

Seismic Data Acquisition and Interpretation

FY2001 Request: \$60,000
Reference No: 32543

AP/AL: Appropriation**Project Type:** Renewal and Replacement**Category:** Natural Resources**Location:** Statewide**Contact:** Nico Bus**House District:** Statewide (HD 1-40)**Contact Phone:** (907)465-2406**Estimated Project Dates:** 07/01/2000 - 06/30/2001**Brief Summary and Statement of Need:**

This project will allow us to: (1) reimburse permittees for the direct costs of reproduction of seismic exploration data submitted to the department pursuant to 11 AAC 96.210 - .230; (2) if necessary, purchase seismic data located on non-state lands; (3) upgrade computer hardware and software when necessary to accommodate changing data formats; and (4) participate in industry trade shows in order to stimulate interest in petroleum exploration opportunities in Alaska.

Funding:	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>Total</u>
Gen Fund	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000		\$300,000
Total:	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$0	\$300,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

There have been several seismic CIPs over the past 20 years. The current project established in 1994 was \$450.0 and will be depleted this fiscal year (FY2000). It's an ongoing project that will always require funding.

Project Description/Justification:

Description of Work to be Done: In order to complete pre-oil and gas lease sale geologic and economic evaluations, as mandated by state statutes, and to evaluate the subsurface for oil and gas unit decisions, the division will continue to have a need for acquiring both 2-D and 3-D seismic data. Companies are continually gathering new data on state, federal and private lands. Although data on state lands are available to the division under the permit submittal regulations (11 AAC 96.210), those acquired on other-than-state lands must be purchased. Seismic data are very expensive, typically costing thousands of dollars per mile for the 2-D data. As is often the case in the Beaufort Sea, and on lands adjacent to the NPRA, it is necessary to purchase data on nearby federal acreage in order to develop an understanding of the subsurface beneath state waters. There also are associated digital reproduction costs, whether the data are submitted or purchased, and these can be substantial. One company, as an example, charges \$6 per mile to digitally reproduce its data.

Continuing improvements of hardware and software and changes in data formats and seismic processing methods necessitate the periodic upgrade of computer equipment and the purchase of new software packages. As the division's inventory of seismic data increases (and with the advent of 3-D data, the increase has been geometric) it is sometimes necessary to improve data storage capacity and computer processing speed.

An important function of this division is outreach to the technical community to promote oil and gas exploration in Alaska. This is done through participation in two major industry trade shows -- the American Association of Petroleum Geologists State of Alaska Capital Project Summary
 Department of Natural Resources
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 Released April 13, 1999

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and the Society of Exploration Geophysicists annual meetings. A portion of this project will fund the division's State of Alaska informational booth at these two events, which typically draw an attendance of 7,000 - 10,000 each, and the creation of promotional brochures. Attendance of these two trade shows also provide an opportunity for division attendees to be exposed to new and developing technologies employed by the industry. Other training opportunities are virtually non-existent in Alaska.

Project Benefits: The main purpose of this project is to maximize the state's revenues generated by oil and gas development. These increased revenues will benefit the public. Should any new companies become active in Alaska, the possibility of additional job opportunities should benefit the public.

Economic Development: By continuing the purchase of seismic data, by converting older data into digital format and by enhancing the division's computer capabilities, the state will be able to make the best possible evaluations for future lease sales and oil and gas unit decisions. All of this is with the intent of maximizing revenues generated by oil and gas activity.

Project History: There have been several seismic capital projects over the past 20 years. The current seismic CIP, established in 1994, was \$450.0, and will be depleted this fiscal year (FY2000). This is an ongoing project that will always require funding. As industry's data-gathering, processing and interpretation technologies continue to evolve and improve the industry's understanding of the subsurface continues to increase. In order for the division to continue to make informed decisions concerning oversight and management of oil and gas activities our understanding of an area must be on par with that of industry. This requires that we have access to the latest data and that we be able to utilize the newest interpretation techniques.

Project Support: This project will have a broad base of agency and public support since its intent is to maximize state revenues generated by oil and gas activity, and to attract new companies to the state.

Project Opposition: There should be no opposition.

Alternative Approaches Considered: There are no alternatives available that can substitute for the acquisition of seismic data under the state's statutory authority. It would be cost prohibitive for the state to gather its own data or for the state to purchase seismic data at market prices. Attendance at industry trade shows is the most cost-effective method of promoting the state's opportunities and incentives for oil and gas exploration, development and production because promotional efforts focus on industry management. Advertising costs would greatly exceed the costs of attending trade shows.

Specific Spending Detail:

Seismic data purchase and reproduction reimbursement	\$160.0
Computer/software upgrades	\$ 20.0
Oil and gas exploration promotion	\$ 50.0
Student intern	\$ 70.0
FIVE Year Spending Plan:	\$300.0

Projected Revenue to the State: The interpretation of seismic data is fundamental to decisions DNR must make in regard to lease sale terms and exploration and production units. Each decision has a direct effect on the state's oil and gas revenue, and is done with the intent of increasing revenue.