

AP/AL: Appropriation **Project Type:** Research / Studies / Planning
Category: Natural Resources
Location: Statewide **Contact:** Leta Simons
House District: Statewide (HD 1-40) **Contact Phone:** (907)465-3379
Estimated Project Dates: 07/01/2010 - 06/30/2013

Brief Summary and Statement of Need:

This three-year project will provide critical data for evaluating the natural gas potential, including unconventional gas, in prospective basins along transportation corridors and near population centers. There are many basins in Alaska with geology conducive for natural gas, but the lack of data hinders evaluation of their gas potential. Some of these areas will not only have sufficient resource for local use, but may have volumes that justify export. Relevant data bearing on the gas potential of these areas will promote informed decisions regarding energy option and spur exploration. Failure to fund will result in continued fragmentation of local energy plans and hinder informed choice of energy options.

| Funding: | <u>FY2011</u> | <u>FY2012</u> | <u>FY2013</u> | <u>FY2014</u> | <u>FY2015</u> | <u>FY2016</u> | <u>Total</u> |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|
| Gen Fund | \$500,000 | \$200,000 | \$500,000 | | | | \$1,200,000 |
| Total: | \$500,000 | \$200,000 | \$500,000 | \$0 | \$0 | \$0 | \$1,200,000 |

| | | | | |
|-----------------------------------------------|-------------------------------------------|--------------------------------------------------|---------------------------------------------|-----------------------------------|
| <input type="checkbox"/> State Match Required | <input type="checkbox"/> One-Time Project | <input checked="" type="checkbox"/> Phased - new | <input type="checkbox"/> Phased - underway | <input 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 | 0 |
| Totals: | 0 | 0 |

Additional Information / Prior Funding History:

New Project – No Prior Funding History

Project Description/Justification:

Alaska faces significant energy challenges that threaten the economic well-being of the population and the state’s economic future. Simply stated, the state does not know where its energy is going to come from over the next few decades. More immediately, the high cost of fuel in rural and railbelt communities is having a strong adverse impact on families and local governments. While fuel costs in some areas have moderated with the current worldwide economic downturn, prices are likely to increase again once the global economy starts to improve and demand for energy increases. It is important for the long-term to look for local energy sources with the potential to supply more affordable energy for local consumption.

A significant amount of recent work has been done to identify renewable sources of energy to help communities reduce the volume of imported fuel oil, yet many communities have a limited suite of options for locally-derived energy. Unlike wind, solar, and hydroelectric, the potential for natural gas is more difficult to discern because it resides deep underground. There are many sedimentary basins in Alaska, with geological characteristics conducive to natural gas, including unconventional gas.

However, most of these basins are so poorly known that we do not have a realistic understanding of their gas potential.

This three-year project will look at prospective basins throughout the state whose geology suggests some potential for natural gas suitable for in-state use. Prospective basins include, but are not necessarily limited to: Yukon Flats, Middle Tanana, Susitna, Copper River, Colville, and Cook Inlet. As an example to help illustrate the need for data, thick coal deposits are known from widely scattered locations in the Susitna Basin, yet we do not understand the distribution of these coal deposits well enough to begin evaluating their potential to supply natural gas. The same statement can be made regarding the Selawik, Yukon Flats and Middle Tanana Basins – all three contain significant coal deposits, yet we know little of their geology and geographic distribution. This type of information is critical for realistic evaluations of the natural gas potential of these sedimentary basins. This project will identify those basins having geologic characteristics most conducive to natural gas deposits and will gather technical data to support more realistic evaluations of their gas potential. Resulting technical data will be appropriate for public release and will help spur private sector exploration investment. Project results will also provide state policy makers some of the essential information required to make informed decisions regarding viable alternate energy sources for Alaskan communities.

Project execution may involve help from other organizations and private-sector geological consultants in the form of direct contracting. The goals of this project are consistent with statutory mandates requiring the Division of Geological and Geophysical Surveys (DGGS) to determine the potential for energy resources on state lands.

Why is this Project Needed Now?

This project is time-sensitive. High-energy costs are adversely influencing the state right now, and decisions to fund projects involving alternate energy sources are currently being made. It is in the state’s long-term best interest to make sure that decision makers have access to the best information, in order to make informed decisions that will allow pursuit of the most cost-effective and viable energy options.

Specific Spending Detail:

| <u>LINE ITEM</u> | <u>DOLLAR AMOUNT</u> | <u>DESCRIPTION</u> |
|-------------------|----------------------|---------------------------------------------------------------------------------------|
| Personal Services | \$ 100,000 | Partial support for existing DGGS personnel over three fiscal years; no new positions |
| Travel | \$ 10,000 | Travel for project planning and collaboration with project partners |
| Services | \$ 378,000 | Field work and contract services |
| Commodities | \$ 2,000 | Field supplies |
| Capital Outlay | \$ 10,000 | Field equipment |

Project Support:

Doyon Ltd., Cook Inlet Regional Corporation, Arctic Slope Regional Corporation, AHTNA Regional Corporation and Bering Straits Regional Corporation all hold surface and subsurface rights to large land positions in their respective regions of the state, and would benefit from improved understanding of the resource potential of their lands,

Native village corporations whose residents are bearing the burden of high energy costs are likely to support this project.

The U.S. Geological Survey Energy Resources Program, a regular collaborator with DGGS and the Division of Oil and Gas, will embrace this project.

Oil and gas corporations exploring on the North Slope and Cook Inlet, and those interested in exploration opportunities in other Alaskan basins, will welcome the data and interpretive results generated through this project.

The University of Alaska Fairbanks faculty and students benefit from state-administered geosciences investigations of this type, which create opportunities for academic research programs and educational opportunities.

Project Opposition:

Formal opposition to this project is unlikely. The proposed studies do not have any direct impact on the environment, subsistence use, or other surface resources.