

Retrofit of Vessel for Gulf and Bering Sea Research

FY2024 Request: \$3,000,000
Reference No: 65217

AP/AL: Appropriation
Category: Natural Resources
Location: Statewide
Impact House District: Statewide (HD 1 - 40)
Estimated Project Dates: 07/01/2023 - 06/30/2028

Project Type: Equipment / Commodities
House District: Statewide (HD 1 - 40)
Contact: Sam Rabung
Contact Phone: (907)465-4210

Brief Summary and Statement of Need:

The Division of Commercial Fisheries research vessel, the R/V Pandalus was deemed unseaworthy and disposed of in FY2024. The research and assessment work that was handled by the vessel has been interrupted by the lack of availability of other ADF&G vessels or other options. This request is to retrofit a donated vessel to conduct marine research and stock assessment projects.

Funding:	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>	<u>FY2029</u>	<u>Total</u>
1004 Gen Fund	\$3,000,000						\$3,000,000
Total:	\$3,000,000	\$0	\$0	\$0	\$0	\$0	\$3,000,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> Ongoing
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

Prior Funding History / Additional Information:

Project Description/Justification:

During the past year, the division has attempted to conduct some surveys through charters. In many cases the costs are prohibitive, sometimes more than double the cost of conducting a survey with a state-owned vessel. Charter vessels are also inconsistently available and not well configured for scientific research. This hampers year-to-year survey replication and fishery assessment data becomes less reliable.

Sustainable management of Alaska’s fish resources requires reliable scientific information collected from marine surveys. Annual monitoring and stock assessment of salmon, black cod, rockfish, pollock, shrimp, scallops, king crab, blue crab, and tanner crab, as well as data on ecosystem changes, provides the scientific basis for sustainable harvests of these fisheries, particularly in a changing marine environment. These fisheries provide substantial economic opportunity and generate landing taxes that support local communities and the state general fund. Without these surveys, fishery management will be more conservative resulting in lost harvest opportunity for subsistence, recreational, and commercial fisheries.

The research vessel must be able to work in weather and at-sea conditions frequently encountered during routine surveys and assessments in the North Pacific Ocean, Gulf of Alaska, and the Bering Sea. The working range of the vessel will encompass coastal and inland waters from southern Southeast Alaska to Nome. The research vessel will allow ADF&G to continue critical surveys and to develop new stock assessments. Examples of existing and future marine research surveys this vessel could conduct include:

- Port Moller sockeye salmon gillnet test fishery
- Norton Sound king crab trawl survey
- St. Lawrence Island blue crab pot survey
- Southern Bering Sea surface trawl juvenile salmon survey to better understand the causes of low productivity of western Alaska salmon stocks
- Shelikof Strait, North Mainland, Kachemak Bay, and Kayak Island scallop dredge surveys
- Kachemak Bay king and tanner crab trawl assessments.
- Prince William Sound trawl survey for tanner crab and pollock
- Prince William Sound black cod pot survey
- Prince William Sound remotely operated vehicle groundfish survey
- Cook Inlet transect surveys for rockfish habitat mapping
- Cook Inlet Beluga Whale prey species composition and abundance trawl survey
- Aleutian Islands and Kodiak area marine mammal surveys to better document status and distribution of species listed under the Endangered Species Act

The department has recently been offered a donated vessel. Two ADF&G Boat Officers have inspected the vessel and believe it can be a viable option with modifications. The needed modifications include work on the work deck, trawl gantry, stern, staff accommodations, engine room, freezer storage, exterior painting, wheelhouse wiring and windows, navigation equipment, and survey computers. The costs of modifications and additional equipment needed for survey work are estimated at \$3 million.

AP/AL: Appropriation **Project Type:** Energy
Category: Natural Resources
Location: Southcentral Alaska **House District:** Unidentified House District (HD 0)
Impact House District: Unidentified House District (HD 0) **Contact:** Theresa Cross
Estimated Project Dates: 07/01/2023 - 06/30/2027 **Contact Phone:** (907)529-6557

Brief Summary and Statement of Need:

The Division of Oil & Gas anticipates federal grant funding from the Department of Energy to assess and provide pertinent data via the Alaska Carbon Capture, Utilization, and Storage Database to an emerging carbon management industry with the goal of accelerating the development and implementation of CO2 storage within the Cook Inlet Region of Alaska. The overall objective of this project is to equip industry to understand the storage potential of Cook Inlet while also helping the people of Alaska understand carbon management and the role it can play in decarbonization.

Funding:	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
1002 Fed Rcpts	\$1,000,000						\$1,000,000
Total:	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$1,000,000

<input 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"/> Ongoing
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

Prior Funding History / Additional Information:

Project Description/Justification:

The overall goal of this project is to evaluate and support the development of safe and socially equitable long term Carbon Storage (CS). A publicly accessible geospatial database will progress CCUS objectives and serve the greater scientific community as well by centralizing key data sets with applications to groundwater, environmental, and seismic hazards studies. Societal considerations and environmental impacts are of utmost importance in Alaska and therefore the first step in this project is to identify environmentally and socially sensitive areas and minimize impacts on these areas by any future Carbon Capture Utilization and Storage (CCUS) industry.

The Division of Oil and Gas will utilize internal DNR staff and employees from other State entities to assess the Cook Inlet Region to identify what information is available to support an emerging CCUS industry. This will entail queuing multiple state and federal agency databases, research, and

publications to determine what information is available to put in a centralized database for public distribution. This information will include basin analysis, rock properties from outcrop, core and well logs, seismic data, reservoir models, storage capacity, and potential reservoir and seal identification.

A portion of the funding will be allocated to establish strong technical expertise and provide society and community engagement. We will work with the University of Alaska Fairbanks Alaska Center for Energy and Power (ACEP), Alaska Resource Education (ARE) and Cook Inlet Region, Inc. (CIRI) to perform these tasks.

The remainder of the funding will be used to hire a contractor/consultant to ensure a website is built that is populated with the pertinent data listed, that it is user friendly, and it incorporates spatial data that can be downloaded. The project will store and distribute Cook Inlet CCUS data within the existing GIS architecture. Upon assessment of the available data, the project will determine where best to store the related data. The project will leverage existing data services and generate new datasets only when required, following the four FAIR Principles (Findability, Accessibility, Interoperability, and Reuse) to ensure quality metadata is available for all datasets.

ArcGIS data services will be created for all relevant datasets. These datasets will be findable through the integrated Alaska Statewide Hub. A CCUS specific ArcGIS Hub site will be generated to give users a comprehensive solution for AK CCUS information and data. In addition to data services, on the project will build one or more web applications leveraging these datasets and providing users exploration map-based visualization of the data.

The division will utilize existing general funds to meet the \$250,000 match requirement.

Line Item	Amount
1000 – Personal Services	
2000 – Travel	
3000 – Services	\$1,000,000
4000 – Commodities	
5000 – Capital Outlay	
7000 – Grants	
Total	\$1,000,000

Fire Protection Fleet Maintenance and Replacement

FY2024 Request: \$1,200,000

Reference No: 65479

AP/AL: Appropriation
Category: Public Protection
Location: Statewide
Impact House District: Statewide (HD 1 - 40)
Estimated Project Dates: 07/01/2023 - 06/30/2028

Project Type: Renewal and Replacement
House District: Statewide (HD 1 - 40)
Contact: Theresa Cross
Contact Phone: (907)269-6398

Brief Summary and Statement of Need:

The Division of Forestry & Fire Protection needs additional statutory designated program receipt authority to utilize revenues from fire cooperating agencies to pay for fleet maintenance and replacement. This approach reduces the division's reliance on state funding.

Funding:	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>	<u>FY2029</u>	<u>Total</u>
1108 Stat Desig	\$1,200,000						\$1,200,000
Total:	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$1,200,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> Ongoing
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

Prior Funding History / Additional Information:

Project Description/Justification:

The Division of Forestry & Fire Protection collects revenues through cooperative agreements when fire response engines are lent to other agencies within the Pacific Northwest. The division bills and collects a fee based on a daily rate as statutory designated program receipts. This budget proposal seeks authority to utilize these revenues for fleet maintenance and replacement. This approach will reduce the need for additional state funding to cover increased maintenance costs and inflation.

These fire engines are vehicles that are crucial tactical tools for protecting life, property, and natural resources. The Fire Protection Program has a long-term engine replacement plan designed to meet increasing maintenance and operational costs determined by the Alaska Department of Transportation and Public Facilities (DOTPF). This funding will replace 16 fire response vehicles over the next four years, including the division's X-class vehicles that are past their useful life and are not covered under a maintenance and replacement plan with DOTPF.

Engine specifications are designed to meet National Fire Protection Association standards. Engine replacement needs exist for the fire stations in Fairbanks, Tok, Copper Center, Palmer, Homer, and Soldotna. This capital project will allow us to safely maintain an operational fleet of fire engines capable of effective wildland fire suppression.

Projected engine and vehicle purchase schedule and breakdown:

Calendar Year 2024

Replace eight Type 6 engines	\$73,000
Replace eight Type 7 engines	\$12,000
Replace nine X-Class Fire Support Vehicles	\$356,000
	<u>\$441,000</u>

Calendar Year 2025

Replace one Type 4 engine	\$29,000
Replace four Type 6 engines	\$28,000
Replace eight X-Class Fire support vehicles	\$413,000
	<u>\$470,000</u>

Calendar Year 2026

Replace two Type 4 engines	\$102,000
	<u>\$102,000</u>

DOT&PF’s cost model shows that maintenance costs are continuing to rise. Maintenance costs are different for each type of vehicle. For example, a Type 6 engine went from \$998 to more than \$1,750 per month. Before, a Type 4 engine cost \$1,400 per month, but when placed in service now, it costs more than \$2,400 per month.

These fire support vehicles are used for command and control of fires during the initial response, and they provide quick response, maneuverability, and the ability to patrol long distances in the Division of Forestry & Fire Protection response areas. These are the division’s standard emergency response fleet that our firefighters and DOT&PF mechanics are trained on. The investment of these revenues in the maintenance and replacement of these vehicles will be recovered many times over through cost savings from increased response capacity and ability to contain fires inexpensively while they are still small.

Resilient Food System Infrastructure Grants

FY2024 Request: \$2,220,000
Reference No: 65225

AP/AL: Appropriation
Category: Health/Human Services
Location: Statewide
Impact House District: Statewide (HD 1 - 40)
Estimated Project Dates: 07/01/2023 - 06/30/2028

Project Type: Economic Assistance
House District: Statewide (HD 1 - 40)
Contact: Theresa Cross
Contact Phone: (209)269-6398

Brief Summary and Statement of Need:

The Resilient Food Systems Infrastructure (RFSI) program is to build resilience in the middle of the food supply chain and provide more and better markets to small farms and food businesses. Alaska is reliant on food imports. 95% of Alaska's food is mostly from the western United States, costing approximately \$2 billion annually. This project will allocate subgrants to increase supply chain connections between farmers, processors, aggregators, retailers, and distributors. This will add processing capacity for new value-added products, increase storage capacity for farmers, create new jobs, and modernize equipment and facilities in Alaska.

Funding:	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>	<u>FY2029</u>	<u>Total</u>
1002 Fed Rcpts	\$2,220,000						\$2,220,000
Total:	\$2,220,000	\$0	\$0	\$0	\$0	\$0	\$2,220,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> Ongoing
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

Prior Funding History / Additional Information:

Project Description/Justification:

The Division of Agriculture (DoAg) will administer the Resilient Food System Infrastructure Program making subgrant awards available to individuals and entities for the purpose of building resiliency in Alaska's food supply chain by creating much needed infrastructure. This will be accomplished by prioritizing projects that will construct new facilities, expand processing capacities, equip facilities with specialized processing, sorting, packaging, and labeling equipment, modernize equipment and facilities, and increase storage space, including cold storage. USDA launched cooperative agreements with each U.S. State and Territory for this purpose.

The mission of the division is to promote and encourage the development of an agriculture industry in the State. DoAg serves Alaska producers all over the state, through research, seed production and seed cleaning, inspections, market access, and the revolving loan fund. This aligns with the

Resilient Food System Infrastructure Grants

FY2024 Request: \$2,220,000

Reference No: 65225

Governor's initiative to increase food security, strengthen local economies, and improve the State's infrastructure.

Dalton Highway Heavy Maintenance

FY2024 Request: \$8,000,000
Reference No: 65255

AP/AL: Appropriation
Category: Transportation
Location: Dalton Highway

Project Type: Construction
House District: Unidentified House District (HD 0)

Impact House District: Unidentified House District (HD 0)

Contact: Dom Pannone

Estimated Project Dates: 07/01/2023 - 06/30/2028

Contact Phone: (907)465-2956

Brief Summary and Statement of Need:

The Dalton Highway corridor between Fairbanks and Deadhorse is vital to the State of Alaska's infrastructure and long-term fiscal stability. The Dalton Highway is a statewide asset serving the oil and gas resources of the North Slope as well as other users. Additional funding is needed to fulfill the State's obligation to keep the existing system in good condition and to continue to provide the current maintenance level of service on this critical supply route.

Funding:	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>	<u>FY2029</u>	<u>Total</u>
1004 Gen Fund	\$8,000,000						\$8,000,000
Total:	\$8,000,000	\$0	\$0	\$0	\$0	\$0	\$8,000,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> Ongoing
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

Prior Funding History / Additional Information:

Sec1 Ch17 SLA2012 P136 L23 SB160 \$7,500,000
 Sec7 Ch43 SLA2010 P36 L14 SB230 \$5,000,000
 Sec10 Ch29 SLA2008 P76 L13 SB221 \$5,000,000
 Sec1 Ch30 SLA2007 P78 L12 SB53 \$9,000,000
 Sec58(c) Ch3 SLA2005 P136 L30 SB46 \$6,000,000

From FY2013 to FY2016, general fund appropriations totaling \$24.5 million were identified for surface repairs along the Dalton Highway corridor. As a result of this funding, DOT&PF was better equipped to serve the needs of the travelling public and industry users within the corridor. With the proposed additional long-term investment program similar service levels can be maintained along the 414-mile Dalton Highway corridor providing a safe and efficiently traveled roadway for all users.

Project Description/Justification:

This project will provide needed upgrades to segments of the Dalton Highway, which is the critical route to access the Prudhoe Bay oilfields. This repair and upgrade work is intended to decrease operating costs for all users traveling to and from Deadhorse while keeping industrial freight traffic moving unimpeded.

While some of the needs listed in the areas below could be eligible for federal-aid funding, the process to get them approved in the federal highway spending plan and through the federal environmental process can be very lengthy. Projects that utilize federal-aid dollars are generally more inclusive of large-scale reconstruction type work, whereas the repairs being proposed with this funding are strategic repairs at focused locations to reduce maintenance while strengthening and reinforcing surface treatments providing efficiency to those using the corridor. These repairs can be efficiently handled by our State personnel and equipment and allow for a reduced level of environmental involvement when using general funds (GF). In addition, the maintenance needs of the Dalton Highway are dynamic due to the corridor conditions, so having the ability to address the most current and concerning needs is paramount to successfully providing the best driving surface possible for all users.

Below is a list of potential sections of road that would benefit from this GF appropriation:

- Milepost (MP) 49-56 Grade raises to improve sight distance and eliminate vertical curve blind spots.
- MP 86-88 (Macky Hill) Re-establish drainage and resurfacing.
- MP 90-175 High float and undulation repair.
- MP 109-111 (Beaver Slide) Surfacing and embankment repairs.
- MP 111-114 (Fish Creek Flats) Embankment repairs, isolated drainage improvements and aggregate resurfacing.
- MP 228-235 Embankment repairs, isolated areas of drainage improvements, and resurfacing.
- MP 235-237 (Chandalar Shelf) Embankment Repairs, drainage ditch construction, and resurfacing.
- MP 237-242 Gravel resurfacing with bentonite surface treatment.
- MP 256-278 Reclaim deteriorated high-float and resurface with asphalt.
- MP 350-356 Perform grade raise and resurface to address ongoing drifting issues.

The Dalton Highway is the sole ground transportation link to the State's major revenue source and is essential to support oil and gas development, the Alyeska pipeline operations, and future gas pipeline construction. Ensuring the highway is appropriately maintained is critical to these operations, trucking companies, and other travelers. Consistent and routine maintenance ensures sustained revenue for the State, and it is in the State's best interest to continue to improve and maintain this critical asset and essential link of our statewide transportation network. Continued capital investments will support more intensive maintenance of the highway, and potentially aviation facilities, along the Dalton corridor.

Originally built to secondary road standards, incremental upgrading of the highway has gradually improved conditions in some areas, but a variety of factors still present significant challenges to maintenance crews:

- Truck traffic comprising 70-80 percent of all vehicles using the road that accelerate the deterioration of the surface and underlying embankment.
- Extreme weather events including high wind, prolonged duration of rain, and drifting snow and avalanches.

Dalton Highway Heavy Maintenance

FY2024 Request: \$8,000,000
Reference No: 65255

- Predominance of permafrost underlying the road.
- Remote nature of the highway with limited communications capabilities.
- Material site availability and quality of materials for producing needed gravels, erosion control rock, and clean embankment materials necessary for roadway maintenance and repairs.

To overcome these challenges additional investment is required so when aggregate surface course degrades and wears away exposing large rocks in the subgrade it can be replaced. Segments with asphalt or high float surfaces, which develop heaves, potholes, and cracks due to the poor subsurface conditions, can be repaired in a timely manner to avoid significant safety and operational challenges to drivers.

The Northern Region is responsible for maintaining this corridor in good conditions despite these challenges. Current discussions with major trucking carriers revealed an expectation of increased usage over the next three to five years due to large scale natural resource development projects.

Advantages:

- Economic support to freight, oil, and gas industries.
- Efficiency of operations.
- Potential to lower costs to maintain roadway.
- Improved health and safety for industry and the traveling public.