressure from the oil industry, which argued that the industry needed advance knowledge of its maximum potential exposure;
3. A deduction for the gallons cleaned up from penalties owed by the spiller, in order to provide an incentive to clean up as much spilled oil as possible;
4. Reductions in penalties for mitigating circumstances, when events surrounding a spill would make full penalties inappropriate;
5. Exemption of spills less than 18,000 gallons, in order to provide some protection for small oil handlers (Graham 1989).

A spiller may be liable under the Civil Penalty statute, as well as other state statutes, but recovery will generally be sought under one statute or the courts may interpret the action as a double recovery. The state may allege liability under all applicable state and federal statutes and then pursue the course that provides the maximum potential recovery. Once a case is filed, however, it is usually settled out of court for a lump sum amount. Otherwise, if left to the courts, a determination would be made as to which is the controlling statute.

A detailed investigation of Alaska's civil penalty scheme for oil spill liability and compensation was completed in January of 1989 at the University of Washington's Institute for Marine Studies (Graham 1989). The investigation was documented as a Master's Thesis and includes an evaluation of the existing system. The report concludes that Alaska's civil penalty approach is viable. However, it also identifies inconsistencies and shortcomings, and offers sound recommendations to make Alaska's liability and compensation system more effective. This report is attached to this paper as an appendix. Review of this study's recommendations by the Alaska Oil Spill Commission (AOSC) and the state legislature is an important recommendation of this report.

PROBLEM STATEMENT

In the aftermath of the Exxon Valdez accident, the Alyeska Pipeline Service Company -- the industry consortium that operates the Trans-Alaska Pipelines on behalf of seven oil companies that own the facilities -- has been soundly criticized for allegedly allowing the oil companies to save money by curtailing preparations for a large-scale oil spill throughout the 1980s. In addition to the problems caused by economic and competitive pressures, automation, safety violations, and a poor preparedness and response evidently also contributed to the disaster (this is also substantiated by research completed for the paper, "The Impact of Fatigue and Other Factors on Human Performance and How They Relate to Maritime Accidents").

1. Economic pressures: the competitive pressures in the oil and oil transportation industry, particularly with respect to competing with foreign carriers, most of which rely on lower standards and have less technology to

finance. Oil transporters are under constant pressure to move fast and stay on schedule. The Exxon Valdez was five days behind schedule when it ran aground. The Exxon Valdez was also on the outer fringes of the Coast Guard Vessel Traffic System (VTS) when the accident occurred. Federal cutbacks are primarily responsible for the failure to extend the VTS to the outer rim of Prince William Sound. The cost of extending the system, according to the Coast Guard, is estimated at \$20 million (House of Representatives 1989a). Expansion of VTS is included in the pending federal legislation.

In 1981, a 20-member emergency team responsible for 24-hour response to oil spills in Valdez Harbor and Prince William Sound was disbanded by Alyeska to cut costs. Alyeska officials argued that such a large-scale spill as the Valdez was highly unlikely (New York Times). Also in 1981, Alyeska turned down an offer from the city of Valdez to stockpile cleanup equipment and materials. Alyeska personnel advised city officials that warehousing booms, dispersants, and other types of cleanup resources sufficient to attack a large-scale spill would be "a tremendous waste of city money" (House of Representatives 1989a). The pending legislation will reinstate national emergency strike teams and require contingency plans for major spills and adequate equipment for response.

2. Automation: as discussed in this paper, more automated ships and smaller crews may lead to an increase in accidents and resulting oil spills. When the Valdez ran aground, the systems that automatically power and steer the ship were on, a violation in that part of the Sound. These systems may have contributed to both the grounding and the large volume of oil released.
3. Safety violations: violations of the Valdez master pilot involving alcohol have been the most publicized, but a number of other violations connected to the accident apparently took place: the Valdez didn't notify the Coast Guard, as required, that it was leaving the shipping lanes to avoid ice floes; and federal

violations involving improper manning for the waters, including control of the ship by third mate (not certified as a pilot) and the failure of the Master to be on the bridge. The look-out was out of position, helping the local pilot depart the ship just minutes before the grounding.

4. Inadequate response and preparedness: As mentioned above, there were inadequate resources in Valdez to respond to an accident of this magnitude. Alyeska's contingency plan included a scenario for a catastrophic incident and noted that the response would be inadequate. After the Valdez spill, it took hours for emergency work to begin. Alyeska's only cleanup barge was out of service, an absorbent boom was buried under snow, and only 45 drums of dispersant were on hand -- enough to dissipate 3% of the spill (Anchorage Daily News November 3, 1989).

Our investigation did not find any evidence that insurance adversely affected the response to this incident. This question came to light when the response to a recent (November, 1989) Alaska grounding was delayed until the hull underwriter could determine whether or not there could be any salvage value. Possible responses involved burning, sinking, or blowing up the ship. These actions were not allowed without the approval of the underwriter.

POSSIBLE SOLUTIONS

The advantages and disadvantages of a number of alternatives to maximizing safety and preparedness through insurance and liability mechanisms are discussed below.

Unlimited Liability

The threat of unlimited liability, it is argued, encourages a higher standard of care in the oil industry and prompts prevention-related activities in both the public and private sectors. Supporters of unlimited liability essentially support the rights of states to establish liability, in order to go beyond federal or international minimums as necessary to protect the health and welfare of their people and environments. Opponents of unlimited liability maintain

that this alternative will result in commercial insurance being unavailable and the oil industry taking its business away from states with unlimited liability laws. (Since nearly one quarter of the U.S. source of petroleum comes from Alaska, this seems unlikely.) Most states and environmental groups argue that states should nonetheless have the right to protect their tourist and fishing industries from oil spills at the expense of a certain amount of business activity (United States Senate 1989).

Advantages:

1. Strongest position in support of "the spiller/polluter pays" principle;
2. Encourages a higher standard of care;
3. Preserves state's rights.

Disadvantages:

1. No insurer will provide unlimited coverage;
2. Oil industry may avoid states with unfavorable limits;
3. Spiller could "hide" assets, declare bankruptcy, and "walk away" from spill.

Limited Liability

In the wake of the Exxon Valdez disaster, future liability limits will face pressures to relate more realistically to the full range of oil pollution damages -- not just for cleanup, but for damages to property, natural resources, losses in earnings, and loss of use of real or personal property. Documentation of a carrier's financial capability levels may also have to follow suit (Schenker 1981). If Congress sets liability limits in the proposed federal compensation and liability legislation, limits could be driven by the financial capability of each company and by its commitment to state-of-the-art technology as a safety incentive (i.e., lower limits available to shippers that commit to modern cleanup equipment, modern monitoring systems, advanced ship designs, etc.). (United States Senate 1989). The recommendations of the investigative report detailing Alaska's civil penalty scheme for oil spills makes similar recommendations through the elimination of certain provisions, including the \$100 million ceiling on penalties. The pending federal legislation suggests lower limits for safer transfer points, such as deepwater ports.

Advantages:

1. High, but fair liability limits might stimulate U.S. marine insurance market;
2. Parties responsible for spills will at least pay something, both into reserve fund and for damages up to limits;

Disadvantages:

1. Probably won't cover all damages in catastrophic accidents;
2. Unless the limits of liability are very high (and reflective of full range of costs), the "cost of doing business mentality" toward managing oil (spills are inevitable) will prevail (United States Senate 1989).

User's Fees

In addition to setting minimum liability limits, toughening standards, and lifting all liability limits in some cases, possibly the most important feature of proposed federal liability and compensation legislation is the establishment of a national fund for cleanup and recovery costs that exceed liability limits. The fund would be developed through a 5-cent per barrel tax on the oil industry, the rationale being that oil companies should bear a responsibility for cleaning up and restoring the environment when damages exceed the responsible party's limit of liability (United States Senate 1989). According to Atlantic Richfield Company testimony before the Senate Subcommittee, merging the federal funds created by the TAPS Act, OCS Act, and Deep Water Ports Act would immediately establish a reserve fund in excess of \$400 million (United States Senate 1989). This is included in the pending legislation. This legislation also includes user fees for the expansion of the VTS.

Advantages:

1. Prevents need for each state to establish its own fund (more economical and efficient);
2. Allows oil shippers to pay into one centralized oil fund instead of individual funds of each state;
3. Retains state liability laws;

4. Can be established together with adoption of 1984 Protocols to cover incidents where damages exceed Convention liability limits;
5. When fund builds up, part of it can be dedicated to improving safety measures, training programs, etc.

Disadvantages:

1. Does nothing to eliminate the "patchwork quilt" of regulations.

National Contingent Insurance

As was the case with hazard insurance for floods and earthquakes prior to the development of national and federally-supported insurance programs, commercial pollution insurance, when available, has become increasingly unaffordable. Nationally, we are all dependent on the Alaskan oil business and concern over the frequency and magnitude of the impacts of oil spills has become a strong national issue. In addition, its resources and natural beauty make Alaska a "national treasure" and a source of national pride. Proponents of national oil pollution insurance make these and other points in support of arguments for a national program.

Advantages:

1. Mitigation and contingency planning can be required as a condition of participation;
2. Incentives relating to the cost of coverage can be employed to prompt oil shippers to operate in as safe a manner as possible.

Disadvantages:

1. Oil shippers may become more complacent or careless with insurance protection to fall back on;
2. Many are not convinced that the oil industry can be relied upon to protect the environment.

Deepwater Ports

Government and industry could investigate the possible development of new offshore deepwater ports, such as the Louisiana Offshore Oil Port (LOOP), where spills may be less likely to occur and easier to clean up than those closer to shore. The open waters around offshore ports are also more amenable to the use of "non-mechanical cleanup means," such as dispersants. Oil is transported between port and shore via underground pipelines.

Advantages:

1. Eliminates threats of groundings and narrow channels;
2. Spills would affect less sensitive environments;
3. LOOP operates wide "safety zone" around port and 24-hour traffic control and communications.
4. Pending legislation calls for lower liability limits for vessels utilizing deepwater ports.

Disadvantages:

1. LOOP has been losing money and has not proven to be an economical alternative for potential port users or investors (United States Senate 1989).
2. Exposure to harsher environment could potentially limit the number of days facilities could be used.

RECOMMENDATIONS

1. The AOSC and the state legislature should review the analysis of the civil penalty scheme for oil spill liability and compensation in Alaska (Graham 1989) and determine the appropriateness of the studies' recommendations for adoption and implementation.
2. The development of a user's tax and national oil spill compensation fund offers a number of important advantages over the "patchwork" liability and compensation system currently in place, and deserves further examination in the near term. These,

and many useful mitigation measures, are incorporated into the pending federal legislation. Alaska should strongly support this legislation package.

3. Localized liability and penalty schemes should be investigated on a port-by-port basis. These schemes should investigate the potential of providing access to terminals contingent not only upon certain levels of liability or financial capability, but also upon certain standards for vessel manning, training, licensing, and equipment.
4. Offshore deepwater ports -- and their obvious advantages in limiting oil spill damages -- may provide the best long-term solution to the problem, provided that economic and environmental problems can be overcome.

Any of these initiatives should be pursued in the context of a complementary liability and compensation system that: (1) defines the relationship with other international, federal, and state laws; (2) preserves state liability laws; (3) clearly defines the liability of each shipowner and the scope of claims that can be made against the responsible party; (4) retains the "polluter pays" principle in pollution liability; and (5) serves to bring under a single umbrella all aspects of oil spill liability and compensation to ensure that all claimants are compensated (United States Senate 1989). The pending federal legislation accomplishes these goals and should be promoted. Reviewing the recommendations of Alaska's civil penalty scheme for oil spills will also accomplish these goals. Developing particular schemes for individual ports can address the varying degree of risk due to frequency of vessels and localized conditions. This may also provide the only mechanism that ensures that a certain level of safety is maintained by visiting vessels, regardless of their nation of origin or registry.

The national flood and earthquake insurance programs, as models, can serve to guide those involved in the development of a similar program for oil spill pollution hazards. Loss prevention should become a strong factor in the development of insurance rates and costs. Repetitive offenders might find it difficult to obtain protection at any cost (Schenker 1981)

or find insurance too expensive to stay in business. Those ship owners and operators working to reduce the likelihood of accidents should get credit for doing so.

Lower liability limits could be made available only to those companies that can demonstrate financial responsibility, good safety records, and a commitment to state-of-the-art technology. Inadequate training procedures, inadequate charts and guiding systems, and inadequate maintenance and repair policies are examples of reasons to deny lower liability limits (United States Senate 1989).

The Exxon Valdez disaster has revealed the need for more mitigation and preparedness planning throughout the system (ship owners, pipeline operators, local, state, and federal governments). Contingency response plans should consider the extraordinary resource demands placed on the response system in major oil spill accidents, and then improve plans through regular drills and exercises. Following the grounding of the Arco Anchorage off Port Angeles in 1985, Arco, the Coast Guard, and the Washington Department of Ecology co-managed a successful cleanup effort that took four months. Coordinators credited a joint response exercise conducted a year earlier with creating a familiarity that led to a smooth working relationship in the actual event (Anchorage Daily News May 7, 1989).

The best opportunities to implement mitigation measures generally follow the occurrence of a disaster, when the hazard is still fresh in memories and there is usually a mandate to improve or change the system. The state of Alaska, Alyeska Pipeline Service Company, and Exxon have all taken proactive steps to mitigate the impacts of future spills. Alyeska has acquired several new, large oil skimming vessels to escort tankers from the Valdez Terminal out of Prince William Sound. Alyeska now plans to stockpile cleanup equipment and supplies and is increasing tariffs approximately \$3 per barrel in order to finance pipeline corrosion repairs, oil spill prevention and improved spill response, and legal fees from the Valdez spill. The state is raising severance taxes to create a \$50 million emergency relief fund for oil spill cleanups (Anchorage Daily News November 2, 1989) and the AOSC has recommended a number of new safety measures, including giving authority to the State Harbor Authority to close down ports if conditions are unsafe (Anchorage

Daily News November 12, 1989). The glaring shortfalls in response and preparedness systems may, in the long run, prove to be more positive if steps are undertaken that prevent future such occurrences. It is important to institutionalize these measures now so that the system does not become lax in between oil spills.

Although the costs of monitoring systems, training programs, and other prevention and response measures may seem relatively minor compared to oil profits, cost/benefit analyses of mitigation opportunities must demonstrate that mitigation and preparedness are in the best financial interests of the oil industry as well. A public/private partnership is likely to produce the best mitigation results.

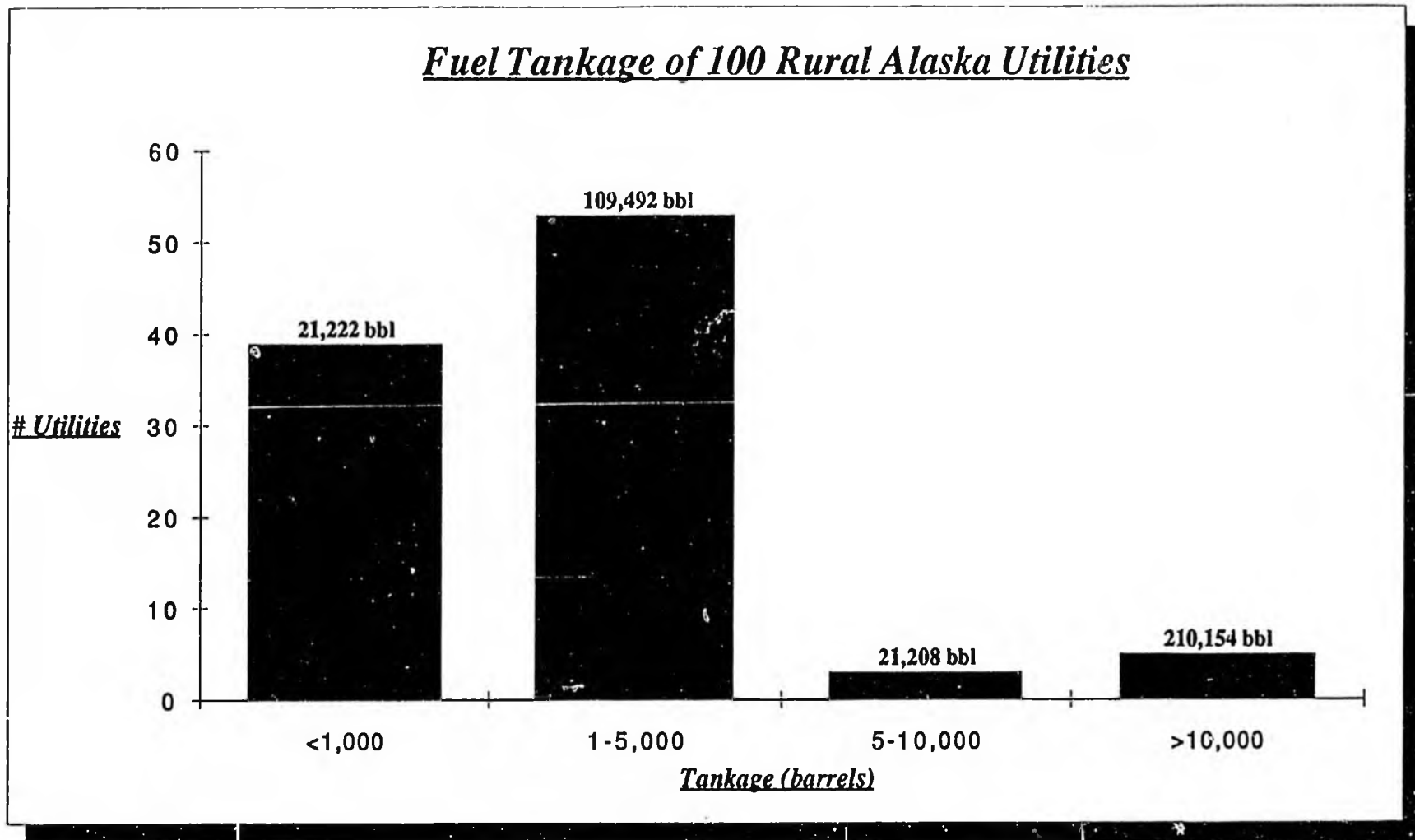
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Fuel Tankage of 100 Rural Alaska Utilities



Bulk Fuel Storage Capacity of Some Alaska Rural Electric Utilities

Community	Gallons	Barrels
<u>1000 Barrels</u>		
1 Aklachak	30,000	714
2 Allakaket	20,000	476
3 Anaktuvuk Pass	35,000	833
4 Arctic Village	18,000	429
5 Atmautluak	28,000	667
6 Atkasuk	17,000	405
7 Beaver	30,000	714
8 Bethel	40,000	952
9 Birch Creek	8,000	190
10 Chuathbaluk	20,000	476
11 Circle	10,000	238
12 Clarks Point	10,000	238
13 Crooked Creek	20,000	476
14 Eagle	15,000	357
15 Ekwook	2,500	60
16 Hoonah	35,018	834
17 Hughes	10,000	238
18 Igiugig	25,000	595
19 Kaktovik	20,000	476
20 Kasaan	20,500	488
20 Klawock	1,140	27
21 Kokhanok Bay	20,000	476
22 Koliganek	25,000	595
23 Kwigillingok	30,000	714
24 Levelok	30,000	714
25 Newtok	20,000	476
26 Nuiqsut	40,000	952
27 Old Harbor	1,950	46
28 Pedro Bay	40,000	952
29 Platinum	10,000	238
30 Point Lay	20,000	476
31 Rampart	40,000	952
32 Red Devil	20,000	476
33 Ruby	7,000	167
34 Sheldon Point	30,000	714
35 Sleetmute	20,000	476
36 Stony River	20,000	476
37 Takotna	30,000	714
38 Telida	12,000	286
39 Venetie	15,000	357
	45,200	1,076
		21,222

Bulk Fuel Storage Capacity of Some Alaska Rural Electric Utilities

Community	Gallons	Barrels
<u>1,000 - 5,000 Barrels</u>		
<u>1</u> Alakanuk	124,534	2,965
<u>2</u> Ambler	101,546	2,418
<u>3</u> Angoon	45,200	1,076
<u>4</u> Anvik	51,903	1,236
<u>5</u> Central	45,000	1,071
<u>6</u> Chalkyitsik	65,000	1,548
<u>7</u> Chevak	137,530	3,275
<u>8</u> Cordova	55,000	1,310
<u>9</u> Eek	67,253	1,601
<u>10</u> Elim	67,899	1,617
<u>11</u> Emmonak	129,617	3,086
<u>12</u> Gambell	107,521	2,560
<u>13</u> Goodnews Bay	64,057	1,525
<u>14</u> Grayling	66,255	1,578
<u>15</u> Holy Cross	77,439	1,844
<u>16</u> Hooper Bay	158,642	3,777
<u>17</u> Huslia	66,255	1,578
<u>18</u> Kake	46,000	1,095
<u>19</u> Kaltag	87,103	2,074
<u>20</u> Kiana	113,393	2,700
<u>21</u> Kivalina	94,743	2,256
<u>22</u> Kongiganak	60,000	1,429
<u>23</u> Koyuk	69,110	1,645
<u>24</u> Lower Kalskag	81,184	1,933
<u>25</u> Marshall	76,324	1,817
<u>26</u> Mekoryuk	80,172	1,909
<u>27</u> Minto	42,000	1,000
<u>28</u> Mountain Village	176,055	4,192
<u>29</u> New Stuyahook	80,508	1,917
<u>30</u> Nightmute	47,000	1,119
<u>31</u> Nikolai	55,360	1,318
<u>32</u> Noatak	80,508	1,917
<u>33</u> Norvik	144,901	3,450
<u>34</u> Nulato	113,400	2,700
<u>35</u> Nunapichuk	152,197	3,624
<u>36</u> Pilot Station	94,633	2,253
<u>37</u> Point Hope	62,000	1,476
<u>38</u> Quinhagak	100,247	2,387
<u>39</u> Russian Mission	55,581	1,323
<u>40</u> Saint Michael	75,304	1,793
<u>41</u> Savoonga	133,623	3,182
<u>42</u> Scammon Bay	80,957	1,928
<u>43</u> Selawik	130,527	3,108

Bulk Fuel Storage Capacity of Some Alaska Rural Electric Utilities

Community	Gallons	Barrels
<u>1,000 - 5,000 Barrels (cont'd)</u>		
44 Shageluk	53,032	1,263
45 Shaktoolik	59,807	1,424
46 Shishmaref	114,743	2,732
47 Shungnak	113,655	2,706
48 Stebbins	79,941	1,903
49 Togiak	130,226	3,101
50 Tooksook Bay	98,931	2,356
51 Tuntutuliak	60,000	1,429
52 Tununak	73,271	1,745
53 Wales	51,590	1,228
		109,492
<u>5,000-10,000 Barrels</u>		
1 Illamna	315,000	7,500
2 Saint Mary's	215,751	5,137
3 Unalakleet	360,000	8,571
		21,208
<u>>10,000 Barrels</u>		
1 Kotzebue	2,150,000	51,190
2 Naknek	1,660,000	39,524
3 Nome	3,400,000	80,952
4 Nushagak	1,064,481	25,345
5 Wainwright	552,000	13,143
		210,154
<u>TOTALS 100 Utilities surveyed</u>	<u>15,207,217</u>	<u>362,077</u>
	Total gallons	Total Barrels
	<u>152,072</u>	<u>3,621</u>
	Average gallons	Average Barrels

Recommendation 54
Full-cost
reimbursement

As a prevention incentive, existing regulations should be broadened to insure that in 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.

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.

HB

569

HOUSE COMMITTEE REPORT

(9)

Date Referred: February 22, 1990

FURTHER REFERRALS:

Date of Committee Action: 3/6/90

The RESOURCES Committee considered:

HB 569

HOUSE BILL NO. 569

LENGTH LIMIT OF SALMON SEINE VESSELS

"An Act relating to the maximum length of salmon seine vessels."

RECOMMENDATIONS:

- be replaced with CS HB 569 (RES) the same title
- have attached amendment(s) a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(S):
(Dept)

APPROVES PREVIOUS: _____
(Date/Dept)

- fiscal impact _____
- zero fiscal note _____
- zero with analysis ADF+G

- fiscal note(s) _____
- zero fiscal note(s) _____
- zero fn/analysis _____

SIGNING DO PASS:

Davidson
Steve Jack
Mike Jones
Richard J. Jolley
Bert J. Jolley
Bill Hudson

SIGNING:
(Check approp. column)

	Do Not Pass	No Rec	Amend
<u>W. J. Jolley</u>		<input checked="" type="checkbox"/>	

W. J. Jolley
Chairman's Signature



STATE OF ALASKA
OFFICE OF THE GOVERNOR
BILL ANALYSIS

DEPARTMENT Fish and Game	DIVISION Commercial Fisheries	BILL NUMBER HB 569	SPONSOR House Resources
SHORT TITLE OF BILL Maximum length of salmon seine vessels			
DEPARTMENT POSITION Support			
PREPARED BY Robert C. Clasby	DATE 3/2/90	COMMISSIONER'S SIGNATURE <i>William W. Wible</i>	DATE 3 5 90

SUMMARY

OTHER AGENCIES AFFECTED BY BILL Public Safety	CONSTITUENT GROUP(S) AFFECTED BY BILL Commercial Salmon Seiners
ORGANIZATIONAL SUPPORT FOR BILL Unknown	ORGANIZATIONAL OPPOSITION TO BILL Unknown

FISCAL IMPACT: NONE FISCAL NOTE ATTACHED

BACKGROUND/LEGISLATIVE INTENT

The US Coast Guard recently changed the definition of "Registered Length". Under the new definition, some vessels will exceed the 50 foot registered length limit, but not the 58 foot overall length requirement, thus making them illegal for use in the commercial salmon seine fishery.

ANALYSIS OF BILL PROGRAM EFFECTS

Passage of this legislation will not effect the programs of the division. Passage will make it easier for department staff to explain, and the public to understand, the length restriction.

AMENDMENTS PROPOSED

The term "overall length" has caused enforcement problems with the Bristol Bay 32 foot maximum length regulation. That problem was overcome by defining "overall length" to mean "the straight line length between the extremities of the vessel, but does not include anchor rollers." We recommend this language be considered as an amendment to this legislation.

PLEASE ATTACH A SEPARATE SHEET FOR ADDITIONAL COMMENTS OR ANALYSIS.

FISCAL NOTE

REQUEST:

Revision Date: _____
 Title: Maximum length of salmon
seine vessels
 Sponsor: House Resources
 Requestor: Governor

Agency Affected: Fish and Game
 BRU: Commercial Fisheries
 Components: All

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	0					
TRAVEL	0					
CONTRACTUAL	0					
SUPPLIES	0					
EQUIPMENT	0					
LAND & STRUCTURES	0					
GRANTS, CLAIMS	0					
MISCELLANEOUS	0					
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE	0	0	0	0	0	0
---------	---	---	---	---	---	---

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

No FY90 impact

Prepared by: Robert C. Clasby Phone: 465-4210
 Division: Commercial Fisheries Date: March 1, 1990

Approved by Commissioner: [Signature] Date: 3/5/90
 Agency: _____

Distribution (by preparer):
 Legislative Finance
 Legislative Sponsor
 Requestor
 Office of Management and Budget
 Impacted Agency(ies)

U.S. Department
of Transportation

United States
Coast Guard



Commandant
United States Coast Guard

Washington, D.C. 20593-0001
Staff Symbol:
Phone:

TELEFAX NO. (907) 465-2418

TO: ALASKA STATE REPRESENTATIVE Cliff Davidson
Attn: Ms. Stephanie LOVE

FR. J.T.LEWIS, CHIEF, TONNAGE SURVEY BRANCH, USCG HQ, WASHDC
TELEFAX (202) 267-1069

IN RE YOUR QUESTION ON REGISTER LENGTH.

On October 12, 1989, new U.S. Coast Guard regulations for tonnage measurement took effect. These regulations incorporated the rules of the International Convention on Tonnage Measurement of Ships, 1969 (Tonnage Convention) and restated previous U.S. tonnage regulations under "Regulatory Tonnage" which includes the pre-existing Standard Measurement, Dual Measurement, and Simplified Measurement systems. At that time the old definition for REGISTER LENGTH

"69.03-13 Register Length

(a) The length measured on the tonnage deck, from the forepart of the outer planking (where it is rabbeted) on the side of the stem of wooden vessels, or fore end of lap of outer plating of steel or iron vessels, to the afterside of the main sternpost, shall be accounted the vessel's register length."

was replaced with:

"69.53 Definitions.

Registered length means either 96 percent of the length on a waterline at 85 percent of the least molded depth measured from the top of the flat keel or the length from the foreside of the stem to the axis of the rudder stock on that waterline, whichever is greater. In vessels designed with a rake of keel, this length is measured on a waterline parallel to the design waterline."

However, another Registered Length definition is found in our tonnage regulations at 46 CFR 69.203 (Simplified Measurement - limited to less than 79 feet overall). It reads:

Registered length means --

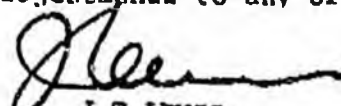
- (a) for a single hull vessel the vessel's overall length; and
- (b) for a multi-hull vessel, the horizontal distance between the outboard side of the foremost part of the stem and the outboard side of the aftermost part of the stern of the aftermost hull, excluding fittings or attachments."

OVERALL LENGTH is described in 46 USC 2101 (20a):

"20(a) "overall in length" means--

- A. For a foreign vessel or a vessel engaged on a foreign voyage, (see 46 CFR 69.53 definition above) or
- B. for any other vessel, the horizontal distance of the hull between the foremost part of the stem and the aftermost part of the stern, excluding fittings and attachments."

There are no plans to recommend adjustments to any of these definitions.


J.T.LEWIS



JMC

Jensen Maritime Consultants Inc. NAVAL ARCHITECTS MARINE ENGINEERS

308 Fisheries Building
4241 21st Ave. West • Seattle, WA 98199 U.S.A.

Phone (206) 284-1274/ 284-8378
Telex No. 152717 • Fax (206) 284-2556

DATE 2-16-90. REF NO. 89192 FROM: HAL HOCKEMA
 TO ATTN OF: BILL CHENEY COMPANY: JENSEN MARITIME
 COMPANY: COMM. FISHERIES I NO. OF PAGES (INCL. COVER): 2
 FAX NO: 907 465 2604

SUBJECT: 5 AAC 39.160. MAXIMUM LENGTH OF SALMON SEINE VESSEL.

MR. CHENEY:

THANK YOU FOR TAKING TIME FOR OUR PHONE DISCUSSION THIS MORNING.

THE LAWS REGARDING MEASUREMENT OF VESSELS HAVE CHANGED EFFECTIVE ON OCTOBER 12, 1989. PER NEW 46 CFR PART 69 RULES THE FOLLOWING REGISTER LENGTHS APPLY TO VESSELS LESS THAN 79' LENGTH OVERALL (THERE ARE 2 CHOICES OF MEASURE):

1. STANDARD SYSTEM - REGISTER LENGTH IS DEFINED AS FOLLOWS (SUBPART C)

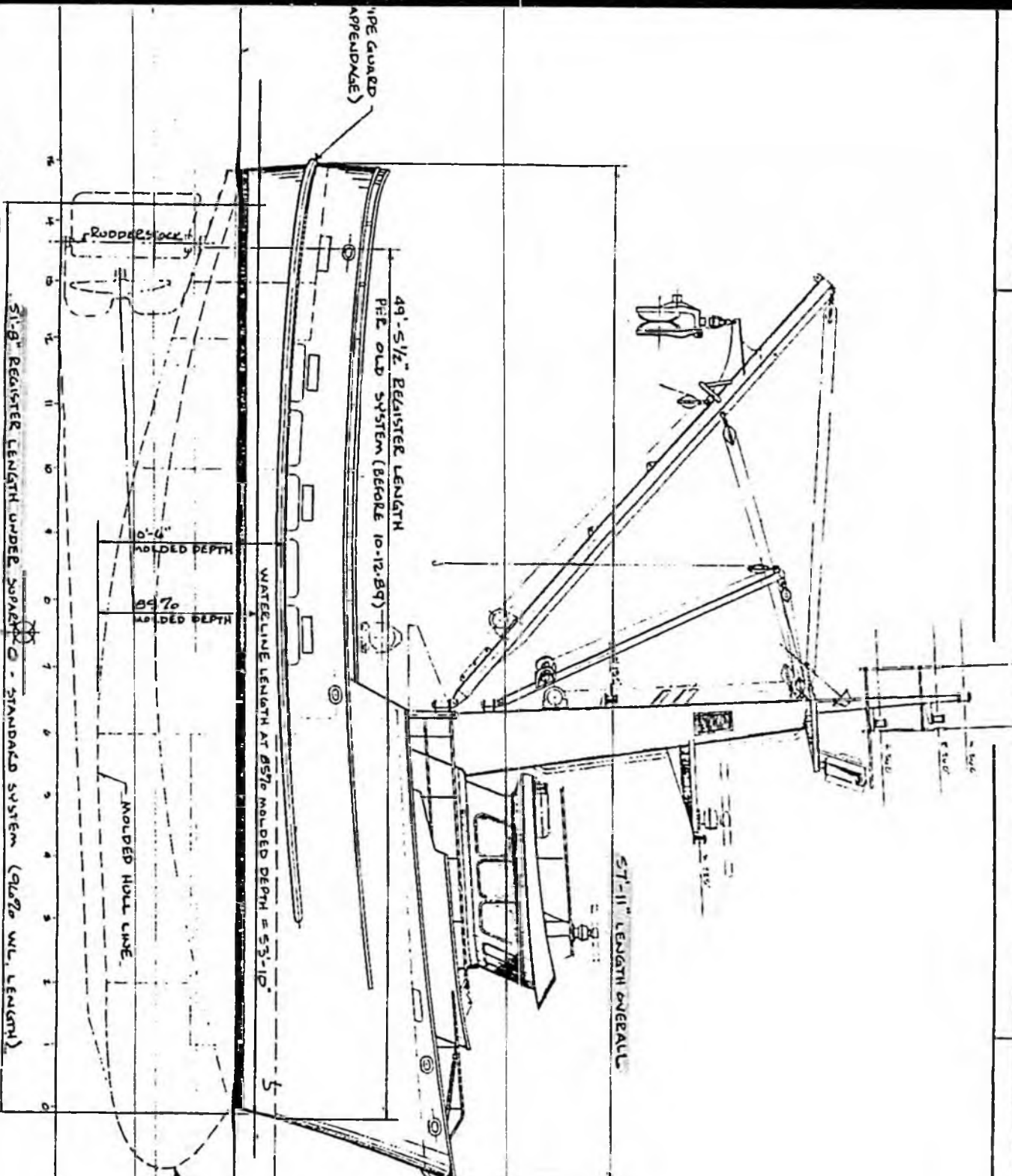
Registered length means either 86 percent of the length on a waterline at 85 percent of the least molded depth measured from the top of the flat keel or the length from the fore side of the stem to the axis of the rudder stock on that waterline, whichever is greater. In vessels designed with a rake of keel, this length is measured on a waterline parallel to the design waterline.

OUR 57'-11" LENGTH OVERALL VESSEL WOULD HAVE 51'-8" REGISTER LENGTH IN THIS CASE

2. SIMPLIFIED SYSTEM - REGISTER LENGTH IS AS FOLLOWS (SUBPART E)

Registered length means—
(a) For a single-hull vessel, the vessel's overall length; and
(b) For a multi-hull vessel, the horizontal distance between the outboard side of the foremost part of the stern of the foremost hull and the outboard side of the aftermost part of the stern of the aftermost hull, excluding fittings or attachments.

OUR 57'-11" LENGTH OVERALL VESSEL WOULD HAVE 57'-11" REGISTER LENGTH IN THIS CASE



PIPE GUARD APPENDAGE)

49'-5 1/2" REGISTER LENGTH
PRE-OLD SYSTEM (BEFORE 10-12-89)

WATERLINE LENGTH AT 85% MOLDED DEPTH = 53'-10"

MOULDED HULL LINE

MOULDED DEPTH 10'-4"

MOULDED DEPTH 85%

ST-11" REGISTER LENGTH UNDER SUPA-PAC E - STANDARD SYSTEM (90% WL LENGTH)

ST-11" LENGTH OVERALL

ST-11" IS ALSO REGISTER LENGTH UNDER SUPA-PAC E - SIMPLIFIED SYSTEM

ANCHOR & SHROUD (APPENDAGES)

FOUR DECK

MAIN DECK (TOWNAGE DECK)

BUOY'S BOW

REGISTER

W.O.M.L.

COMMENTS:
FINN HULL VOLUME 11.5
11.5" SEEEZE VOLUME
FUEL OIL
HYDRAULIC OIL
FRESH WATER

PARTICULARS

LENGTH OVERALL
LENGTH 49'-5 1/2"
LENGTH MOLDED
REGISTER HULL
REGISTER HULL OVERALL
LENGTH MOLDED OVERALL

DATE

NO.

REF.

OUTBOARD PRC

JMB

50 FT LIMIT DESIGN

OUTBOARD PRC

CORRECTION

**THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY**



JMC

Jensen Maritime Consultants Inc. NAVAL ARCHITECTS MARINE ENGINEERS

308 Fisheries Building
4241 21st Ave West • Seattle, WA 98199 U.S.A.

Phone (206) 284-1274/ 284-8378
Telex No. 152717 • Fax (206) 284-2558

DATE 2-16-90 REF NO. 89192 FROM: HAL HOCKEMA
 TO ATTN OF: BILL CHENEY COMPANY: JENSEN MARITIME
 COMPANY: COMM. FISHERIES DIV. NO. OF PAGES (INCL. COVER): 2
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1. STANDARD SYSTEM - REGISTER LENGTH IS DEFINED AS FOLLOWS (SUBPART C)

Registered length means either 88 percent of the length on a waterline at 85 percent of the least molded depth measured from the top of the flat keel or the length from the fore side of the stem to the axis of the rudder stock on that waterline, whichever is greater. In vessels designed with a rake of keel, this length is measured on a waterline parallel to the design waterline.

OUR 57'-11" LENGTH OVERALL VESSEL WOULD HAVE 51'-8" REGISTER LENGTH IN THIS CASE

2. SIMPLIFIED SYSTEM - REGISTER LENGTH IS AS FOLLOWS (SUBPART E)

Registered length means—
 (a) For a single-hull vessel, the vessel's overall length; and
 (b) For a multi-hull vessel, the horizontal distance between the outboard side of the foremost part of the stern of the foremost hull and the outboard side of the aftermost part of the stern of the aftermost hull, excluding fittings or attachments.

OUR 57'-11" LENGTH OVERALL VESSEL WOULD HAVE 57'-11" REGISTER LENGTH IN THIS CASE

THE OLD (PRE - OCTOBER 12, 1989) MEASUREMENT RULES REQUIRE REGISTER LENGTH MEASUREMENT AS FOLLOWS:

§ 69.03-13 Register length.

(a) The length measured on the tonnage deck, from the fore part of the outer planking (where it is rabbeted) on the side of the stem of wooden vessels, or fore end of lap of outer plating of steel or iron vessels, to the after side of the main sternpost, shall be accounted the vessel's register length. (See Figures 2 and 3 (§ 69.07-1).)

(b) In the case of screw vessels with no sternpost, take the length to the forward side of the rudder-stock or line of same extended through the deck.

(c) The register length of scows and barges, with a square bow and stern sloping up from the bottom to the deck, and with neither stem nor sternpost, is to be taken on the deck from the extreme point of the hull at the bow to the extreme point of the hull at the stern; that is, the overall length of the hull, not including guards or rubbing strakes, is to be considered the register length of such vessel.

OUR 57'-11" LENGTH
OVERALL VESSEL WOULD
HAVE 49'-6" REGISTER
LENGTH IN THIS CASE

THIS IS THE RULE THAT HAS BEEN IN EFFECT FOR DECADES, AND PROBABLY IS THE RULE THAT THE ALASKA LIMIT OF 50' REGISTER LENGTH IS WRITTEN FROM. HOWEVER THIS DEFINITION HAS BEEN REPLACED BY THE TWO CHOICES ON THE PRECEDING PAGE AND THEREFORE IS NO LONGER APPLICABLE.

TO SIMPLIFY MATTERS I SUGGEST THAT THE LAW FOR LIMITING LENGTH OF SALMON SEINERS BE ALTERED TO ONLY ADDRESS 50' "LENGTH OVERALL" AND DELETE ANY REFERENCE TO "REGISTER LENGTH."

I HAVE INCLUDED A PROFILE DRAWING OF ONE OF OUR DESIGNS TO CLARIFY THE DEFINITIONS ABOVE.

THANKS FOR YOUR ATTENTION IN THIS MATTER.





JMC

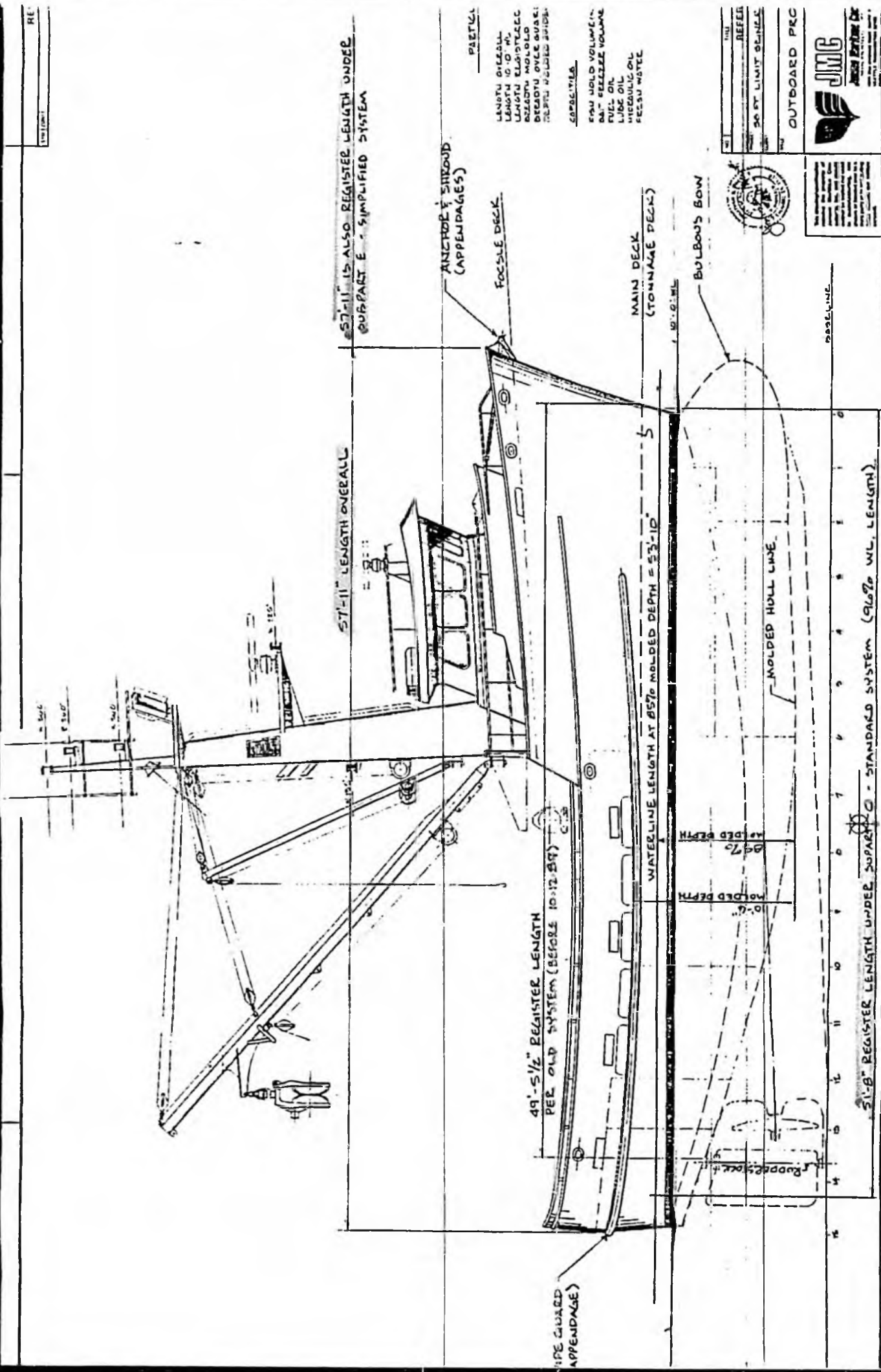
Jensen Maritime Consultants Inc. MEMBER OF THE JENSEN GROUP

HAL G. HOCKEMA, P.E.
Chief Projects Manager

4241 21st Avenue West, Suite 308
Seattle, Washington 98199
Telex 152 717

(206) 284-1274
FAX (206) 284-2566
Home (206) 365-3380

RE
 10/1/68



57'-11" LENGTH OVERALL

57'-11" IS ALSO REGISTER LENGTH UNDER
 PART E - SIMPLIFIED SYSTEM

49'-5 1/2" REGISTER LENGTH
 PER OLD SYSTEM (BEFORE 10-12-59)

WATERLINE LENGTH AT 85% MOLDED DEPTH = 53'-10"

MAIN DECK
 (TONNAGE DECK)

ANCHOR & SHROUD
 (APPENDAGES)

FOCUS DECK

MOLDED HULL LINE

BULBOUS BOW

BASLINE

51'-8" REGISTER LENGTH UNDER PART E - STANDARD SYSTEM (90% WL LENGTH)

- PARTIAL
- LENGTH OVERALL
 - LENGTH 10'-0" WL
 - LENGTH ELASTIC
 - LENGTH MOLDED
 - LENGTH OVERALL
 - LENGTH MOLDED
- CORRECTIONS
- FRU HOLD VOLUME
 - FRU FREEZE VOLUME
 - FUEL OIL
 - LUBE OIL
 - MISC OIL
 - PESSU WASTE

NO. _____

DATE _____

SCALE _____

50 FT LIMIT SCALE

OUTBOARD PRC

JMB

JOHN B. MURPHY

1000 N. 10th St. Annapolis, MD 21403

410-291-1111





STATE OF ALASKA

HOUSE OF REPRESENTATIVES

Box V, Juneau, Alaska 99811

(907) 465-2487 • 465-2498

REPRESENTATIVE CLIFF DAVIDSON • DISTRICT 27 • Box 746, Kodiak, Alaska 99615 • (907) 486-8250

TO: House Resources Committee Members

FROM: Representative Cliff Davidson, ^{Co-Chair} Co-Chair
House Resources Committee

DATE: March 6, 1990

SUBJECT: Maximum Length of Salmon Seine Vessels

House Bill 569 updates language currently in Alaska Statute 16.05.835 which states commercial salmon seiners may not be longer than 50 feet, registered Coast Guard length, and 58 feet overall length. On September 12, 1989, the Coast Guard changed their method of measuring vessels. Previously, the length from the rudder stock to the bow was used. They are now measuring the overall length of a boat to be consistent with international law.

Alaska Statute and regulation both refer to the "50 feet, registered Coast Guard" language. If this language is not changed in Statute, newly built salmon seiners will be Coast Guard registered using the overall length (rather than the keel length) and would be over the allowable size limit. The language change proposed in this bill will correct this problem and simplify the measurement standard.

HB

572

Date Referred: February 28, 1990

FURTHER REFERRALS:

JUDICIARY

Date of Committee Action: 4-9-90

The RESOURCES Committee considered:

HB 572

HOUSE BILL NO. 572

PIPELINE TARIFF CASE MANAGEMENT

"An Act relating to management of cases involving interstate regulation of pipeline carriers."

RECOMMENDATIONS:

- be replaced with CSHB 572 (RES) the same title
- a new title
- have attached amendment(s)
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(s):
(Dept)

APPROVES PREVIOUS: (Date/Dept)

- fiscal impact NR
- zero fiscal note _____
- zero with analysis _____

- fiscal note(s) _____
- zero fiscal note(s) _____
- zero fn/analysis _____

SIGNING DO PASS:

Cliff Davidson DAVIDSON
Carol Menard MENARD
Les Jacko JACKO
Richard Foster FOSTER

SIGNING:
(Check approb. column)

Do Not Pass No Rec Amend

	Do Not Pass	No Rec	Amend
<i>Bill Hudson</i> HUDSON		<input checked="" type="checkbox"/>	
<i>Scott Sharp</i> SHARP		<input checked="" type="checkbox"/>	
<i>W. Furnace</i> FURNACE	<input checked="" type="checkbox"/>		

Cliff Davidson
Chairman's Signature

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: Management of cases involving inter-
state regulation of pipeline carriers
Sponsor: House Resources
Requestor: House Resources

Agency Affected: Department of Revenue
BRU: Oil & Gas Audit Division

Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
OPERATING						
PERSONAL SERVICES	325.0	325.0	325.0	325.0	325.0	325.0
TRAVEL	30.0	30.0	30.0	30.0	30.0	30.0
CONTRACTUAL	200.0	200.0	200.0	200.0	200.0	200.0
SUPPLIES	5.0	5.0	5.0	5.0	5.0	5.0
EQUIPMENT	39.0	0	0	0	0	0
LANDS & STRUCTURES	21.0	21.0	21.0	21.0	21.0	21.0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	620.0	581.0	581.0	581.0	581.0	581.0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND	620.0	581.0	581.0	581.0	581.0	581.0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	620.0	581.0	581.0	581.0	581.0	581.0

POSITIONS:

FULL-TIME	5	5	5	5	5	5
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS: Attach a separate page for analysis.

Prepared By: Richard Brewer
Division: Oil & Gas Audit Division

Phone: 276-1363
Date: March 20, 1990

Approved by Commissioner: Hugh Malone
Agency: Department of Revenue

Date: 3/20/90

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Transfer of Responsibility for Federal Pipeline Tariff Proceedings from Department of Law to Department of Natural Resources

This bill amends AS 42.06.140 to give the Department of Natural Resources (DNR), which is currently expanding its pipeline monitoring role, direct control of the inter-state pipeline tariff management. To make sure that revenue and environmental consequences of pipeline tariffs receive due weight, DNR should coordinate its efforts closely with the Departments of Revenue, Environmental Conservation, Fish and Game and Law.

This change would reduce critical delays in apprehension of resource management problems. (Procedurally, in the short run this shift would make little difference, since Law would still be the legal arm for the Department of Natural Resources.) The central premise of HB 572 is that pipeline tariffs directly impact resource development issues and should therefore be managed by a line agency.

The Department of Law was assigned this function in 1976 under AS 42.06.140(a)(10), apparently pursuant to its statutory mandate under AS 44.23.050 to appear as attorney before distant courts. When the Alaska Pipeline Commission became part of the APUC in 1981, the same arrangement with the Department of Law was carried over.

— [Statute Reference: AS 42.06.140(a)(10); AS 42.06.230; AS 44.37.020(c)]

— [See Fineberg Report: recommendation #12 (Chapter IV, p. 28)]

STATE OF ALASKA
THE LEGISLATURE

POUCH Y STATE CAPITOL
JUNEAU ALASKA 99811
907 465 3800


LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM

March 9, 1990

SUBJECT: House Bill 572 -- sectional analysis

TO: Representative Cliff Davidson, Co-Chair
House Resources Committee

FROM: Jack Chenoweth
Legislative Counsel 

The measure would re-assign the responsibility for representing the interests of the state in certain federal proceedings relating to the interstate regulation of pipelines from the Department of Law to the Department of Natural Resources.

Bill section 1 enunciates the purpose of the bill.

The principal operative provision of the measure appears in bill section 4, adding a new subsection to the duties of the Department of Natural Resources. The department is given "principal responsibility in all federal proceedings involving the interstate regulation of a pipeline carrier."

The amendments set out in bill sections 2 and 3, both applicable to the Alaska Public Utilities Commission, make related changes necessitated by the shift of responsibility in federal proceedings to the Department of Natural Resources.

JBC:lmb
L10/007

FISCAL NOTE

REQUEST:

Revision Date: _____
 Title: "... relating to... cases involving
 interstate regulation of pipeline carriers."
 Sponsor: House Resources
 Requestor: House Resources

Agency Affected: Department of Law
 BRU: Oil and Gas Special Projects
 Components: Operations

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

Please see the attached analysis.

Richard I. Pegues

Prepared by: Richard I. Pegues, Director
 Division: Administrative Services

Phone: 465-3672
 Date: March 21, 1990

Approved by Commissioner: Richard I. Pegues / FOR /
Douglas B. Bailly Attorney General
 Agency: Department of Law

Date: March 21, 1990

Distribution (by preparer):

- Legislative Finance.
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. HB 572

This bill amends AS 42.06.140(a) and adds a new subsection to AS 44.37.020 in a way that transfers responsibility for representation of the interests of the state, in federal proceedings involving regulation of pipeline carriers, from the Department of Law to the Department of Natural Resources.

If it is the intent of the legislation to change the state agency client status for pipeline matters before the Federal Energy Regulatory Commission, the Department of Law has no objection to the bill and there should not be a fiscal impact. If, on the other hand, it is the intent of the legislation to confer primary responsibility for representation of the state in legal proceedings in this or any other forum (as is stated in Section 1 of the bill), to a department of state government other than the Department of Law, the department totally objects. Administration of the state's legal affairs must be coordinated and directed from a single authority. The state's legal representation cannot be conducted by two attorneys general for the same reason that there cannot be two governors, or two speakers of the house, or two presidents of the senate.

FISCAL NOTE

REQUEST:

Revision Date: 3/27/90
Title: Interstate Regulation of Pipe-
line carriers
Sponsor: House Resources Committee
Requestor: House Resources Committee

Agency Affected: Natural Resources
BRU: Management and Administration

Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
FEDERAL FUNDS						
OTHER						
TOTAL	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

The \$1.5 million per year is the current Department of Law funding for the TAPS corrosion/tariff case. If the Department of Law responsibilities for this case were transferred to DNR, similar funding would be needed to hire attorneys and technical consultants. Funding levels could also vary from year to year, depending on the situation under consideration.

Prepared by: _____ Phone: 465-2400

Division: Carol Wilson, Commissioner's Office Date: 3/27/90

Approved by Commissioner:  Date: 3/27/90

Agency: Department of Natural Resources

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

HB

574

HOUSE COMMITTEE REPORT

(9)

Date Referred: February 28, 1990

FURTHER REFERRALS:

FINANCE

Date of Committee Action: 3/12/90

The RESOURCES Committee considered:

HB 574

HOUSE BILL NO. 574

APPROP: KENAI PENINSULA FIRE HAZARD

"An Act making special appropriations to the Department of Natural Resources to build certain fire breaks and to take other action to control the fire hazard on the Kenai Peninsula created by the bark beetle infestation; and providing for an effective date."

RECOMMENDATIONS:

- be replaced with _____ the same title
- have attached amendment(s) a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(S): _____ APPROVES PREVIOUS: _____ (Date/Dept)

(Dept)

- fiscal impact DNR-FOREST MANAGEMENT fiscal note(s) _____
- zero fiscal note _____ zero fiscal note(s) _____
- zero with analysis _____ zero fn/analysis _____

SIGNING DO PASS:

Grant Munnich

Chloe De

Mike Swane

George Jack

SIGNING:

(Check approp. column)

	Do Not Pass	No Rec	Amend
<i>Bill Huds</i>		<input checked="" type="checkbox"/>	
<i>Rest Shans</i>		<input checked="" type="checkbox"/>	
<i>Walter W</i>		<input checked="" type="checkbox"/>	

Grant Munnich

 Chairman's Signature

STATE OF ALASKA
1990 LEGISLATIVE SESSION

BILL VERSION : HB 574
PUBLISH DATE : _____

FISCAL NOTE

REQUEST:

Revision Date: 14-Mar-90 Agency Affected: Natural Resources
 Title: Special Appropriation to build fire breaks and
central fire hazzard on the Kenai Peninsula. BRU: Forest Management
 Sponsor: Resource Committe Components: Forest Management
 Requestor: House Resources

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	202.9					
TRAVEL	8.0					
CONTRACTUAL	748.0					
SUPPLIES	29.1					
EQUIPMENT	12.0					
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	1,000.0	0.0	0.0	0.0	0.0	0.0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE	55.0					
---------	------	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND	1,000.0					
FEDERAL FUNDS						
OTHER						
TOTAL	1,000.0	0.0	0.0	0.0	0.0	0.0

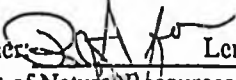
POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY	4.0					

ANALYSIS: (Attach a separate page if necessary)

See Attached

Prepared by: George K. Hollett Phone: 762-2503
 Division: Forest Management Date: 14-Mar-90

Approved by Commissioner:  Lennie Gorsuch Date: 14-Mar-90
 Agency: Department of Natural Resources

Distribution (by preparer) :
 Legislative Finance
 Legislative Sponsor
 Requestor
 Office of Management and Budget
 Impacted Agency(ies)

COOPER LANDING SPRUCE BEETLE PROJECT
ALASKA DIVISION OF FORESTRY
MARCH 7, 1990

Outline of Project Proposal

Over the years, the Kenai Peninsula has been impacted time and time again by spruce beetle (*Dendroctonus rufipennis*, kby). Approximately 538,000 acres has been infested from the late 60's through '75. Presently, the area of primary concern is the area from Kenai Lake to Skilak Lake along the Kenai River corridor and northward towards Hope. Within this area, an estimated 130,000 acres of spruce trees have been killed or infested. Due to the extensive amounts of beetle killed trees surrounding the community of Cooper Landing, this area has been given first priority for attention.

The State of Alaska owns approximately 6,400 acres in the Cooper Landing area. The lands have been selected by the Kenai Peninsula Borough under the Municipal Entitlement Act. Transfer of these lands to the Borough are still pending. Approximately 2,000 acres have been infested. The Division of Forestry has identified the following priorities:

1. Protect life and property from wildland fire;
2. Reduce the fuel loading adjacent to private lands;
3. Salvage usable forest products from the beetle killed forest and create employment opportunities;
4. Put the forest back into productivity as quickly as possible.

To achieve these objectives, the Division has embarked on the following course of action. Presently, the Division has seven active or completed salvage sales in the Cooper Landing Area. Additional salvage areas are currently being prepared. These actions are being completed under existing budget dollars.

The Division has requested an additional \$700,000 to be appropriated by the Legislature to help meet the above objectives. With these additional dollars, the Division proposes to develop two fuelbreaks of approximately 500 feet in width and 4,000 feet in length (92 acres). A containment line to mineral soil will be developed within these fuelbreaks. One is proposed east of Cooper Creek and will utilize the old Cooper Creek dam road as the containment line and the other is proposed west of Shackelford Creek and will require construction of a containment line. Within the fuelbreaks, all dead and infested spruce will be removed. The hardwoods and hemlocks will be left untouched. The harvested trees will be tree length yarded to landings where they will be limbed and topped, cut to log length and decked. The slash will be disposed of by burning. The fuelbreaks will be regenerated to primarily hardwoods. Estimated cost of the fuelbreaks is \$117.1.

The Division is also proposing to reduce fuel loading in areas immediately adjacent to private land by the creation of fuel reduction areas. The fuel reduction areas total 656 acres. These areas will be treated similarly to the

Cooper Landing Spruce Beetle Project

fuelbreaks but will not include containment lines. Some of this area is currently under salvage contracts, but additional treatment and regeneration of areas is necessary to reduce the potential of fire spread. These areas are located within 1/2 mile of private lands and do not have any vegetative buffers between the treatment area and private lands. Estimated cost of the fuel reduction areas is \$477.4.

The areas outside of the fuelbreaks and fuel reduction areas are called vegetative management areas. Stands and pockets of beetle killed trees will be salvaged as part of the Division's normal budget process.

The Division also wants to remove the hazard trees on State land along the Sterling Highway. The field work is completed, but dollars are needed to contract the removal. The estimated cost of the project is \$25.0.

To administer these various contracts, the Division is proposing to hire a temporary position at the Forest Tech IV level for the life of the contracts. The Division also proposes to upgrade our radio system into Cooper Landing to allow better coordination on initial attack fires. At the present time, our initial attack vehicles do not have communications with our dispatch office by radio. Costs for this position plus administrative support dollars for the project are estimated to be \$80.5

The purpose of this project is to rapidly develop two fuelbreaks in the vicinity of Cooper Landing and to reduce fuel loading on areas adjacent to private lands in an effort to diminish the potential for loss of life or property from wildfire. This project is also designed to return the forest back into productivity by reforesting the treated areas with primarily hardwoods to reduce the potential of fire spread. Due to the seasonal time constraints of portions of this project proposal, the funds should be allocated as a capital improvement project (CIP). That portion of this project that may extend into the fall of 1991 is the regeneration and possibly slash burning. Some of the costs allocated are for one and seed collection which will be undertaken in the fall of 1990. Approximately 110,000 seedlings will need to be ordered and would be old enough to outplant in the fall of 1991. To get a jump on the grass competition, we will want to scarify just prior to seeding and planting. This means scarification will be conducted in the late summer and early fall of 1991. Some of the ash and debris piles will need to be burned in the late fall of 91.

Project Cost Summary:

Fuelbreak(s)	\$ 117.1
Fuel Reduction Areas	477.4
Hazard Trees	25.0
State Administration	\$ 80.5
	<u>\$ 700.0</u>

Cooper Creek Fuelbreak

Project size: 500 feet by 4,000 feet (46 acres)

Current conditions: 85% of the spruce is dead. Stand structure is roughly 2/3 spruce and 1/3 hemlock.

Special concerns: This bench has a very thin soil depth overlaid by alluvial deposits of silty sand.

Project Proposal:

1. Open up old Cooper Creek dam road and put to bed after completion of use.
Cost \$6.0.
2. Remove all dead spruce 7" DBH and larger. Tree length yard, limb and top at landings and deck merchantable material. Burn slash and unmerchantable material at landings. Work to be completed by vendor service contract.
Cost: \$41.8 (\$160/MBF @ 5 MBF/ac - total 46 acres) (plus \$5.0 slash burning)
3. Mechanically pile ground fuel accumulations during winter months with dozer and brush blade. Vendor service contract on approximately 35 acres.
Cost: \$1.9 (\$50/acre + mobilization costs)
4. State crew to burn mechanically piled slash.
Cost: \$0.2
5. Regeneration of fuelbreak with birch by direct seeding. Some interplanting with spruce. Seed collection, handtool site prep and direct seeding to be accomplished by vendor service contract.
Cost: \$7.3 (\$150/acre and cone/seed collection and seedling cost)

Project Totals:

Open Road	\$ 6.0
Removal	41.8
Piling	1.9
Burning	.2
Regeneration	7.3
Total	\$ 57.2

000 feet (46 acres)
ately spruce forest with approximately 90% of the
ead.

visible from the Sterling Highway while
a Bridge.
stable soils capable of mass movement.

18 and larger. Two vendor services
oped. One will address the lower sidehill
ch may require unconventional harvest
tract will be the more stable uplands, and
y conventional means. Logs will be decked
cations. Slash to be burned at landings.
6 MBF/ac - Total 46 acres) (plus \$5.0 for
plus containment line construction)
by dozer with a brush blade of 50% of the
leted by vendor service contract.

(mobilization, etc.)
break will be completed by one vendor
provisions differing the sidehill area
project. The sidehill will involve hand
plant spruce seedlings and to direct seed
stabilize slopes. The upper area will be
and hand planted with spruce.
seed collection and seedling cost)

\$ 49.7
2.4
7.8
\$ 59.9

Bean Creek Fuel Reduction Area

Project Size: 200 acres

Current Condition: 95% dead spruce in a homogenous stand.

Special Concerns:

1. The Bean Creek recreation trail transect area.
2. Removal of spruce product on Bean Creek road will negatively impact residents. This road is not satisfactorily built for heavy truck traffic.

Project Proposal

1. Develop a new access forest road along the DOT&PF "preferred alternative" for realignment of the Sterling Highway.
Cost: \$40.0
2. Log all dead spruce 7" DBH and larger by vendor service contract. Deck product along access route. Slash dead under 7" DBH size.
Cost: \$128.0 (\$160/MBF) (4 MBF/ac)
3. Mechanically scarify 50% of the fuel reduction area with dozer and brush blade by vendor service contract. This will effectively break ground fuel continuity while at the same time establishing regeneration planting sites.
Cost: \$14.0 (\$70/ac)
4. Regular State crew to develop prescribed burn plan to fire berm piles resulting from the scarification phase. Vendor service contract burning of the piles.
Cost: \$6.0
5. Relocate 1 1/2 miles of the Bean Creek recreation trail and develop trail head parking area. This will put the trail completely on State land compared to its current trespass through private property and the trail head parking on subdivision roads.
Costs: \$28.0
6. Regeneration of the fuel reduction area is planned to be in hardwoods-paperbirch. Vendor service contract to collect seed and distribute on site by a direct seeding method. Seed drying and cleaning to be completed by State nursery.
Cost: \$12.0

Project Totals:

Access Development	\$ 40.0
Dozer Work	14.0
Trail Relocation	28.0
Burning	6.0
Site Regeneration	12.0
Total	\$ 227.0

West Shackleford Fuel Reduction Area

Project size: 139 Acres (Snug Harbor)
+ 204 Acres (Cooper Creek)
+ 42 Acres (Shackleford Creek II)
+ 14 Acres (Bridgeview)
+ 17 Acres (Firebreak)
+ 50 Acres (Old Buffers)
Total 466 Acres

Current Conditions: 90% of the spruce stand is dead.

Special Concerns:

1. Existing timber salvage contracts on 385 acres. Snug Harbor sale totaling 139 acres will need special attention to work out a program with existing contractor.

Project Proposal:

1. Remove all dead spruce 7" DBH and larger on 81 acres by vendor service contract. Slash dead under 7" DBH in size. Deck logs at designated access points. Burn slash at landings as part of ongoing process.
Cost: \$64.8 (\$160/M&F @ 5MBF/ac)
2. A total of 385 acres will be harvested under salvage contracts. Approximately 343 acres will need to have all dead trees under 10" DBH removed or slashed. To be completed by vendor service contract.
Cost: \$60.0 (\$175/ac)
3. Mechanically scarify 50% of 281 acres with a dozer and brush blade by vendor service contract.
Cost: \$19.7 (\$70/ac)
4. Burn slash piles and berm piles from scarification by vendor service contract.
Cost: \$5.0
5. Regeneration of the fuel reduction area is planned to be primarily in hardwoods (birch and alder - alder on unstable soils). Some interplanting of spruce seedlings is planned. Scarified sites will be direct seeded with hardwood seed. Vendor service contract to collect seed and distribute on site. Seed drying and cleaning will be completed by the State Nursery.
Costs: \$100.9 (collect and seed \$12.0-145 acres) (Interplant of spruce-200 acres @ \$220/ac-\$44.0) (Hand seed and hand seed bed prep-186 acres @ \$125/ac=\$23.1) (Cost of seedlings 436/ac @ \$.25/ea-\$21.8)

Project Totals:

Removal	\$	64.8
Slash		60.0
Scarify		19.7
Burning		5.0
Regeneration		100.9
Total	\$	250.4

HAZARD TREES REMOVAL-COOPER LANDING

The Division of Forestry has marked approximately 600 hazard trees located along the Sterling Highway in the Cooper Landing area. The trees marked have the potential to fall onto the road surface of the highway. The trees are located between milepost 46.0 -46.8 and milepost 49.5 - 50.2. Removal of the trees will be necessary to reduce the hazard to the passing motorist and disposal of the slash from the tree removal will be necessary to reduce the fire potential. Intermittent closure of the Sterling Highway will be necessary for public safety reasons. The estimated cost to remove these trees from state land is \$25.0.

State Administrative Costs

Forest Technician IV (new)	\$ 37.2
This position will assist in propagation, supervise, and administer contracts, evaluate field results, and complete project reports.	
Travel	2.0
Contractual	25.0
(Vehicle lease, advertisements, printing, professional contract preparation assistant, photoprocessing, phone charges, postage, vehicle maintenance, seedling shipping cost, etc.)	
Commodities	\$ <u>16.3</u>
(Gas, film, paper, communications, office supplies, paint, ribbon, tags, minor tools and equipment.)	
Total	\$ 80.5

Position Title Forest Technician IV		No. of Positions 1	Range/Step 13/A	Barg. Unit GG
Time Status T	Staff Months 12	Location Sotodolls		Electoral District
Type of Expenditure		Annual		
1		2		3
Salary* 2205 x 12		26,460	////////////////////	
Benefits* 891 x 12		10,692	////////////////////	
Premium Pay (Included in Above)			////////////////////	
Other			////////////////////	
Total Personal Services			37.2	
Travel			2.0	
Contractual			25.0	
Commodities			20.0	
Equipment				
Other				
Total Cost			84.2	
Funding Source for Total Cost				
Federal Receipts	1002			
G.F. Hatch	1003			
General Fund	1004		84.2	
Program Receipts/GF	1005			
I-A Receipts	1007			
CIP Receipts	1061			
Other				
* Personal Services Salary and Benefits Costs are from PACS.				

Justification
 This position will administer the various contracts that will be developed to handle the hazard reduction of the Cooper Landing Spruce Eettle Project.

Contracts will be developed and issued to do the following:

1. Remove hazard trees on state land along Sterling Highway.
2. Construct the Cooper Creek fuelbreak.
3. Construct the Shackleford Creek fuelbreak.
4. Fuel reduction in the Bran Creek area.
5. Fuel reduction in the west Shackleford area.

This position will be the contract administrator and the responsible person to see the fuel hazard reduction is accomplished.

REQUEST FOR
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 COMPONENT Forest Management

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EVALUATION OF SPRUCE BEETLE ALTERNATIVES ON THE KENAI PENINSULA
ALASKA DIVISION OF FORESTRY
March 9, 1990

Outline of Project Proposal

The Division of Forestry has submitted an appropriation request to the legislature to fund an evaluation of alternatives to deal with spruce beetle (*Dendroctonus rufipennis*, kby.) infestations on the Kenai Peninsula. The three areas of highest priority for evaluation of beetle infestations on State lands on the Peninsula are Moose Pass, Kalgin Island, and Bear Cove. These areas will be prioritized for evaluation and field review will be undertaken to assess forest conditions and beetle population levels. The evaluation process will include interagency activities, landowner interface and public involvement. A summary document will be prepared listing areas of concern by priority, alternatives for action, a preferred alternative, a funding estimate to implement the preferred alternative and a decision document.

Minimum staffing to manage and complete the actions outlined in this project proposal are outlined below. The new positions are temporary and will only last until June 30, 1991, which is the projected completion date of this project.

Natural Resource Manager I (new)

52.5
~~55.0~~

This position will be the project leader. The employee will lead field crews in the collection of field data; will coordinate agency, landowner and public involvement; will develop and evaluate alternatives; will prepare cost estimates of alternatives; and will prepare decision documents for line officer approval.

Clerk-Typist III (new)

29.4
~~30.0~~

This position will provide clerical support to the project including formulating newsletters, maintaining mailing lists, typing documents and correspondence, recording minutes of meetings, serving as receptionist for the group, etc.

Information Officer I (new)

39.3
~~45.0~~

Design public participation program and implement that program. Ensure compliance with public meeting regulations. Identify opportunities for better keeping the general public informed of the merging issues as well as steps being undertaken to effect control. Set results of annual aerial surveys out to everyone. Design other publications and brochures as needed.

Forest Tech III (extension - 8mm)

\$25.6

Forest Tech II (extension - 8mm)

\$20.9

Extend present seasonal technicians to gather data and preliminary map preparation; verification of ownerships, classifications and infestation levels. These positions would also gather stand data to allow determination of treatment alternatives.

Required start-up cost increment for this initiative:	
Personal Services (new positions)	119.2
(extensions of seasonal)	526.0
	\$ 46.5
Travel	6.0
Contractual (phones, utilities, copies, brochures, professional services)	103.5
(Advertisements, printing, helicopter/aircraft flights)	
Vehicle lease and operating costs)	19.8
Commodities	6.0
Equipment (computer, printer, peripherals)	7.0
(Desks, chairs, bookcases, etc.)	5.0
TOTAL START-UP INVESTMENT	\$300.0

For additional information, contact Jim Paterson, the Kenai-Kodiak Area Forester and Project Manager at:

Alaska Division of Forestry
 Kenai-Kodiak Area
 HC 1, Box 107
 Soldotna, AK 99669
 (907) 262-4124

Position Title Natural Resource Manager I		No. of Positions 1	Range/Step 18/A	Barg. Unit GO
Time Status T	Staff Months 12	Location Anchorage		Election District 7
Type of Expenditure		Justification		
1	2	3		
Salary* 3114 x 12	37,356	//////////		
Benefits* 1099 x 12	13,188	//////////		
Vacation Pay (Included in Above)	//////////	//////////		
Other	//////////	//////////		
Total Personal Services	//////////	50.5		
Travel		3.0		
Contractual		53.5		
Commodities		3.0		
Equipment		5.0		
Other				
Total Cost		115.0		
Funding Source for Total Cost				
Federal Receipts	1002			
G.F. Match	1003			
General Fund	1004	115.0		
Program Receipts/GF	1095			
I-A Receipts	1007			
CIP Receipts	1061			
Other				
* Personal Services Salary and Benefits Costs are from PACS.				

This position will be the project manager in development and evaluation of alternatives to deal with spruce beetle infestations on the Kenai Peninsula. Duties of the position will include:

1. Leading of field crews in collection of field data.
2. Coordinate agency, landowner and public involvement.
3. Develop and evaluate alternatives.
4. Prepare cost estimates of alternatives.

This position will provide overall project management and direction. Getting the job done on time and within budget are direct responsibilities of this position.

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Position Title Clerk Typist III		No. of Positions 1	Range/Step 8/A	Barg. Unit GG
File Status T	Staff Months 12	Location Anchorage		Election District 7
Type of Expenditure		Justification		
1	2	3		
Salary* 1678 x 12	20,136	////////////////////		
Benefits* 771 x 12	9,252	////////////////////		
Premium Pay (included in above)	////////////////////	////////////////////		
Other	////////////////////	////////////////////		
Total Personal Services	////////////////////	29.4		
Travel				
Contractual				
Commodities		6.8		
Equipment				
Other				
Total Cost		36.2		
Funding Source for Total Cost				
Federal Receipts 1002				
G.F. Hatch 1003				
General Fund 1004		36.2		
Program Receipts/GF 1005				
I-A Receipts 1007				
CIP Receipts 1061				
Other				
* Personal Services Salary and Benefits Costs are from PACS.				

This position will provide clerical support for the Kenai Peninsula Spruce Hard Barkle project. Duties will include receptionist, recording minutes at public meetings, typing documents and correspondence, developing newsletters, maintaining mailing list and mailing of newsletters and notices to the public.

REQUEST FOR
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Position Title Information Officer I		No. of Positions 1	Range/Step 14/A	Barg. Unit GO																																																												
Time Status T	Staff Months 12	Location Anchorage		Election District 5																																																												
Type of Expenditure		Justification																																																														
		This position will design the public participation program dealing with spruce beetle alteration on the Kenai Peninsula. The public is a major player in which alternative is accepted and must be involved in its development.																																																														
<table border="1"> <thead> <tr> <th>Type of Expenditure</th> <th>1</th> <th>2</th> <th>Account</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>Salary* 2353 x 12</td> <td></td> <td>28,836</td> <td>////////////////////</td> <td></td> </tr> <tr> <td>Benefits* 026 x 12</td> <td></td> <td>11,100</td> <td>////////////////////</td> <td></td> </tr> <tr> <td>Freight Pay (Included in Above)</td> <td></td> <td>////////////////////</td> <td>////////////////////</td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td>////////////////////</td> <td>////////////////////</td> <td></td> </tr> <tr> <td>Total Personal Services</td> <td></td> <td>////////////////////</td> <td></td> <td>39.3</td> </tr> <tr> <td>Travel</td> <td></td> <td></td> <td></td> <td>3.0</td> </tr> <tr> <td>Contractual</td> <td></td> <td></td> <td></td> <td>50.0</td> </tr> <tr> <td>Commodities</td> <td></td> <td></td> <td></td> <td>3.0</td> </tr> <tr> <td>Equipment</td> <td></td> <td></td> <td></td> <td>7.0</td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total Cost</td> <td></td> <td></td> <td></td> <td>102.3</td> </tr> </tbody> </table>		Type of Expenditure	1	2	Account	3	Salary* 2353 x 12		28,836	////////////////////		Benefits* 026 x 12		11,100	////////////////////		Freight Pay (Included in Above)		////////////////////	////////////////////		Other		////////////////////	////////////////////		Total Personal Services		////////////////////		39.3	Travel				3.0	Contractual				50.0	Commodities				3.0	Equipment				7.0	Other					Total Cost				102.3	<p>Duties of this position will include the following:</p> <ol style="list-style-type: none"> 1. Implement the public participation program. 2. Ensure compliance with public meeting regulations. 3. Ensure the public is informed of issues and what steps are underway for beetle control. 4. Conduct any necessary surveys and get the results out to the public. 5. Develop and have printed brochures and any other publications. 		
Type of Expenditure	1	2	Account	3																																																												
Salary* 2353 x 12		28,836	////////////////////																																																													
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ALASKA DIVISION OF FORESTRY
 COOPER LANDING AREA-PROGRAM RECEIPTS
 MARCH 13, 1990

The following is an estimate of the program receipts or salvage operations in the spruce beetle killed stands in the Cooper Landing Vicinity.

1. Proposed Operations Under Service Contract Within the Proposed Fuelbreaks and Fuel Reduction Areas

<u>Activity</u>	<u>Acres</u>	<u>Est. Volume</u>	<u>Est. Value</u>	<u>Total Value</u>
Fuelbreaks	92	920 Cords	\$25/Cord	\$23,000.00
Buan Creek	200	300 Cords	\$25/Cord	7,500.00
Bridgeview	10	93 Cords	\$25/Cord	2,325.00
Fuelbreak	22	240 Cords	\$25/Cord	6,000.00
Old Buffers	50	500 Cords	\$25/Cord	12,500.00
			Total	\$51,325.00

2. Operations Proposed or Existing Under Timber Sale Contract Within Fuel Reduction Areas

<u>Activity</u>	<u>Acres</u>	<u>Est. Volume</u>	<u>Est. Value</u>	<u>Total Value</u>
		70 MBF	\$22.75/MBF	
*Snug Harbor	130	563 Cords	\$ 1.00/Cord	\$ 2,155.50
*Shackleford Creek	42	42 Cords	\$ 1.00/Cord	450.00
Cooper Creek	204	2,618 Cords	\$ 1.00/Cord	2,618.00
Total (Less \$1,522.50 for Scarification on Portions of Snug Harbor)				\$ 3,701.00
			Grand Total of #1 and #2	\$55,026.00

*Active Sales previously sold.

STATEMENT OF
DUANE HARP
DISTRICT RANGER, SEWARD DISTRICT
CHUGACH NATIONAL FOREST, USDA FOREST SERVICE

Before the
Joint House and Senate Resources Committee
Alaska Legislature

Concerning
Beetle Infestation on the Kenai Peninsula.

March 12, 1990

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

As Dr. Holsten has pointed out, the Kenai Peninsula has been infested with an epidemic of spruce bark beetle over the past 10 years. In particular, the Cooper Landing area has been severely affected.

In 1986, the Forest Service initiated plans to deal with the beetle epidemic. Based on an environmental assessment completed in July 1987, a decision was made to 1) reduce the spread of the infestation by thinning green stands of spruce trees susceptible to beetle attack, 2) to salvage harvest timber where feasible and 3) to reduce the threat of fire to the Cooper Landing area by harvesting dead and dying trees and by constructing fuelbreaks around trailheads and campgrounds. That decision was appealed, and consequently, harvest was limited to dead trees in areas posing only the highest fire threat to Cooper Landing.

The threat of wildfire to the Cooper Landing area is very real. The Kenai Peninsula has a history of large wildfires including a burn of over 350,000 acres in 1947, the 10,000 acre Kenai Lake Burn of 1959, and in 1969, the 86,000 acre Swanson River Burn and the 2,600 acre Russian River Burn. Each of these fires was man caused. Each summer we experience fire starts in the Cooper Landing area. To date, weather and wind conditions have allowed us to suppress the fires before they became large.

Since the 1987 decision, the beetle infestation has increased in intensity. Currently, in the Cooper Landing area, some 27,000 acres of spruce on National Forest System lands are affected. Estimates of tree mortality range from 65 to 95 percent of all spruce 5 inches in diameter and larger. Of the total affected acreage, only 950 acres are currently scheduled for harvest; and to date, less than 100 acres have actually been logged. The Forest Service continues to reduce hazardous fuels in and around heavily used areas such as campgrounds and trailheads.

Over the past three years, the U.S. Forest Service, the State Division of Forestry, and the residents of Cooper Landing have become increasingly concerned about the potential for a catastrophic wildfire in the Cooper Landing area. Trees which have been dead for five years or more are now starting to fall, creating large concentrations of dry fuels on the forest floor. These concentrations increase both the severity of a fire and the difficulty of suppressing one. If no additional fuel reduction work is done, we can expect such hazardous fuel conditions to exist for 20 to 40 years.

In response to these concerns, in June 1989, the Forest Service, State Division of Forestry, U.S. Fish and Wildlife Service, and the Kenai Peninsula Borough strengthened plans for responding to a wildfire in the Cooper Landing area.

Last August, the Chugach National Forest began planning to deal with the present situation. In October, I initiated an environmental assessment process to examine alternatives to meet two primary objectives on National Forest System lands: 1) to reduce the risk of a catastrophic wildfire in the Cooper Landing area to an acceptable level; and 2) to restore forest health by re-establishing a vigorous and diverse forest. A working group consisting of Cooper Landing area residents, representatives of the local timber industry, the

environmental community, the Kenai Borough Economic Development District, the Department of Fish and Game, and the Division of Parks, was formed to participate in the planning process. The State Division of Forestry, the U.S. Fish and Wildlife Service, and the Kenai Peninsula Borough are also key in integrating and coordinating our efforts with their own plans.

The working group recommended a concentrated effort in three areas: 1) reduce fire hazards around residences and on private property, 2) construct fuelbreaks in strategic locations, and 3) reduce large concentrations of dead fuel. Public forums to discuss these actions are scheduled this week in Soldotna, Anchorage, and Cooper Landing.

The deadline for a decision based on the environmental assessment is June 29, 1990. However, it has become apparent that the situation is too urgent to wait and that some action is needed before the 1990 fire season. As a result, the Forest Service plans to construct two major fuelbreaks and several smaller fuelbreaks in critical areas. In addition, we will increase our fire suppression forces and fire prevention efforts. The Forest Service and State Division of Forestry will also conduct a workshop for Cooper Landing residents on how to make homes fire resistant.

I must stress that the fuelbreaks are only a small part of the solution to the problem. The 200 to 500 foot wide breaks will provide lines of defense for fighting wildfires. To adequately lower the risk of wildfire hazardous fuels must be reduced over a large area. The forest health and vigor must also be restored so that bark beetle infestations will not reach epidemic proportions in the future. The environmental assessment scheduled for completion in late June will assist me in making that decision for the National Forest System lands in the Cooper Landing area.

It is also crucial that actions be implemented on State of Alaska lands. The Division of Forestry has been working closely with us in developing coordinated strategic plans to deal with the spruce bark beetle epidemic and associated wildfire problem. I urge the Committee to give full support to the Department of Natural Resources efforts to work with the Forest Service on this important issue.

EVALUATION OF SPRUCE BEETLE ALTERNATIVES ON THE KENAI PENINSULA
ALASKA DIVISION OF FORESTRY
March 9, 1990

Outline of Project Proposal

The Division of Forestry has submitted an appropriation request to the legislature to fund an evaluation of alternatives to deal with spruce beetle (*Dendroctonus rufipennis*, kby.) infestations on the Kenai Peninsula. The three areas of highest priority for evaluation of beetle infestations on State lands on the Peninsula are Moose Pass, Kalgin Island, and Bear Cove. These areas will be prioritized for evaluation and field review will be undertaken to assess forest conditions and beetle population levels. The evaluation process will include interagency activities, landowner interface and public involvement. A summary document will be prepared listing areas of concern by priority, alternatives for action, a preferred alternative, a funding estimate to implement the preferred alternative and a decision document.

Minimum staffing to manage and complete the actions outlined in this project proposal are outlined below. The new positions are temporary and will only last until June 30, 1991, which is the projected completion date of this project.

Natural Resource Manager I (new)	\$51.0
This position will be the project leader. The employee will lead field crews in the collection of field data; will coordinate agency, landowner and public involvement; will develop and evaluate alternatives; will prepare cost estimates of alternatives; and will prepare decision documents for line officer approval.	
Clerk-Typist II (new)	\$30.0
This position will provide clerical support to the project including formulating newsletters, maintaining mailing lists, typing documents and correspondence, recording minutes of meetings, serving as receptionist for the group, etc.	
Information Officer I (new)	\$45.0
Design public participation program and implement that program. Ensure compliance with public meeting regulations. Identify opportunities for better keeping the general public informed of the merging issues as well as steps being undertaken to effect control. Get results of annual aerial surveys out to everyone. Design other publications and brochures as needed.	
Forest Tech III (extension - 8mm)	\$25.6
Forest Tech II (extension - 8mm)	\$20.9
Extend present seasonal technicians to gather data and do preliminary map preparation; verification of ownerships, classifications and infestation levels. These positions would also gather stand data to allow determination of treatment alternatives.	

Required start-up cost increment for this initiative:

Personal Services (new positions)	\$126.0
(extensions of seasonals)	\$ 46.5
Travel	6.0
Contractual (phones, utilities, copies, brochures, professional services)	103.5
(Advertisements, printing, helicopter/aircraft flights Vehicle lease and operating costs)	
Commodities	6.0
Equipment (computer, printer, peripherals)	7.0
(Desks, chairs, bookcases, etc.)	5.0
TOTAL START-UP INVESTMENT	\$300.0

For additional information, contact Jim Peterson, the Kenai-Kodiak Area Forester and Project Manager at:

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Soldotna, AK 99669
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COOPER LANDING SPRUCE BEETLE PROJECT
ALASKA DIVISION OF FORESTRY
MARCH 7, 1990

Outline of Project Proposal

Over the years, the Kenai Peninsula has been impacted time and time again by spruce beetle (*Dendroctonus rufipennis*, kby). Approximately 538,000 acres has been infested from the late 60's through '75. Presently, the area of primary concern is the area from Kenai Lake to Skilak Lake along the Kenai River corridor and northward towards Hope. Within this area, an estimated 130,000 acres of spruce trees have been killed or infested. Due to the extensive amounts of beetle killed trees surrounding the community of Cooper Landing, this area has been given first priority for attention.

The State of Alaska owns approximately 6,400 acres in the Cooper Landing area. The lands have been selected by the Kenai Peninsula Borough under the Municipal Entitlement Act. Transfer of these lands to the Borough are still pending. Approximately 2,000 acres have been infested. The Division of Forestry has identified the following priorities:

1. Protect life and property from wildland fire;
2. Reduce the fuel loading adjacent to private lands;
3. Salvage usable forest products from the beetle killed forest and create employment opportunities;
4. Put the forest back into productivity as quickly as possible.

To achieve these objectives, the Division has embarked on the following course of action. Presently, the Division has seven active or completed salvage sales in the Cooper Landing Area. Additional salvage areas are currently being prepared. These actions are being completed under existing budget dollars.

The Division has requested an additional \$700,000 to be appropriated by the Legislature to help meet the above objectives. With these additional dollars, the Division proposes to develop two fuelbreaks of approximately 500 feet in width and 4,000 feet in length (92 acres). A containment line to mineral soil will be developed within these fuelbreaks. One is proposed east of Cooper Creek and will utilize the old Cooper Creek dam road as the containment line and the other is proposed west of Shackelford Creek and will require construction of a containment line. Within the fuelbreaks, all dead and infested spruce will be removed. The hardwoods and hemlocks will be left untouched. The harvested trees will be tree length yarded to landings where they will be limbed and topped, cut to log length and decked. The slash will be disposed of by burning. The fuelbreaks will be regenerated to primarily hardwoods. Estimated cost of the fuelbreaks is \$117.1.

The Division is also proposing to reduce fuel loading in areas immediately adjacent to private land by the creation of fuel reduction areas. The fuel reduction areas total 666 acres. These areas will be treated similarly to the

Cooper Landing Spruce Beetle Project

fuelbreaks but will not include containment lines. Some of this area is currently under salvage contracts, but additional treatment and regeneration of areas is necessary to reduce the potential of fire spread. These areas are located within 1/2 mile of private lands and do not have any vegetative buffers between the treatment area and private lands. Estimated cost of the fuel reduction areas is \$477.4.

In order for both the fuel breaks and the fuel reduction areas to be effective over the next several years, some form of grass control will be necessary.

The areas outside of the fuelbreaks and fuel reduction areas are called vegetative management areas. Stands and pockets of beetle killed trees will be salvaged as part of the Division's normal sale program. Regeneration of these sites will be part of the Division's normal budget process.

The Division also wants to remove the hazard trees on State land along the Sterling Highway. The field work is completed, but dollars are needed to contract the removal. The estimated cost of the project is \$25.0.

To administer these various contracts, the Division is proposing to hire a temporary position at the Forest Tech IV level for the life of the contracts. The Division also proposes to upgrade our radio system into Cooper Landing to allow better coordination on initial attack fires. At the present time, our initial attack vehicles do not have communications with our dispatch office by radio. Costs for this position plus administrative support dollars for the project are estimated to be \$88.0.

Due to the seasonal time constraints of portions of this project proposal, the funds should be allocated as a capital improvement project (CIP). The scarification and tree planting cannot be completed until fall of 1991.

Project Cost Summary:

Fuelbreak(s)	\$ 117.1
Fuel Reduction Areas	477.4
Hazard Trees	25.0
State Administration	88.0
	<u>\$ 707.5</u>

For additional information, contact Jim Peterson, the Kenai-Kodiak Area Forester and Project Manager at:

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Cooper Creek Fuelbreak

Project size: 500 feet by 4,000 feet (46 acres)

Current conditions: 85% of the spruce is dead. Stand structure is roughly
2/3 spruce and 1/3 hemlock.

Special concerns: This bench has a very thin soil depth overlaid by alluvial deposits of silty sand.

Project Proposal:

1. Open up old Cooper Creek dam road and put to bed after completion of use.
Cost \$6.0.
2. Remove all dead spruce 7" DBH and larger. Tree length yard, limb and top at landings and deck merchantable material. Burn slash and unmerchantable material at landings. Work to be completed by vendor service contract.
Cost: \$41.8 (\$160/MBF @ 5 MBF/ac - total 46 acres) (plus \$5.0 slash burning)
3. Mechanically pile ground fuel accumulations during winter months with dozer and brush blade. Vendor service contract on approximately 35 acres.
Cost: \$1.9 (\$50/acre + mobilization costs)
4. State crew to burn mechanically piled slash.
Cost: \$0.2
5. Regeneration of fuelbreak with birch by direct seeding. Some interplanting with spruce. Seed collection, handtool site prep and direct seeding to be accomplished by vendor service contract.
Cost: \$7.3 (\$150/acre and cone/seed collection and seedling cost)

Project Totals:

Open Road	\$ 6.0
Removal	41.8
Piling	1.9
Burning	.2
Regeneration	7.3
Total	\$ <u>57.2</u>

Shackleford Creek Firebreak

Project size: 500 feet by 4,000 feet (46 acres)

Current Conditions: Predominately spruce forest with approximately 90% of the spruce dead.

Special Concerns:

1. Project will be highly visible from the Sterling Highway while crossing the Kenai River Bridge.
2. Lower sidehill is on unstable soils capable of mass movement.

Project Proposal:

1. Remove dead spruce 7" DBH and larger. Two vendor service contracts will be developed. One will address the lower sidehill with unstable slopes which may require unconventional harvest systems. The second contract will be the more stable uplands and they will be harvested by conventional means. Logs will be decked at various accessible locations. Slash to be burned at landings.
Cost: \$49.7 (\$160/MBF @ 6 MBF/ac - Total 46 acres) (plus \$5.0 for slash disposal) (plus containment line construction)
2. Mechanical scarification by dozer with a brush blade of 50% of the upland area. To be completed by vendor service contract.
Cost: \$2.4 (\$70/ac and mobilization, etc.)
3. Regeneration of the fuelbreak will be completed by one vendor contract with distinctive provisions differing the sidehill area from the balance of the project. The sidehill will involve hand preparation of sites to plant spruce seedlings and to direct seed with birch and alder to stabilize slopes. The upper area will be direct seeded with birch and hand planted with spruce.
Cost: \$7.8 (\$150/ac and seed collection and seedling cost)

Project Totals:

Removal	\$ 49.7
Scarification	2.4
Regeneration	7.8
Total	\$ 59.9