

Appendix B
Coastal Zone Management Act Consistency Determination

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**Coastal Zone Management Act Consistency Determination
U.S. Army Office of Energy Initiatives (OEI) Solar Project
at U.S. Army Garrison
Fort George G. Meade, Maryland**

October 2023

**U.S. Army Office of Energy Initiatives (OEI) Solar Project
at U.S. Army Garrison
Fort George G. Meade, Maryland**

**Coastal Zone Management Act (CZMA) Consistency Determination
Determination of Consistency with Maryland's Coastal Zone Management Program
(CZMP)**

In accordance with the Federal Coastal Zone Management Act (CZMA) of 1972, as amended, Section 307(c)(3)(A) and 15 Code of Federal Regulations (CFR) Part 930, subpart D, and the CZMA Memorandum of Understanding (MOU) between the State of Maryland and the U.S. Department of Defense, this document serves as a Federal Consistency Determination for the proposed OEI Solar Project (Proposed Action) at U.S. Army Garrison (USAG) Fort George G. Meade (FMMD).

Maryland's Coastal Zone Management Plan (CZMP) was established by Executive Order (EO) and approved in 1978 as required by the Federal CZMA of 1972, as amended. Maryland's Coastal Zone consists of land, water, and sub-aqueous land between the territorial limits of Maryland (including the towns, cities, and counties that contain coastal shoreline) in the Chesapeake Bay, Atlantic coastal bays, and the Atlantic Ocean.

The CZMA requires that federal actions likely to affect land, water, or natural resources in the Coastal Zone be conducted in a manner consistent to the maximum extent practicable with the enforceable policies of a state's federally approved CZMP. The Coastal Zone Act Reauthorization Amendments of 1990 also clarified that coastal effects include cumulative, secondary, or indirect effects of the activity in the immediate or reasonably foreseeable future.

The Army is required to determine the consistency for its proposed activities associated with activities at FMMD affecting Maryland's coastal resources or coastal uses with the CZMP, which is administered by the Maryland Department of Natural Resources (MDNR) Chesapeake and Coastal Service (CCS). The Army determined that implementation of the Proposed Action would ultimately have a negligible adverse effect and a significant positive effect on the land, water, or natural resources of the Maryland's Coastal Zone. This document represents an analysis of Maryland's CZMP Enforceable Coastal Policies (MDNR, 2011), and reflects the commitment of the Army to comply with the Maryland CZMP.

This document represents an analysis of project activities in context with established CCS Enforceable Programs. Furthermore, submission of this consistency determination reflects the commitment of FMMD to comply with those Enforceable Programs. FMMD has determined that the Proposed Activity would have a negligible impact on any land and water uses or natural resources of Maryland's coastal zone.

1. Proposed Project Description

a. Project Location

FMMD encompasses approximately 5,107 acres and is located in the northwest corner of Anne Arundel County, Maryland. FMMD is located approximately 17 miles southwest of downtown Baltimore, Maryland, and approximately 24 miles northeast of Washington, D.C. Annapolis, MD is approximately 14 miles southeast of FMMD.

b. Project Description

FMMD is proposing to implement the Proposed Action, which includes the construction and operation of a new approximately 10 MW solar PV panel field on a closed landfill in the southeastern corner of FMMD. The Proposed Action also includes the lease of the land for the construction of the array, and an interconnection pathway to connect the array and its controlling systems to existing facilities. The purpose of the Proposed Action is to lease land for solar generation at FMMD sites that are not suitable for other uses. The need for the Proposed Action is to support U.S. Army policies on increasing the resiliency of utility infrastructure and moving towards increased carbon free energy production. This project aligns with Executive Order (EO) 14057, *Catalyzing Clean Energy Industries and Jobs through Federal Sustainability*, by utilizing Federal land at Fort Meade, generating carbon free energy, and establishing a public-private partnership that catalyzes the growth of clean energy industries and jobs. It also supports the Fort Meade Installation Energy and Water Plan (IEWP) (2019) recommendation to evaluate landfill sites for energy/resilience opportunities.

Under the No Action Alternative, the Proposed Action would not be implemented. FMMD would continue to use current power sources. The No Action Alternative does not support the Army's resilience strategy or provide an opportunity to move towards increased carbon free energy production.

The Proposed Action was evaluated based on the environmental, cultural, and socioeconomic impacts, as well as compliance with regulatory and mission requirements.

Required permits to implement the Proposed Action may include, but are not limited to, the following: Department of the Army Permit pursuant to Section 404 of the Clean Water Act; Maryland Department of Environment (MDE) Wetlands and Waterways Permit and Water Quality Certification; National Pollutant Discharge Elimination System permit; MDE Stormwater Permit; and MDE-approved Erosion and Sediment Control (ESC) plans. Prior to the start of construction, any required construction-related permits or approvals would be obtained by FMMD or the third-party developer, as appropriate.

c. Public Participation

Public participation would take place as a part of the NEPA Environmental Assessment (EA), which is currently being prepared for the Proposed Action. The EA serves as the primary document to facilitate environmental review of the Proposed Action by federal, state, Native American Tribes, local agencies, and the public. State agency consultation will include review through the

Maryland State Clearinghouse. Public participation opportunities with respect to the EA and decision making on the Proposed Action are guided by 32 Code of Federal Regulations (CFR) Part 651. A draft EA and, if warranted, a draft Finding of No Significant Impact (FNSI), will be released to the public for a 30-day review and comment period. Any comments or responses will be addressed prior to publication of the final EA. FMMD would sign a FNSI if there are no significant adverse impacts, and then proceed with implementation of the Proposed Action. If there are significant and unmitigated adverse impacts associated with the Proposed Action, the Army would publish a Notice of Intent to prepare an Environmental Impact Statement.

d. Other Consultations

Through the NEPA process, FMMD initiated consultation with U.S. Fish and Wildlife Service (USFWS), Maryland Department of Natural Resources, and Maryland Historic Trust State Historic Preservation Office. Copies of these correspondences are provided in the draft EA. Additionally, FMMD will submit the draft EA to the Maryland State Clearinghouse for review.

2. Enclosure 2: Site Location

a. Site Location Maps

A site location map and solar array project area are provided below as Figures 1 and 2, respectively.

Figure 1. Site Location Map

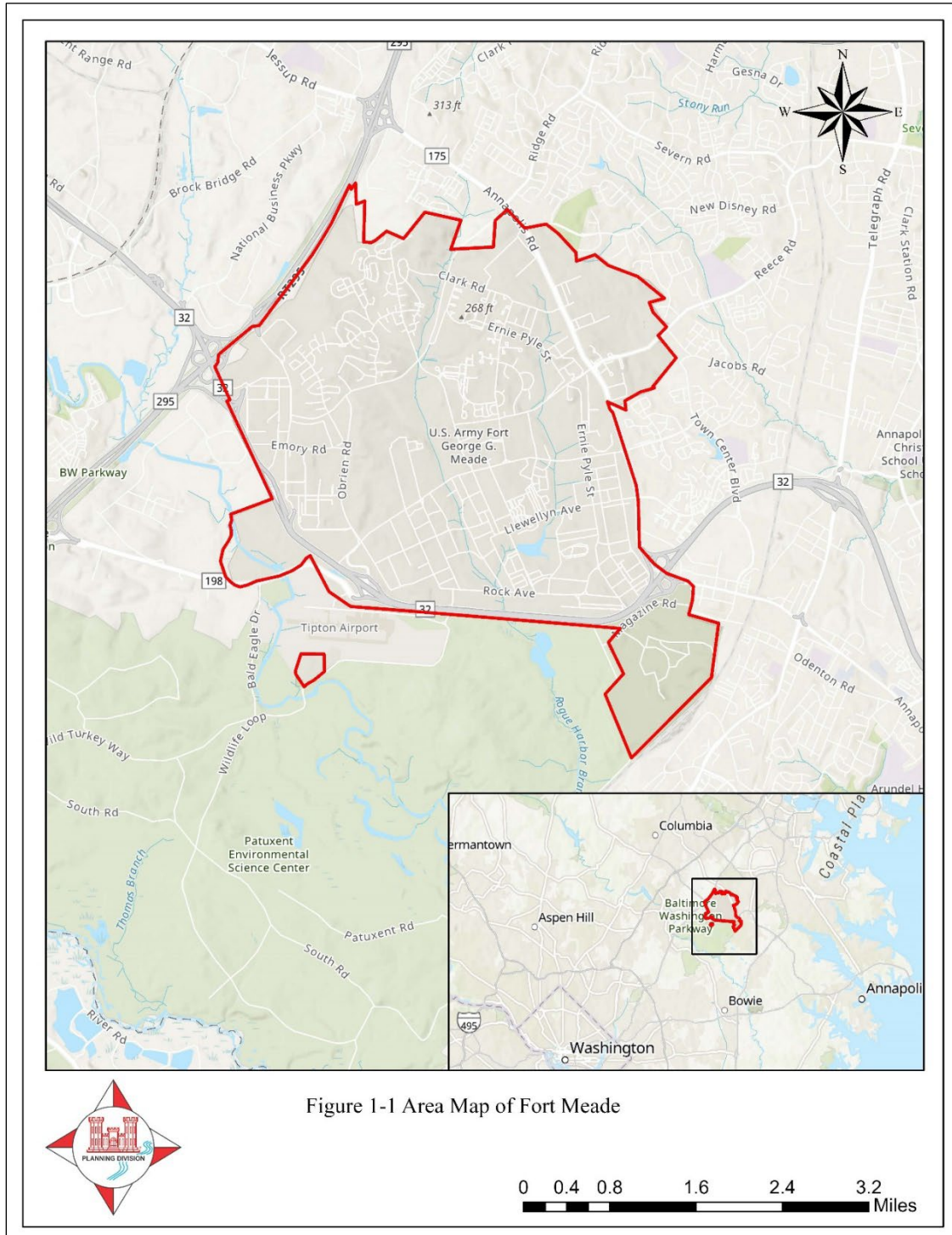
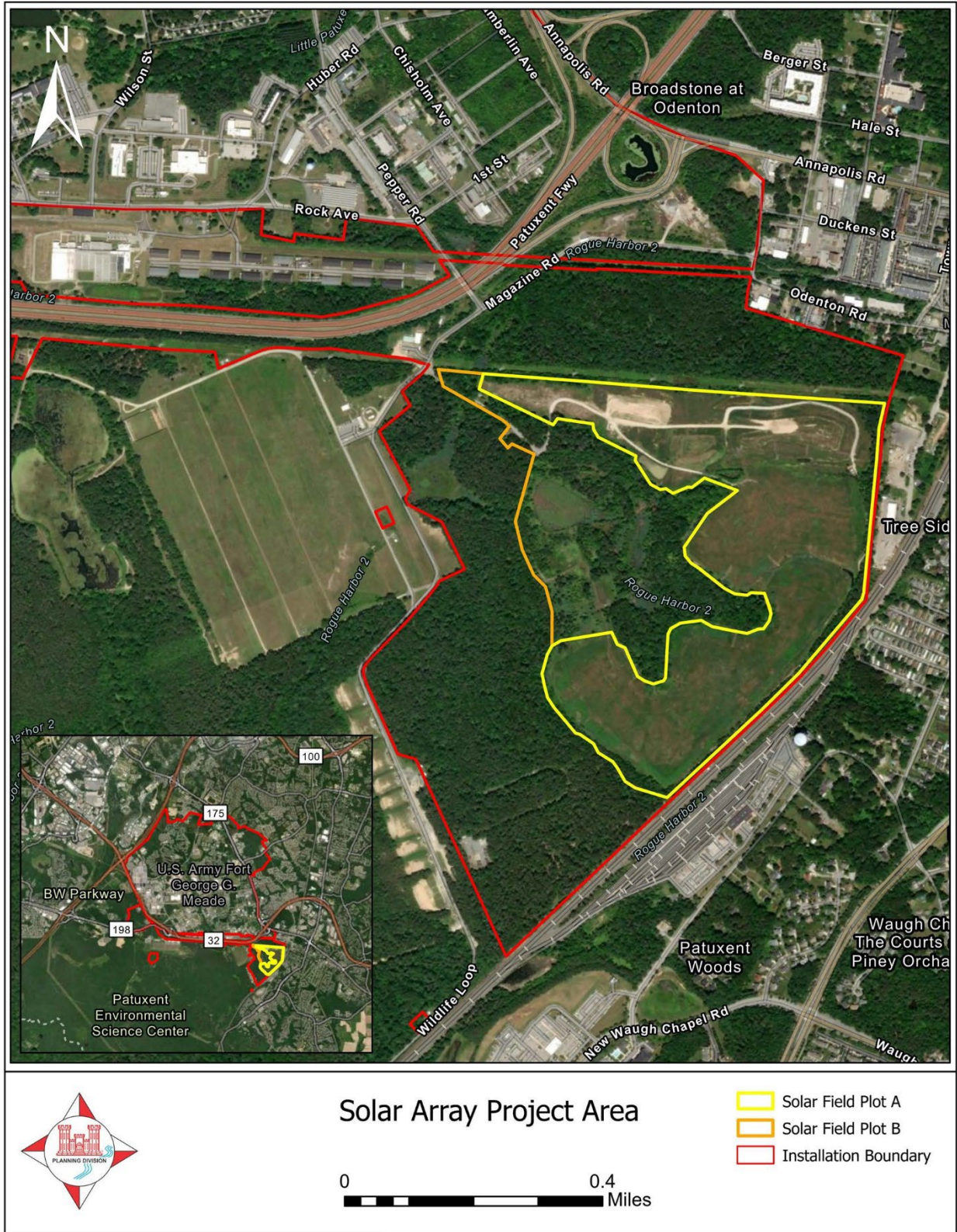


Figure 2. Solar Array Project Area



3. Basis for Determination

FMMD evaluated the proposed action based on its foreseeable effect on the following General Policies.

a. General Policies

i. Core Policies

Relevant core policies are described below. The core policies which are not relevant or applicable to the Proposed Action are: 3 (State wild lands), 4 (State parks, forests, etc.), 5 (Water appropriation), 6. (Character and Scenic Value of Waterways), 7 (Natural Water Flow), 8 (Permanent dune structures), 9 (Assateague Island), 10 (Public Hearing for Non-Tidal Waters), 11 (Soil Erosion), 12 (Controlled hazardous substances), 13 (Port of Baltimore), and 14 (Outer Continental Shelf).

1. Air Resources

FMMD is located within an area designated by the USEPA as “attainment” for the criteria pollutants except for PM_{2.5} and ozone (O₃), which is measured as oxides of nitrogen (NO_x) and volatile organic compounds (VOCs).

The Proposed Action would result in temporary, minor, direct, adverse impacts to air quality, primarily due to construction equipment and activities. Under the Proposed Action, potential air quality impacts from construction activities would occur from: 1) combustion emissions due to the use of fossil fuel-powered equipment and vehicles, and 2) particulate emissions during earth-moving activities. Construction vehicles used would consist of a mixture of rollers (soil/stone/paving compaction), trenchers, excavators, cranes, graders, rough terrain lifts, tractor/loader/backhoe(s), skid steer loaders, and other vehicles and equipment typically associated with construction activities. As documented in the EA, air emissions associated with the Proposed Action would not exceed CAA NAAQS General Conformity *de minimus* thresholds.

It is also possible that due to the replacement of energy provided by combustion of fossil fuels with energy supplied by solar power, the Proposed Alternative could result in a long-term, indirect, beneficial impact on air quality from the resultant decrease in fossil fuel-based emissions. Operation and maintenance equipment could include lawnmowers, weedwhackers, washing equipment, light trucks, and, possibly, a natural-gas emergency generator, the regular and/or intermittent use of which would not exceed the NAAQS.

2. Noise

The Proposed Action construction activities would have short-term, minor, direct, adverse impacts on noise in the immediate area of the array sites and interconnection pathways, primarily due to site preparation and construction activities. The area is subject to considerable road noise from Highway 32, railroad tracks and a shooting range, all immediately adjacent to the primary project area. There are no sensitive receptors nearby. Construction equipment is expected to include gas and/or diesel-powered equipment such rollers (soil/stone/paving compaction), trenchers, excavators, cranes, graders, rough terrain lifts, tractor/loader/backhoe(s), skid steer loaders, and

other vehicles and equipment typically associated with construction activities. Once mobilized to the site, the majority of construction equipment would remain within the proposed construction boundary until the phase of construction for which the equipment was needed is complete. Within the proposed construction area, noise from construction activities would vary depending on the type of equipment being used at the time.

Any of the Proposed Action phases may generate noise levels during the earth moving phase (site clearing activities involving pieces of equipment) that could range from 72 to 98 dBA when measured 50 feet from the respective piece of equipment. The nearest noise receptor would be residents in the Arundel Mobile Village located off North Patuxent Road and Aaron Circle, approximately 300 feet to the east of the landfill and immediately adjacent to the Amtrack tracks.

Noise impacts would be further minimized by equipping construction equipment with appropriate sound-muffling devices (i.e., from the original equipment manufacturer or better), and limiting engine idling to less than five minutes. Additionally, construction activities would take place during daylight hours and during weekdays.

i. Water Quality

Relevant water quality policies are described below. Water Quality Policies that are not relevant to the Proposed Action include: 1 (Pollutants), 2 (Protecting State waters for recreation, fish, aquatic life, and wildlife), 3 (Toxic pollutants discharge), 5 (Additional treatment for discharges), 6 (Thermal discharges), 7 (Pesticide storage), 8 (Non-structural stormwater management for developments), 9 (Used oil), 10 (Toxic dumping material), or 11 (Public meetings).

Policy 4. Stormwater Discharge Permit for discharge into State waters.

The Proposed Action would not involve discharging or introducing any substance into any state waters. Construction of an ancillary battery facility and/or generator pad may result in a minor increase in impervious surfaces, but this increase will be minimized to the fullest extent possible.

The third-party developer would be required to submit a stormwater management and erosion and sedimentation plan to MDE for approval prior to any ground disturbing activities. The project proponent will be required to obtain a stormwater management permit from the MDE. FMMD will comply to the maximum extent technically feasible with EISA Section 438 to ensure that pre- and post-hydrology remain the same with no additional discharge for stormwater.

Construction activities may temporarily expose soils and introduce sedimentation to any temporary surface waters from rain, which are not expected to reach the nearest stream, Little Patuxent. To avoid erosion of exposed soils, the construction contractor would install and maintain ESC BMPs to minimize sedimentation. Any polluting substances needed for construction equipment on site (e.g., diesel fuel) would be stored and contained appropriately and disposed of appropriately, with all necessary permits. Any spills would be cleaned up appropriately, in accordance with the FMMD Spill Prevention, Controls and Countermeasures Plan. All activities would comply and demonstrate consistency with the relevant laws, policies, and regulations.

Due to the distance from FMMD to the Chesapeake Bay, any impacts to finfish resources from non-point source pollution in the form of sedimentation caused by construction are not reasonably

anticipated to enter the Chesapeake Bay or its tributaries. As previously described, a Stormwater Management Plan and ESC Plan would be prepared in accordance with Maryland Stormwater Management Act permit regulations and implemented to prevent impacts to other surface water bodies.

i. Flood Hazards

The Proposed Action is not located in a coastal tidal floodplain nor in a flood hazard area and would have no impact on Flood Hazard policies 1, 2, or 3 (Downstream discharge for named watersheds).

a. Coastal Resources

i. Chesapeake and Atlantic Coastal Bays Critical Area

FMMD is not located in the Critical Area as designated and administered through the Maryland's Critical Area Program.

b. Tidal Wetlands

There are no tidal wetlands, marshes, or tidal waters at FMMD.

i. Non-tidal Wetlands

Policy 1. Modifying character of non-tidal wetlands

Construction and operation of the Proposed Action could result in permanent impacts to emergent nontidal wetlands and their buffers. There is a large (24-acre) wetland system within the forested western portion of the site that drains to Rogue Harbor Branch off-site to the west. There are also four PEM wetlands that were delineated during site visits in July and August of 2022, totaling 1.87 acres.

The potential for other project components to intersect mapped wetland areas is found primarily within yet-to-be-determined access roads. No site layout plans are available at this stage of the project because such plans would be the responsibility of the third-party developer that obtains the areas to be leased from FMMD as part of the Proposed Action; however, throughout the project design process, all efforts would be made to avoid impacts to wetlands by citing project elements outside of the delineated wetlands and their 100-foot buffers. To the extent practicable, existing gravel access roads would be used for construction and operational activities associated with the panel array. If the access pathway with the washed-out area referenced above is identified as the best access path, repairs would be necessary to reestablish a passable route past the stormwater pond. Following the required wetland permitting regulations, impacts to wetlands would be minor.

ii. Forests

Relevant forest policies are described below. Forest Policies that are not relevant to the Proposed Action include: 3 (Commercial timber harvesting), 4 (Highway construction projects), and 5 (Roadside tree cutting).

Policy 2. Forest Conversation Act

It is the intent of FMMD to conserve forested areas to the maximum extent practical in accordance with the Maryland Forest Conservation Act (FCA) while continuing to sustain and support current and future missions. This includes managing the FMMD forest conservation program in accordance with the 2013 MOU between the State of Maryland and the DoD concerning federal consistency requirements of the Coastal Zone Management Act.

Limited removal and disturbance of trees would be required for site preparation as the area used for the array field is mostly previously graded former landfills with a topsoil cap and herbaceous groundcover. Adjacent areas of the former landfill have been identified as having environmental constraints, namely, wetlands and streams. This area would only be used to allow access to the landfill cells. No specimen tree removal is expected to occur, but mitigation would be required for any impacted trees and/or forested areas. Trees can be replanted elsewhere on FMMD, if necessary, for mitigation. The project proponent would work with Fort Meade's DPW to comply with the Fort Meade tree policy and FCA, which requires compliance for all projects of 40,000 square feet or larger and that the equivalent of 20% of a project area be forested. Where tree removal is required, the impact would be mitigated onsite by replanting at a ratio of 1:1 or higher, through forest conservation, reforestation, or silvicultural improvement projects. Tree planting and landscaping would be composed of native, non-invasive plant species. Construction impacts to vegetative habitat would be limited to the immediate project areas.

Policy 6. Non-tidal wetland compliance

The third-party developer would be required to submit a stormwater management and erosion and sedimentation plan to MDE for approval prior to any ground disturbing activities. The project proponent will be required to obtain a stormwater management permit from the MDE. FMMD will comply to the maximum extent technically feasible with EISA Section 438 to ensure that pre- and post-hydrology remain the same with no additional discharge for stormwater. The BMPs identified in the ESC plan, to minimize sedimentation and erosion associated with construction activities, would be implemented.

iii. Historic and Archaeological Sites

Policies 1, 2 and 3.

No historic properties have been identified within the project site. However, there is the potential for adverse impacts to previously unidentified cultural resources that could be inadvertently discovered during any construction work that requires vegetation removal or causes subsurface disturbance.

To ensure adverse impacts to historical and archaeological sites are avoided, FMMD initiated Section 106 consultation with the Maryland State Historic Preservation Officer (SHPO) and selected Native American Tribes to ascertain potential impacts of the Proposed Action to historical and archaeological sites prior to implementing the Proposed Action.

Additionally, to minimize the potential adverse impact to previously unknown cultural resources

during subsurface work, FMMD would implement an “Accidental Discovery” plan to comply with the NHPA, Archaeological Resources Protection Act of 1979, Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act, 36 CFR Part 79, and EO 13007: Indian Sacred Sites. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time during construction or operation of the expansion areas, FMMD would cease all activities involving subsurface disturbance in the vicinity of the discovery. Should human remains or other cultural items, as defined by NAGPRA, be discovered during project construction, construction work would immediately cease until the FMMD Cultural Resources Manager, Maryland SHPO, and selected Native American Tribes are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and federal law(s). Implementation of these measures would ensure that the Proposed Action would have “No Adverse Effect” on historic properties or cultural resources.

No additional impacts are anticipated from construction or operation and maintenance of the Proposed Action.

iv. Living Aquatic Resources

Relevant living aquatic resources policies are described below. Living aquatic policies that are not relevant to the Proposed Action include: 2 (Sustainable fisheries harvesting), 3 (State land or water resource acquisitions), 4 (Passage of finfish), 5 (Instream construction windows), 6 (Riparian buffers for self-sustaining trout populations), 8 (Impacts on Submerged Aquatic Vegetation), 9 (Oyster bars), 10 (Oyster harvest), 11 (Genetically altered organisms), 12 (Vectors for introducing nonnative organisms), 13 (Snakehead introduction), and 14 (Nonnative oyster introduction).

Policy 1. Taking of a State Listed Species without an Incidental Take Permit

The presence of the now-endangered Northern Long-eared Bat and the endangered Indiana Bat have been acoustically detected on Fort Meade. However, no hibernaculum or summer roost trees have been identified at FMMD or in Anne Arundel County, MD. Consultation was initiated with the USFWS on September 20, 2022, and their response states that the Proposed Action would have “no effect” on endangered, threatened, or candidate species. While the project is within the range of the species, they have determined that less than 15 acres of trees would be cleared, and it is unlikely that these bat species would occur within the project area. Therefore, a Biological Assessment would not be necessary and further Section 7 Consultation with USFWS would not be required.

Additionally, the MD DNR Wildlife and Heritage Service determined that there are no official State or Federal records for listed plant or animal species within the project area and, therefore, no specific concerns regarding potential impacts or recommendations for protection measures unless the project area changes.

An unpermitted "take" of an RTE species is not anticipated to occur under construction or operation of the Proposed Action. If a protected species should be found in a proposed construction area, FMMD would consult with the USFWS and/or MDE and appropriate steps would be taken to ensure the species was not harmed.

Policy 7. Aquatic and terrestrial habitat impacts in non-tidal waters

For aquatic and terrestrial habitat, minor, short-term, direct, adverse impacts could result from repairs to the stormwater treatment pond. Construction would require direct disturbance to the man-made pond while restoration improvements are made. As previously described, short-term adverse impacts would be minimized by implementing BMPs per the ESC to minimize erosion and sedimentation. In general, significant, long-term beneficial impacts are anticipated for nearby aquatic and terrestrial habitat during operation of the newly improved stormwater treatment pond.

c. COASTAL USES

- 1. Mineral Extraction:** Not Relevant
- 2. Electrical Generation and Transmission:** Not Relevant
- 3. Tidal Shore Erosion Control:** Not Relevant
- 4. Oil and Natural Gas Facilities:** Not Relevant
- 5. Dredging and Disposal of Dredged Material:** Not Relevant
- 6. Navigation:** Not Relevant
- 7. Transportation:** Not Relevant
- 8. Agriculture:** Not Relevant
- 9. Development:** Not Relevant
- 10. Sewage Treatment:** Not Relevant

4. Summary of Findings

Based on the above analysis, FMMD would 1) comply with all MD coastal policies; 2) ensure all federal consistency requirements are met; 3) follow all MDE regulations and Army INRMP requirements, and; 4) implement measures to mitigate any potential environmental impacts.

FMMD has conducted a Coastal Zone Management Federal Consistency review of the Proposed Action and has determined that the Proposed Action is consistent, to the maximum extent practicable, with the policies of Maryland's federally approved Coastal Zone Management Program.