### U.S. Navy Pacific Missile Range Facility and NASA Kōke'e Park Geophysical Observatory Real Estate Environmental Impact Statement (EIS)



#### Draft EIS Fact Sheet

#### Public Meeting Schedule

Attend any of the three Draff EIS public meetings to talk story, learn more, and submit comments on the Draff EIS. Each meeting will include a live online broadcast and public comment opportunity. The meetings will include information stations, a presentation that will be broadcast live online, and oral comments from the public in person and online. To participate online, register at PMRF-KPGO-EIS.com

DATE	LOCATION	AGENDA	
Tuesday, July 15, 2025	Kaua`i Veterans Center 3215 Kaua`i Veterans Memorial Hwy, Līhu`e	Meeting Time: 5 to 8 p.m. HST  In-Person:  5 to 8 p.m. Information stations – meet the project team, talk story, and ask questions. Visit the comments station to provide a written or oral comment.  In-Person and Online:  6 to 6:30 p.m. Presentation by Navy and NASA.  6:30 to 8 p.m. Oral comments from the public in person and online.	
Wednesday, July 16, 2025	Kekaha Neighborhood Center 8130 Elepaio Road, Kekaha		
Thursday, July 17, 2025	Sheraton Kaua`i Coconut Beach Resort, Makai Ballroom 650 Aleka Loop, Kapa`a		

#### Please Check In!

This public review and comment period is your opportunity to provide comments on the Draff EIS. Your voice is important to the planning process. Please visit the project website at PMRF-KPGO-EIS.com

#### Welcome

The U.S. Navy (Navy) and the National Aeronautics and Space Administration (NASA), as applicants and joint lead agencies, have prepared a Draft Environmental Impact Statement (EIS) to evaluate the potential environmental impacts of proposed real estate agreements with the State of Hawai'i for the Pacific Missile Range Facility (PMRF) and the Kōke'e Park Geophysical Observatory (KPGO). The Navy and NASA invite you to participate in this planning process.

#### What are the Navy and NASA Proposing?

The Navy currently leases or holds easements for approximately 8,172 acres of State of Hawai'i land primarily for passive encroachment buffer as well as for mission readiness, access, and utilities for PMRF on Kaua'i. The Navy proposes to retain the use of 8,172 acres of state lands on Kaua'i for operational continuity and sustainment in support of continued military training, testing, and facility operations at PMRF.

The Navy operates on approximately 410 acres of the total acres leased from the State of Hawai'i. The remaining acres are used as buffer zones, conservation areas, infrastructure, and access corridors.

NASA currently leases or holds easements for 23 acres of State of Hawai'i land for operations of KPGO. NASA issued the Navy a Use Permit in 2016 for portions of KPGO to conduct radar, telemetry, and communications services in support of PMRF operations.

NASA operates KPGO to collect geodetic data about the Earth's shape, orientation in space, and gravity. This data supports modern navigation technology such as the Global Positioning System (GPS) that is used every day in a wide variety of devices, from handheld smartphones to satellites. In addition, this data is used for scientific studies, spacecraft navigation, and the geolocation of Earth observations. NASA proposes to retain the use of 23 acres of state lands on Kaua'i in support of continued operations including measurements of the Earth's rotation and local land motion at KPGO.

The Proposed Action is needed because existing real estate agreements for these state lands are set to expire between 2027 and 2030.

On Kaua'i, the
Navy is the largest
high-tech employer and
third largest overall employer.
Most of the 900 personnel at
PMRF are civilians, including
many from the local community.
PMRF contributes approximately
\$150 million annually in salary,
contract goods, and services
to the local economy.

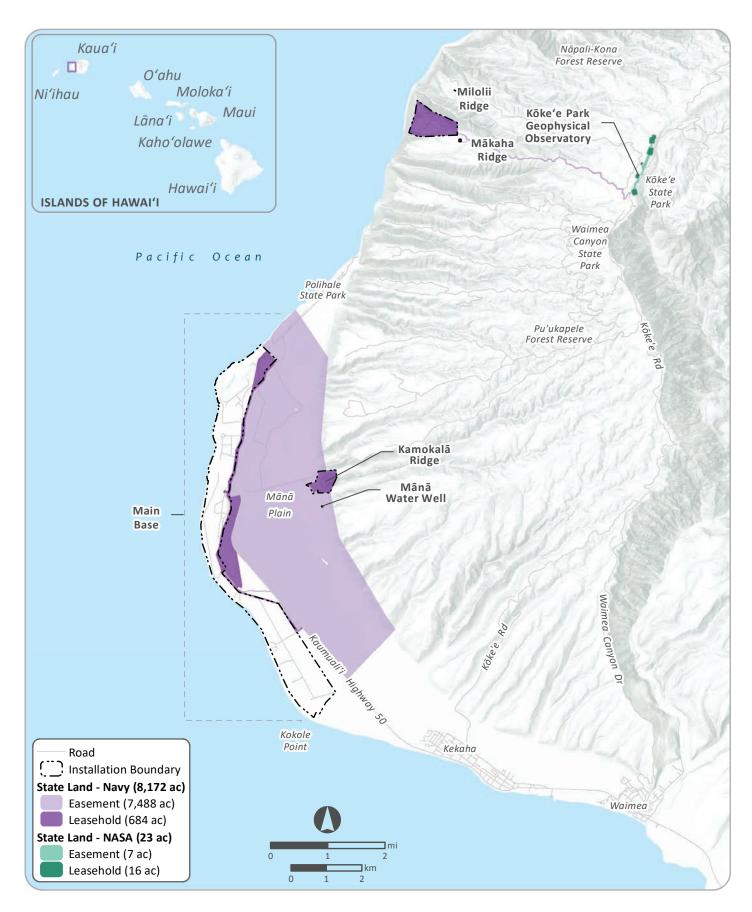


Figure 1. Project Map

#### **Action Alternatives**

#### Alternative 1: Succeeding Current Real Estate Agreements.

Under this alternative, the Navy and NASA would apply to the Board of Land and Natural Resources (BLNR) for new long-term real estate agreements at fair market value, for a similar duration, and for the same uses as the current leases and easements. The Navy's agreements would include 684 acres of land leased exclusively by the Navy and 7,488 acres of easement lands (for a total of 8,172 acres). NASA's agreements would include 16 acres of land leased exclusively by NASA and 7 acres of easement lands (for a total of 23 acres). NASA would enter into a new real estate agreement with the Navy for continued use of the leasehold and easement lands. Under this alternative, there would be no changes to the type or frequency of current activities occurring on state leased and easement lands. This alternative would not change any use or maintenance of existing infrastructure and would not involve construction, renovation, or demolition of facilities. This alternative would also preserve the Navy- and NASA-funded natural and cultural resource management activities on the leased and easement lands.

## Alternative 2: Fee Simple Acquisition of Current Real Estate Agreements for Leaseholds.

Under this alternative, the Navy and NASA would pursue fee simple acquisition at fair market value of up to 700 acres (684 acres for Navy use and 16 acres for NASA use) of leaseholds and otherwise obtain use of the same easement lands as described in Alternative 1. The new Navy fee simple land of 684 acres would include 392 acres of land at the Main Base<sup>1</sup>, 89 acres at Kamokalā Ridge, 0.29 acre at the Mānā Water Well, 0.015 acre at Miloli'i Ridge, 203 acres at Mākaha Ridge, and the NASA fee simple land would include 16 acres at KPGO. This acreage would be transferred from ownership by the State of Hawai'i to the U.S. Government. This alternative would not change any use or maintenance of existing infrastructure and would not involve construction, renovation, or demolition of facilities.

#### Alternative 3: No Action Alternative.

Under the No Action Alternative, the state would not grant Navy and NASA any new real estate agreements for the state lands on Kaua'i (8,172 acres Navy, 23 acres NASA) after expiration of the leases and easements between 2027 and 2030.

In this EIS, the No Action Alternative consists of the potential steps that would take place if the new real estate agreements for leases and easements are not granted to the Navy and NASA after their expiration. The analysis of the environmental resources also examines the loss of the Navy and NASA programs and potential effects to the resource; however, the full effect of such an alternative cannot be determined due to the uncertainty of how the Navy and NASA would reduce their operations, the state's future management of its returned lands, and what each party may negotiate.

<sup>&</sup>lt;sup>1</sup> Note that "Main Base" is a common naming convention for Navy fee simple, leasehold, and easement lands on the Mānā Plain. This EIS only analyzes potential effects from the Proposed Action on the leasehold and easement lands in the Project Area.

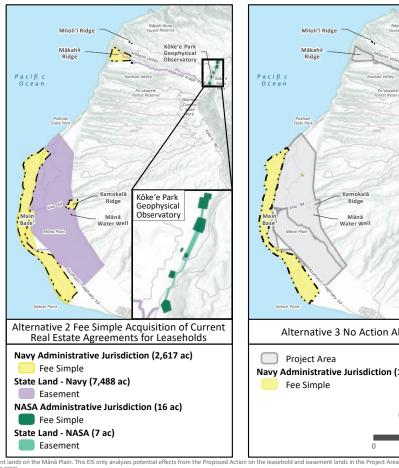
#### **Action Alternatives**

#### **Alternatives Screening Process**

The Navy and NASA used the following screening factors to select reasonable alternatives that would allow their missions to be fulfilled:

- Maintain long-term use of state lands currently used to support Department of Defense (DoD) and NASA missions on Kaua'i;
- Preserve current DoD and NASA operations on Kaua'i;
- Retain existing DoD and NASA infrastructure on Kaua'i; and
- Support Department of Land and Natural Resources management of public lands and associated environmental and conservation programs on Kaua'i.







Base is a common naming convention for Navy fee simple, leasehold, and easen \$/10/2025 Source: DOD, 2023; Esri, 2023; Hawaii Statewide GIS, 2023. Note a grojecth lingay.0/23/33 PMRF NASA Land Retention 0/2-Marsh. DEIS, V3\Ejurye Fi lote ac = acres ure ES-2 All Alternatives.mxd

Figure 2. **Alternatives Carried** Forward for Analysis

Alternatives Considered But Not Carried Forward				
Alternative	Description			
Succeeding Leases and Easements Except for Current Leases at Mākaha Ridge and KPGO	The Navy and NASA would obtain succeeding leases and easements on leased land not currently located in the State of Hawai'i's Conservation District. These would include leaseholds at Main Base, Kamokalā Ridge, Mānā Water Well, and Miloli'i Ridge, but would not include succeeding leaseholds or easements at Mākaha Ridge or KPGO.			
Succeeding Leases and Easements Except for Current Leases at Mākaha Ridge and KPGO	The Navy and NASA would only obtain succeeding lease agreements and not succeeding easements. These would include succeeding leaseholds at Main Base, Kamokalā Ridge, Mānā Water Well, Miloli'i Ridge, Mākaha Ridge, and KPGO, but not easements at Main Base, Kamokalā Ridge, Mākaha Ridge, or KPGO.			
Short Duration	The Navy and NASA would obtain succeeding real estate agreements for a short duration (less than 25 years).			

#### **Environmental Resources Studied**

The Navy and NASA evaluated the potential environmental impacts of each of the alternatives on the following resource areas. The public is invited to provide input on the environmental analysis presented in the Draft EIS.



#### Summary of Draft EIS Analysis

The Draft EIS contains summary tables and detailed analysis of the potential effects to resources studied, including consideration of applicable best management practices, standard operating procedures, and mitigation measures already in place. The Navy and NASA have also identified enhanced management measures to further reduce and offset potential effects. A copy of the Draft EIS is available at PMRF-KPGO-EIS.com and at the Waimea Public Library (Kaua'i) and the Hawai'i Documents Center (Hawai'i State Library, O'ahu).

## Summary of Potential Effects

The Navy and NASA are committed to continued stewardship of the 'āina. As such, the Navy and NASA are including enhanced management measures that propose protections for the 'āina.

ARCHAEOLOGICAL AND ARCHITECTURAL  CULTURAL PRACTICES	Regulatory protections remain unchanged	Increase access to information about archaeological and architectural resources; see EMM-1 for details	Loss of federal protections under historic preservation programs; current stressors from ongoing operations would remain,
CULTURAL PRACTICES			from ongoing operations would remain, and BMPs and the ICRMP would remain in place
	Moderate access restrictions	Develop an Access Management Plan for PMRF that balances public access and PMRF's mission requirements; see EMM-2 for details	Access limitations during demolition and/or removal activities
BIOLOGICAL	Navy and NASA programs would continue (REPI projects, PMRF INRMP, nature-based solutions [e.g., for erosion control]); effects to general vegetation, general wildlife, special status species, and critical habitat would continue to occur from ongoing operations	Provide the public with annual wildlife summaries, status updates, data reports, and research studies; see EMM-3 for details	Long-term protection of special status species and their habitats, as well as management and control of invasive species by the Navy and NASA, would not continue and DLNR would assume such responsibilities; loss of Navy and NASA programs
LAND USE AND ACCESS	Remain consistent with regulatory requirements, no changes or new restrictions, long-term beneficial effect from fair market value of the real estate transactions		No new restrictions; access limitations during demolition and/or removal activities
SOCIOECONOMICS	Benefits to the economy would continue from employment opportunities at PMRF and KPGO; fair market value from the real estate transactions	Establish the One Kaua'i Hui (Stakeholder Advisory Group); see EMM-4 for details	Potential in reduction in spending and loss of employment at both PMRF and KPGO
WATER RESOURCES	No degradation to water quality, no effect to beneficial uses of water resources, no contamination of a drinking water source; will not create noncompliance with the Clean Water Act, nor alter floodplains, nor increase hazards of flooding	Establish a Navy-DLNR-DHHL-ADC-Kaua'i County Working Group to collaboratively manage water resources in West Kaua'i; see EMM-5 for details	Navy would no longer operate the Kawai'ele pump station, support sand berm openings at coastal outlets, nor maintain Mānā Water Well, thus increasing flood potential; effects to groundwater and contamination of a drinking water source should the state not continue these operations
UTILITIES	No changes to current usage; no exceedance of capacity or demand; continue to comply with regulations		Reduction of potable water capacity for PMRF and increased demand on Kaua'i County Water Department
PUBLIC HEALTH AND SAFETY	Continued ongoing use and storage of fuels and oils, missile operations, ordnance storage and movement, and radar operations; Public Health & Safety programs would continue	Improve closure protocol and public notification during launch activities; see EMM-6 for details	Short-term effect from transport of ordnance; missile launches decrease from loss of telemetry and tracking at Mākaha Ridge; current Public Health & Safety programs would not continue (wildfire risk)
AIR QUALITY AND GREENHOUSE GASES	No changes to ambient air quality conditions and no exceedances of federal or state ambient air quality standards	In addition to BMPs (see Draft EIS Section 2.5) and Community Coordination (see Draft EIS Section 1.7.5), Draft EIS Chapter 5 describes actions the Navy and NASA are currently taking to mitigate, avoid, and minimize effects from the Proposed Action and existing mitigation measures that would continue to be implemented under the action alternatives. The Navy and NASA have identified EMMs that aim to provide additional protections for the 'āina.  Under the No Action Alternative and pursuant to the existing real estate agreements, any	Short-term emissions from demolition activities; discontinuation of operations
TRANSPORTATION	No change to current conditions, no changes in traffic volumes accessing facilities on the existing roadway network		Short-term road closures from demolition activities
HAZARDOUS MATERIALS AND WASTE	No increase in the use or generation of hazardous materials or waste		Short-term effect from transport of hazardous materials and waste; small decrease in the amount of hazardous materials and waste (including solid waste)
VISUAL RESOURCES	No change to the existing scenic viewpoint	return of state property would involve complex negotiations with the State of Hawai'i for the transfer of various environmental and cultural responsibilities now performed by Navy and NASA back to the state. Mitigation measures	Due to lack of visibility of facilities, no change to existing scenic viewpoint
		for the No Action Alternative would occur at a later time and are therefore not included in the Draft EIS.  ADC = Agribusiness Developme	

Figure 3. Summary of Potential Effects

# About the Navy Pacific Missile Range Facility and NASA Kōke'e Park Geophysical Observatory

#### Pacific Missile Range Facility

PMRF is the world's largest instrumented multi-domain training and testing facility. What makes PMRF unique is its ability to simultaneously support surface, subsurface, air, and space operations. For portions of PMRF, the Navy has real estate agreements with the State of Hawai'i for 8,172 acres, comprised of 684 acres of leaseholds and 7,488 acres of easements. The Navy operates on approximately 410 acres of the total acres leased from the state. The majority of the leasehold and easement areas remain intentionally undeveloped as they are used as an encroachment buffer for the facility's mission. For more information, visit https://cnrh.cnic.navy.mil/Installations/PMRF-Barking-Sands/

PMRF engages and actively participates with the community. Personnel who work at PMRF take great pride in their role as caretakers of the cultural and natural resources they are entrusted with. As the third largest employer on Kaua'i, many of the personnel are from the community.

#### Kōke'e Park Geophysical Observatory

NASA's KPGO is located on a remote ridge within Kōke'e State Park. NASA operates the observatory to collect geodetic data that contributes to daily measurements of the Earth's orientation in space and rotation. This data is used for scientific studies and a wide variety of positioning and navigation applications. For more information, visit: https://space-geodesy.nasa.gov/NSGN/sites/KPGO/KPGO.html

The Navy use
of these state lands
is required to maintain
technological and safety
capabilities supporting PMRF
training and testing. Navy
training and testing operations
do not occur on these state
lands. For NASA, these state
lands are critical to maintain
data collection efforts of
global significance.

#### PMRF and KPGO Timeline

Navy and NASA enter into Navy and NASA establish Navy and NASA establish Navy establishes Readiness Lua Kupapa'u O Nohili Navy hosts Aha 'Awa ceremony real estate agreements Natural Resources Integrated Cultural Resources and Environmental Protection (crypt) is constructed rededicating Lua Kupapa'u O Management Plans for PMRF with the State of Hawai'i Management Plans for PMRF Integration Program projects Nohili (crypt) expansion for safe and KPGO and KPGO for PMRF keeping of iwi kūpuna 1964 - 2007 1988 1998 2014 2019 2024 2027 - 2030

Current real estate agreements expire

#### What is the Space Geodesy Project at KPGO?

The Space Geodesy Project (SGP) maintains a global network of space geodetic observing instruments. The network is comprised of sites around the world that use four primary observation techniques:

- Very Long Baseline Interferometry (VLBI)
- Satellite Laser Ranging
- Doppler Orbitography by Radiopositioning Integrated on Satellite (DORIS)
- Global Navigation Satellite System (GNSS)

The International Terrestrial Reference Frame (ITRF) is determined by the observations made from the instruments listed above and is the foundation for virtually all Earth observations and georeferenced data used by society. This data is fundamental for:

- Positioning and navigation in space/air and on land/sea
- Tracking sea level changes
- Tsunami early warning systems
- Volcano deformation measurements
- Predicting flood patterns
- Studying glacier dynamics

#### What is KPGO?

KPGO is one of the core sites for NASA's SGP. The mission of KPGO is to collect geodetic data to support the geolocation of Earth observation from both land and space as well as scientific investigations of the Earth's surface and interior.

#### Why is KPGO Important?

NASA and the scientific community use the data collected by KPGO to study ecosystems, water cycles, geological hazards, sea-level change, crustal-dynamics, and many other Earth science topics. NASA data products produced using KPGO are also used for spacecraft operations and for positioning, navigation, and timing services like GPS. Many of these applications rely on the long history and continuity of the geodetic data collected from the current KPGO location.

#### Why Kōke'e State Park?

KPGO is in Kōke'e State Park at an elevation of 3,600 feet near the Waimea Canyon, isolated from radio broadcasts that would interfere with the sensitive measurements made by the VLBI system. The location on the island of Kaua'i is also critical for tying the Hawaiian Islands into the ITRF that contributes towards improving positioning and navigation accuracy on and around Hawai'i.

### Stewardship and Care of the Land

Personnel who work at PMRF take great pride in their role as caretakers of the cultural and natural resources with which they are entrusted.

E Pane Maí Ka Nonoí O Nohílí Answering the requests of Nohili

#### NATURAL RESOURCES CONSERVATION THROUGH PARTNERSHIPS





Conservation of sensitive

species at Honopū Valley.

Conservation of green sea turtles and their



The Lua Kupapa'u O Nohili (crypt) preserves and honors iwi kūpuna (ancestral remains) found on PMRF. Initially constructed in 2019, Lua Kupapa'u O Nohili was expanded and



rededicated in 2024.

Mānā Town Japanese cemetery from the sugar plantation davs.



**CULTURAL RESOURCES PRESERVATION** 

#### **CLEAN ENERGY AND RESILIENCY THROUGH** RENEWABLE ENERGY PROJECTS



Solar facility and battery energy storage system at PMRF.

#### **COMMUNITY SERVICE**



environmental awareness events.

In 2024, the Department of Defense Readiness and Environmental Protection Integration (REPI) program awarded \$4.85 million, and another projected \$1.5 million in 2025, to natural resource conservation projects on Kaua'i. In 2023, approximately \$26.7 million was awarded for all of Hawai'i.

# NEPA/HEPA/Historic Preservation Process and Community Involvement

The Navy and NASA are jointly preparing the EIS pursuant to the National Environmental Policy Act (NEPA). The EIS will also be used by the Hawai'i Department of Land and Natural Resources under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules Chapter 11-200.1, collectively referred to as the Hawai'i Environmental Policy Act (HEPA), in its decision making as to whether and what type of real estate agreement it may grant the Navy and NASA.

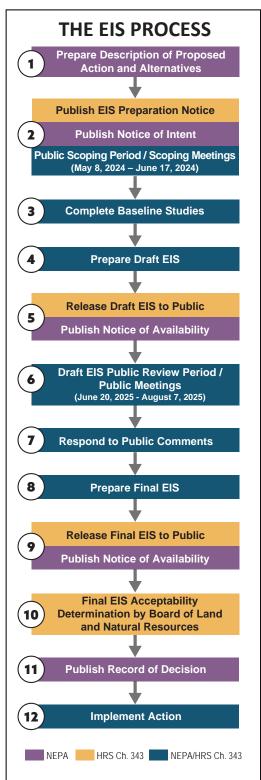
The EIS Process diagram (at right) illustrates the stages of public involvement in the NEPA and HEPA environmental processes. The public involvement processes for NEPA and HEPA for this EIS are running concurrently to meet the requirements for both state and federal laws and regulations.

The NEPA/HEPA public meetings will also serve as an opportunity to obtain public input concerning potential effects to historic properties pursuant to Section 106 of the National Historic Preservation Act (NHPA) and HRS Section 6E-8.

#### Community Involvement

The Navy and NASA have prepared a Draff EIS for public review and comment. Members of the public are encouraged to participate in the planning process by providing input on the proposed real estate action including on the environmental impacts of the alternatives, environmental or cultural concerns, information the public would like the Navy and NASA to know, and any other information the public would like to see addressed in the Final EIS, and the project's potential to affect historic properties pursuant to Section 106 of the NHPA and HRS Section 6E-8.

The Navy and NASA are proud contributing members of the local community. The Navy and NASA value and welcome input from the community, as well as the chance to share, communicate, and inform the community about the EIS and the need for the real estate agreements.



## Opportunities for formal public participation in the EIS process occur during two stages:

- 1. During the scoping period (which occurred in spring 2024) following publication of the Notice of Intent and the Environmental Impact Statement Preparation Notice.
- 2. During the comment period following publication of the Draft EIS (current phase).

#### What's Next?

After the Draff EIS public review and comment period closes, the Navy and NASA will review all comments received and will prepare the Final EIS. After publication of the Final EIS, there is a 30-day wait period, and concurrently, BLNR will determine acceptability of the Final EIS. The Navy and NASA will then publish a Record of Decision. The Record of Decision is a concise public record that will address the Navy and NASA decision.

#### How to Submit Comments

Submit Comments in Person, Online, or by Mail.

Submit comments by *August 7, 2025, 11:59 p.m. HST*. The Navy and NASA encourage the public to attend a public meeting, submit comments on the Draft EIS, and visit the project website to learn more.

#### The public may submit comments in any of the following ways:

- In person or online at a public meeting
- Through the project website at PMRF-KPGO-EIS.com
- By email to info@PMRF-KPGO-EIS.com
- By mail, postmarked by August 7, 2025, to the following address: Naval Facilities Engineering Systems Command Environmental OPHEV2

Attention: PMRF and KPGO RE EIS Project Manager, Ms. Kerry Ling 400 Marshall Road, Building X-11

Pearl Harbor, HI 96860









For language assistance or special accommodations, contact the PMRF Public Affairs Officer at (808) 335-4740 or PMRFPublicAffairs@us.navy.mil.

A copy of the Draft EIS is available at PMRF-KPGO-EIS.com and at the Waimea Public Library (Kaua'i) and the Hawai'i Documents Center (Hawai'i State Library, O'ahu).







We appreciate your time and interest. For more information visit the project website at PMRF-KPGO-EIS.com