

**Cook Inlet Oil and Gas Resources and Statewide Energy Database**

**FY2016 Request: \$800,000**  
**Reference No: AMD 60705**

**AP/AL:** Appropriation

**Project Type:** Energy

**Category:** Development

**Location:** Statewide

**House District:** Statewide (HD 1-40)

**Impact House District:** Statewide (HD 1-40)

**Contact:** Jean Davis

**Estimated Project Dates:** 07/01/2015 - 06/30/2020

**Contact Phone:** (907)465-2422

**Brief Summary and Statement of Need:**

According to the U.S. Geological Survey, Alaska contains the largest undiscovered conventional oil and gas potential in the nation and also has significant unconventional resource potential in tight gas, shale oil, and coal reservoirs. Vast areas of Cook Inlet remain unexplored or underexplored. Much new data are needed to reduce exploration risk, spur exploration investment, and increase exploration success in these areas. High-quality, publicly available and relevant geological information adds to Alaska's ability to attract exploration investment in a competitive global market and ensures future exploration for, and development of, Alaska's energy resources.

| <b>Funding:</b> | <b>FY2016</b>    | <b>FY2017</b> | <b>FY2018</b> | <b>FY2019</b> | <b>FY2020</b> | <b>FY2021</b> | <b>Total</b>     |
|-----------------|------------------|---------------|---------------|---------------|---------------|---------------|------------------|
| Fed Rcpts       | \$400,000        |               |               |               |               |               | \$400,000        |
| G/F Match       | \$400,000        |               |               |               |               |               | \$400,000        |
| <b>Total:</b>   | <b>\$800,000</b> | <b>\$0</b>    | <b>\$0</b>    | <b>\$0</b>    | <b>\$0</b>    | <b>\$0</b>    | <b>\$800,000</b> |

|  |  |   |   |                                   |
|--|--|---|---|-----------------------------------|
| <input checked="" type="checkbox"/> State Match Required | <input checked="" type="checkbox"/> One-Time Project | <input type="checkbox"/> Phased - new         | <input type="checkbox"/> Phased - underway  | <input type="checkbox"/> On-Going |
| 100% = Minimum State Match % Required                    |  | <input checked="" 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            |
| <b>Totals:</b>       | <b>0</b>      | <b>0</b>     |

**Prior Funding History / Additional Information:**

No prior funding history.

**Project Description/Justification:**

Alaska's petroleum basins have significant remaining undiscovered resources; according to the U.S. Geological Survey (USGS), Alaska contains the largest undiscovered conventional oil and gas potential in the nation and also has significant unconventional resource potential in tight gas, shale oil, and coal reservoirs.

Vast areas of Cook Inlet remain unexplored or underexplored, yet most industry activity continues to focus on relatively low-risk exploration for conventional resources within and near existing oil and gas fields, with only a few companies venturing farther afield to pursue higher risk projects or unconventional oil resources.

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The trend over the past decade toward smaller companies exploring for and developing Alaska’s oil and gas resources is likely to continue. These companies lack the resources of large, integrated oil companies and are more reliant on publicly available data.

Much new data are needed to reduce exploration risk, spur exploration investment, and increase exploration success in unexplored or underexplored areas. High-quality, publicly available and relevant geological information adds to Alaska’s ability to attract exploration investment in a competitive global market and ensures future exploration for, and development of, Alaska’s energy resources.

Southcentral Alaska is dependent on low-cost Cook Inlet gas for electrical generation as well as home and business heating. Lack of an adequate gas supply would lead to brown outs, higher home and business heating costs and higher energy costs for the entire area. Continued exploration and development is needed to maintain a stable gas supply into the future. This work directly contributes to maintaining a stable gas supply.

As part of DGGs's continued evaluation of the state’s energy resources, efforts to attract companies to Alaska and stimulate discoveries, this funding will provide the following new geologic information:

- o Enhanced understanding of the oil source rocks, stratigraphic and structural evolution of the Cook Inlet Basin, and implications for reservoir potential.
- o CY2015 1:63,360-scale geological mapping between Chinitna and Tuxedni Bays in western Cook Inlet that project into the basin.
- o Stratigraphic and analytical studies supporting oil and gas development on the North Slope.
- o Database development and data compilation of relevant geological and geophysical data statewide.

All of these funds will match 1:1 federal funding from the USGS for geological mapping in western Cook Inlet in CY2015, National Coal Resources Data System (NCRDS) funding for energy database development over the next 5 years, and National Geological and Geophysical Data Preservation Program (NGGDPP) funding for energy data preservation.

The project directly addresses the DGGs statutory mission (AS § 41.08.020) “To determine the potential of Alaskan land for production of metals, minerals, fuels, and geothermal resources...”

The project also addresses DNR’s core services to “Foster responsible commercial development” and also “Ensure sufficient data acquisition and assessment of land and resources”.

| <b>Line Item</b>                                  | <b>Amount</b>    |
|---|------------------|
| 71000 - Personal Services (position detail below) | \$100,000        |
| 72000 – Travel (field work, meetings)             | \$25,000         |
| 73000 – Contractual (helicopter, analyses)        | \$225,000        |
| 74000 - Commodities                               | \$50,000         |
| 75000 - Capital Outlay                            | 0.0              |
| 77000 – Grants                                    | 0.0              |
| <b>Total Request</b>                              | <b>\$400,000</b> |

Position Detail:

All are existing positions in Fairbanks:  
(10-x013) PFT, Petroleum Geologist I  
(10-2016) PFT, Geologist IV  
(10-2133) PFT, Geologist IV  
(10-2035) PFT, Geologist III  
(10-2227) PFT, Geologist III  
(10-2124) PFT, Geologist II  
(10-2055) PFT, Geological Scientist I  
(10N12102) LTNP, Geologist I

Failure to fund this capital request will significantly reduce the division's ability to provide industry with the basic scientific data required for oil and gas exploration. This will retard oil and gas exploration and development, thereby reducing future state revenues.

Failure to fund will impact the availability of new geological data to stimulate gas exploration, required for a stable gas supply in southcentral Alaska.

Failure to fund will also reduce the division's ability to match available federal funds, thereby ignoring substantial external funding available to help spur Alaska resource development.