

**Upgrade and Repair of Critical Volcano Monitoring Instruments**

**FY2020 Request: \$0**  
**Reference No: 60704**

**AP/AL:** Appropriation **Project Type:** Renewal and Replacement  
**Category:** Public Protection  
**Location:** Statewide **House District:** Statewide (HD 1-40)  
**Impact House District:** Statewide (HD 1-40) **Contact:** Fabienne Peter-Contesse  
**Estimated Project Dates:** 07/01/2015 - 06/30/2023 **Contact Phone:** (907)465-2422

**Brief Summary and Statement of Need:**

The USGS has funding to replace existing analog data transmission equipment at Alaska’s monitored volcanoes with digital data transmission equipment. This equipment monitors seismic activity at Alaska’s active volcanoes. Replacing radio equipment is required as radio frequencies in use are being re-purposed and will not be available for use. This is a supplemental request to the FY2016 Upgrade and Repair of Critical Volcano Monitoring Instruments capital request.

<b>Funding:</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2022</b>	<b>FY2023</b>	<b>FY2024</b>	<b>Total</b>
1002 Fed Rcpts	\$4,250,000						\$4,250,000
<b>Total:</b>	\$4,250,000	\$0	\$0	\$0	\$0	\$0	\$4,250,000

<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"/> 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
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Prior Funding History / Additional Information:**

Sec1 Ch38 SLA2015 P5 L32 SB 26 \$500,000

**Project Description/Justification:**

Rapid detection of volcanic activity is critical in protecting threats to life, health, and the economy. Several high-threat volcanoes in Alaska are currently inadequately equipped with monitoring instruments and repairs and upgrades are needed to bring this equipment back to operational status.

Seismic, infrasound, and GPS instruments allow scientists at the Alaska Volcano Observatory (AVO) to detect early signs of volcanic unrest. This information allows the observatory to provide timely and accurate information on volcanic hazards, and warnings of impending dangerous activity to the public and to local, state, and federal officials.

As part of a Federal-State (USGS-DGGS) cooperative agreement, the Division of Geological and Geophysical Surveys (DGGS) volcanology section is responsible for helicopter and fuel contracting, and logistics in support of volcanic monitoring station installation, upgrades, and maintenance for the AVO.

The USGS has been told its analog radio frequency band is being re-purposed and will no longer be available for their use, requiring existing data transmission equipment be replaced. This project is facilitating the conversion of analog monitoring instrumentation to digital instrumentation in support of volcanic activity monitoring and hazard assessment and to comply with National Telecommunications and Information Administration (NTIA) radio spectrum guidelines.

**What will be accomplished?**

This supplemental request includes funding for helicopter operating costs, remote fuel transport, and new and existing staff to handle remote field logistics and administrative tasks as they relate to purchasing in support of the field projects. This project be complete by 9/30/21.

<b>Line Item</b>	<b>Amount</b>
1000 - Personal Services	\$670,000
2000 - Travel	100,000
3000 - Services	\$3,960,000
4000 - Commodities	\$20,000
7000 - Grants	
<b>Total Request</b>	<b>\$4,750,000</b>

Project will fund existing and new positions located in Fairbanks.

- (10-2117) Geologist V
- (10-2085) Geologist IV
- (10-2061) Geologist I
- (10-2030) Analyst/Programmer IV
- New LTNP Natural Resource Technician II
- New LTNP Administrative Assistant