

**S C R**

**30**

1 IN THE SENATE

BY THE RESOURCES COMMITTEE

2 CS FOR SENATE CONCURRENT RESOLUTION NO. 30 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SIXTEENTH LEGISLATURE - FIRST SESSION

5 Urging coordinated research and develop-  
6 ment of technology and programs for  
7 prevention and cleanup of oil dis-  
8 charges.

9 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 WHEREAS the recent disaster in Prince William Sound has emphasized the  
11 need for expedited research and development related to better technology  
12 and programs to prevent and clean up oil discharges; and

13 WHEREAS the Science and Engineering Advisory Commission has been  
14 established to assist state agencies in assessing their research needs and  
15 to facilitate cooperation between state agencies, the University of Alaska,  
16 and industry with respect to technological issues; and

17 WHEREAS the Alaska Science and Technology Foundation has been estab-  
18 lished to award grants for the promotion of basic and applied research on  
19 issues important to the state; and

20 WHEREAS the scientific knowledge gained from Alaska's experience with  
21 the Prince William Sound disaster and its future effects are of great  
22 concern to governments, organizations, industries, and other persons  
23 throughout the world;

24 BE IT RESOLVED that the Alaska State Legislature respectfully requests  
25 the Governor to direct the Science and Engineering Advisory Commission and  
26 the Alaska Science and Technology Foundation to explore additional ways to  
27 coordinate their activities and the activities of other state agencies in  
28 order to achieve the development of better prevention and response tech-  
29 niques related to oil discharges; and be it

1           FURTHER RESOLVED that the legislature respectfully requests the  
2 Governor to direct the Science and Engineering Advisory Commission and the  
3 Alaska Science and Technology Foundation to explore ways of establishing  
4 and funding, as soon as practicable, a Prince William Sound science and  
5 technology institute, which would be an integrated scientific research  
6 facility in Cordova, Alaska, with a special emphasis on research and devel-  
7 opment relating to oil spills in coastal water, and that would provide a  
8 central repository and logistical support for research of this type; and be  
9 it

10           FURTHER RESOLVED that the Governor consider the possibility of having  
11 Alaska host a future conference at which the attention of worldwide experts  
12 could be focused on the prevention, consequences, and lessons of oil dis-  
13 charge disasters like the one at Prince William Sound.

14           COPIES of this resolution shall be sent to the members of the Science  
15 and Engineering Advisory Commission; the members of the board of directors  
16 of the Alaska Science and Technology Foundation; and to the Honorable Ted  
17 Stevens and the Honorable Frank Murkowski, U.S. Senators, and the Honorable  
18 Don Young, U.S. Representative, members of the Alaska delegation in Con-  
19 gress.  
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## FISCAL NOTE

**REQUEST:**

Revision Date: \_\_\_\_\_ Agency Affected: Environmental Conservation  
 Title: A Resolution urging coordinated BRU: Environmental Quality  
research and development of technology and programs for prevention and cleanup  
of oil discharge Components: Environmental Quality  
 Sponsor: Rodey and Szymanski

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>		-0-	-0-	-0-	-0-	-0-

<b>CAPITAL</b>						
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<b>REVENUE</b>						
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**FUNDING: (Thousands of Dollars)**

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>		-0-	-0-	-0-	-0-	-0-

**POSITIONS:**

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

**ANALYSIS :** (Attach a separate page if necessary)

Prepared by: Dan Easton Phone: 465-2640  
 Division: Environmental Quality Date: April 11, 1989

Approved by Commissioner: AD/gh Date: 4/12/89  
 Agency: Alaska Department of Environmental Conservation

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



Alaska  
Pacific  
Consultants

in April 6  
SJR For Future Conference  
S&T Found. For Spill Coordination  
SJR Log. Coordination

3111 C Street, Suite 200 Anchorage, Alaska 99503 (907) 562-3427

April 2, 1989

Honorable Pat Rodey, Senator  
Alaska State Senate  
P.O. Box V  
Juneau, AK 99811

Dear Senator Rodey:

The Alaska State Senate has passed a bill appropriating \$20 million to aid in the Prince William Sound oil spill disaster. If the House has not also passed, I trust it will do so shortly.

I suggest that the State of Alaska can do more. Over one year ago (March 31, 1988, Northern Lights Inn, Anchorage. See attached article), Mr. Henry Cole, Science Advisor to Governor Cowper, addressed the Resource Development Council of Alaska, Inc., stating that the Alaska Science and Technology Foundation would be funded with a \$100 million endowment. Unfortunately, that amount of money was not forthcoming. Now is the time to move aggressively forward to fund this Foundation for the purpose of researching, and developing recovery programs surrounding the Prince William Sound oil spill.

The Science and Technology Foundation might well address the following:

- **Oil Spill Research:** Recovery, appropriate disperants, skimmers, cleanup technology, wildlife protection and cleaning, plus a myriad of other appropriate technologies.
- **Social Science Research:** Study and development, in conjunction with existing local, state and federal agencies, programs to assist individuals, families and companies through the difficult economic and stressfull days ahead. As people face mortgages, unpaid bills, increased family conflict, mental anguish, and other problems faced with the "fallout" from this disaster, assistance will be needed.

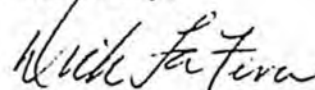
- **Economic Renewal Research:** Study how the recovery of the Prince William Sound's economic/social system will need a total systems approach. All of Alaska will be affected by this disaster, and we Alaskans are capable of designing our collective future, **IF** we choose to work collaboratively in collective best interests. To do this however, will, in my opinion, need the leadership the Foundation could provide.
- **Psychological Leverage:** Provide immediate attention and focus on Alaska's efforts to build toward the future. Not only is this good business, but it will provide Alaskans and potential visitors and investors the "psychological edge" proving that we are indeed in control of our destiny.

Mr. Ed Clinton, Chairman of the Alaska Science and Technology Foundation, will address the Alaska State Chamber of Commerce on Friday April 7, in Anchorage, at the NBA Main Branch, 3rd Floor Conference Room. It may be possible to get Mr. Clinton's attention on this before April 7, and to seek his input.

Further, I am asking that Mr. Clinton, and the other Science and Technology Foundation Board Members, Governor Cowper, appropriate State Department and Agency Heads, Alaska State Legislators, and appropriate private citizens be called to a "summit" on Alaska's Economic and Social Future to address this proposal. If appropriate, legislation addressing this concept might be the best method for moving forward. I, however, leave that to you, Senator Rodey.

Thank you for your kind and timely attention to these ideas.

Sincerely,



Dick La Fever, Director

# City/State



## Foreigners visit oil spill; observe, advise



Times photo by MICHAEL DINEEN

Oppeneau, Head of Research, Ministry of the Environment, left, and Lalonde, French Minister of the Environment

By BOB BORTEGA  
Times Writer

When the supertanker Exxon Valdez disemboweled itself on Bligh Reef nine days ago, crude oil gushed out so furiously that it billowed eight or 10 feet in the air before pancaking out in a vast flat slick.

As fast as the oil spread through the pristine waters of Prince William Sound, word of the disaster leapt by wire around the world — drawing oil spill experts and wannabes from every oil-producing country imaginable.

"We are here to see, and hopefully to learn more about the effects of the oil on the wildlife," said Reldar Hindrum, a nature management director from Oslo who arrived in Anchorage Saturday, along with four other Norwegian oil spill management technicians. The five men were to leave this morning for Valdez, at the south end of the trans-Alaska pipeline, and for the nearby fishing village of Cordova.

Several Canadian researchers ar-

rived early last week, Exxon spokesman Gene Sands said. Technicians and scientists from many other countries are also expected to show up.

"We've heard from literally every oil spill consultant and expert in North America and Europe," Sands said.

Saturday, France's Minister of the Environment, Brice Lalonde, and his head of research, Jean Claude Oppeneau, jetted in. They were to be joined today by another French spill expert bearing a gift — 10 tons of Inpol 90, a chemical dispersant that has been used frequently to break down oil slicks in European waters.

There's been some question as to whether the Inpol 90 will do any good. Early last week, special planes made a few low-altitude runs over the sound, spraying an American-made dispersant on the crude with some success. Then, five days ago, those directing the cleanup effort said that the slick had weathered too much for dispersants to be effective.

But Saturday, at Anchorage International Airport, a senior Exxon environmental scientist waiting with the Frenchmen for their luggage said the Inpol 90 might still prove useful.

The tall, bespectacled Dr. Al Maki agreed that the dispersant could be applied to the fresh oil that the Exxon Valdez continues to burp into the sound. And he said that the chemical might still work on the older, emulsified oil known as "chocolate mousse" for its color and consistency.

"There are long streamers of oil that are coated with mousse on the outside, but inside are relatively unweathered oil," he said.

"As the sea breaks apart the mousse, that fresh oil is exposed to water. That's why you still see that blue-green sheen on the water. The dispersants might work on that oil," he said.

Lalonde is hopeful that dispersants aside, he and his aides can offer sug-  
See Spill, page B-8

# Spill: World learns

Continued from page B-1

gestions to make the cleanup more effective.

Eleven years ago, when the tanker Amoco Cadiz broke up off the northwest coast of France, it spilled more than 1.5 million barrels of oil, about six times as much as the Exxon Valdez. Huge stretches of the coast of Brittany were slimed with a thick goo that wiped out the wildlife; the local fisheries were destroyed.

At the time, Lalonde was the director of France's chapter of Friends of the Earth. He was involved heavily in the massive cleanup effort. He was involved in setting up new agencies to study the effects of the spill, how to prevent another one, and how to develop new and more effec-

tive cleanup techniques.

"We know how it feels," he said, "the anger and the hopelessness . . . but cleaning up the coast is something we've learned to do. We'll see if the same techniques can be of use here."

Lalonde said he believes the rocky shores of Prince William Sound are similar to those of the Brittany coast.

Oyvind Schreiner, assistant director of Norway's State Pollution Control Authority, said the similarity of the sound's geography to Norway's fiords should make his experts' knowledge of shoreline cleanup relevant as well.

The Norwegians nearly didn't come. Wednesday, the U.S. Coast Guard declined their offer.

But Alaska officials quickly extended their own invitation.



Times photo by MICHAEL DINEEN  
Jan Nerland, Norway State Pollution Control Authority arrives in Anchorage.



# WESTRENDS

121 SECOND STREET 4TH FLOOR SAN FRANCISCO, CA 94105 TELEPHONE (415) 398-6422

## WESTRENDS EXECUTIVE SUMMARY

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Governor, Nevada  
WESTRENDS Chairman

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Senator, Washington

*Thomas M. Hannigan*  
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Assembly Majority Leader

*Jim Jones*  
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*Stephen McAlpin*  
Lieutenant Governor, Alaska  
WESTRENDS Vice-Chairman

*W. Val Oveson*  
Lieutenant Governor, Utah

*Chris Paulson*  
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*Barbara Roberts*  
Secretary of State, Oregon

*Raymond G. Sanchez*  
Speaker, New Mexico

*Daniel M. Sprague*  
WESTRENDS President

Historically the West has been a region of change and growth. In recent years, however, the fundamental nature of the region has begun to shift. Key demographic and economic changes are permanently altering the socio-economic character of many parts of the region, adding new dimensions and challenges for public policy makers. Among the leading trends transforming the West are:

### Fastest Growing Region of the United States

The West grew at a faster rate than any other U.S. region between 1980 and 1987. The region grew 15.1% during this time period, more than double the national average. The South was the second fastest growing region at 11.3%, followed by the Northeast and Midwest at 2.3% and 1.1% respectively. Population growth in the West is well above the national rate due to three factors: high birth rates, relatively high migration rates and very high immigration rates. A majority of western states are participating in the high rate of population growth; however, a handful of states experiencing serious downturns in their economies have had static or declining populations over the past several years.

### Highest Dependency Ratio Among Regions

Among the four U.S. regions, the West has the highest dependency ratio. The "dependency ratio" refers to the burden placed on wage earning taxpayers between the ages of 18 and 64 to finance services such as education, and health for older and younger age groups. The region has the highest percent of the population under age 18 with the under-5 age group increasing 51%, or approximately five times the national rate from 1980 to 1987. During the same time period, the 65 and older age group in the West has increased by 49%, more than three times the national rate.

### Growing Ethnic Diversity

A third demographic trend is the changing ethnic composition of the western region. The West leads the nation in legal immigration for the decade 1975-85. Asian and Hispanic immigration is highest to the region, where the greatest concentration of Hispanic and Asian Americans reside. In addition, from 1970 to 1980, the West, with the smallest percentage of blacks, experienced the greatest increase in black population among U.S. regions for that decade.

### Metropolitization of the West

The growth in population and changes in metropolitan areas contribute to the shifting landscape of the West. The region is no longer a network of small towns; instead, it is largely comprised of sprawling metropolitan areas and newly suburbanized communities separated by large open spaces. In 1986 the West ranked above the national average, with 83.7% of the population residing in metropolitan areas, second only to the northeastern region at 88%. From 1980 to 1986, mountain states experienced an average annual metropolitan growth rate of 2.5%, lead by Arizona at 3.3%. Pacific states experienced an average annual metropolitan growth of 1.9%, with Alaska leading at 4.8%. Both sub-regions exceeded the national average of 1.1% for this time period. This metropolitan growth brings a shift in political and economic emphasis from rural areas to urban centers.

-over-

### **Importance of Natural Resources**

Western states continue to rely upon natural resource industries for revenues and employment well above the national average. While natural resource-based industries have declined in recent years, signs of upturn are now evident in some areas. The creation of value added activities associated with natural resource production and processing will increase employment and productivity. Nonconsumptive uses of natural resources, such as tourism and recreation, are increasingly important revenue producers in the region. The continued importance of natural resources to the West is best understood in the context that the region does not have to import these basic commodities, and indeed they offer significant value added export opportunities for the future.

### **Increasing Manufacturing and Service Jobs**

Concerted efforts have been made to diversify the western economy beyond the traditional natural resource sectors. Although the West has below the national average percent of population employed in manufacturing, the region added a net of 70,000 new manufacturing jobs to its economy between 1980 and 1986; while the other U.S. regions experienced a net decline in manufacturing jobs during this period. Moreover in 1985, the western region led the nation in export-related manufacturing employment. Though the West ranked third among the four regions in service employment from 1980 to 1986, the number of service workers increased by an impressive 1 million.

### **Pacific Rim Powerbase**

Perhaps the most optimal circumstance for the western region is its inclusion in the Pacific Rim, the most dynamic sector of the global economy. In 1984, western states accounted for 23% of U.S. exports and imports. Total 1984 U.S. exports equaled approximately \$218 billion, of which \$50 billion moved through western ports. All western states, due to proximity to the emerging world class economies in the Pacific Rim, stand to be key players in unprecedented economic growth toward the year 2000 and beyond.

### **Changing Workforce Composition**

The demographic and economic changes the West is experiencing underscore the need for a highly educated, well-trained labor force. Minorities and women will constitute an increasingly larger share of the western labor force, and they must be equipped with relevant skills to maintain the region's economic competitiveness. The West currently has the highest percent of high school graduates and the highest participation of women in the labor force among U.S. regions. The West, with the highest percent of population under age 18, has a sizeable labor pool for the future; however, the region has a significant challenge ahead in educating an increasingly diverse population for more highly skilled service sector employment.

### **Challenges to Environmental Quality**

Compared to other regions, the West has experienced relatively less environmental degradation. Air and water quality has actually improved in many parts of the region in the past two decades. However, rapid population growth concentrated in large metropolitan areas is resulting in heightened concerns about air quality, adequacy of water supplies and general congestion in urban areas. Western states are highly dependent upon tourism to bring revenue to the region and a high quality of life to attract new businesses and residents. Reductions in environmental quality in major metropolitan areas will adversely impact tourism and related economic growth sectors. Therefore, Westerners need to be particularly attentive to the vital role of updating infrastructure including highways, water storage facilities, wastewater treatment plants and mass transit to provide for sound economic expansion and environmental protection.

### **Less Regional Cohesion**

The West is unquestionably the most fractionalized region of the country. It is a land of contrasts, with the nation's most populous state, California, and several of the least populated states, such as Wyoming and Alaska. The citizens of the mountain West and the Pacific West hold widely different views on basic value issues such as abortion, religion and the role of government. The trends cited above tend to reinforce existing regional differences. Thus, the region will have to work more diligently on interstate issues and communication if it is to gain political cohesion and influence in national policy equal to its growing population.

### **Conclusion**

The foregoing trends are most likely to have sustaining impact on the economic, social and political future of the western region to the year 2000. Together these trends present "good news - bad news" scenarios. Each brings positive values to the region, and each presents risks, or at least missed opportunities, if not appropriately addressed. The challenge for state leaders is to build upon an extraordinary set of positive attributes embodied in the people and the land. With a comparatively youthful, well-educated and enterprising population, the West continues to be a land of opportunity and is strategically positioned to have an era of sustained prosperity as part of the Pacific Century ahead. Whether the region will in fact realize this bright promise will be determined largely by the extent to which state leaders are willing and able to tackle the tough allocation choices immediately ahead - educating the young, maintaining environmental quality, anticipating the capital needs of fast growth, providing for the elderly, and strengthening regional ties and cooperation with neighboring states.

PROPOSED AMENDMENT TO SENATE CONCURRENT RESOLUTION 30

BE IT FURTHER RESOLVED:

That the Alaska State Legislature respectfully request the Governor to direct the Science and Engineering Advisory Commission and the Alaska Science and Technology Foundation to explore ways of funding and establishing as soon as practicable, The Prince William Sound Science and Technology Institute, an integrated scientific research facility in Prince William Sound in Cordova, Alaska, to coordinate applied and basic research on sub-arctic coastal ecosystems, with special emphasis on research and development relating to oil spills in sub-arctic coastal waters, and to provide a central repository for research data, to provide logistical support for such research.

U.S. should get a whole school  
of env. restoration & oil spill

CONTAINMENT - PAW.S.C.I.E.

Marine = Sci. =

Long ← →

Patrick M. Rodey  
Senator

# Alaska State Legislature



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During Session:  
P.O. Box V  
Juneau, Alaska 99811  
(907) 465-3793

M E M O R A N D U M

Senate

April 24, 1989

TO : Senator Bettye Fahrenkamp, Chair  
Senate Resources Committee

FROM: Senator Patrick M. Rodey

RE : SCR 30 - Urging coordinated research and development of  
technology and programs for prevention and cleanup of oil  
discharges

Senate Concurrent Resolution 30 requests utilization of the research capabilities and programs of the Science and Engineering Advisory Commission and the Alaska Science and Technology Foundation to review and explore methods of coordinating their activities for development of improved response techniques and prevention of oil discharges.

The Alaska Science and Technology Foundation's technological expertise would make a valuable contribution to facilitating cooperation among the local, state, and federal coordination efforts.

The proposal also requests that the Governor consider hosting a future conference to focus on the prevention, and consequences of oil discharges disasters.

There is a zero fiscal note.