



**US Army Corps
of Engineers®**
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Explanation of Significant Differences

Culebra, Puerto Rico Formerly Used Defense Site

**Property Number I02PR0068
Project Number 19 (Culebrita and Cayo Botella Impact Area - Land)**

Authorized under the Formerly Used Defense Sites Program

**Prepared by:
U.S. Army Corps of Engineers**

July 2025

Acronym List

ARAR	Applicable or Relevant and Appropriate Requirements
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DoD	Department of Defense
DOI	Department of Interior
ESD	Explanation of Significant Differences
FS	Feasibility Study
FUDS	Formerly Used Defense Site
FWS	U.S. Fish and Wildlife Service
LUCs	Land Use Controls
MEC	Munitions and Explosives of Concern
mm	millimeter
MRS	Munitions Response Site
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
PRDNER	Puerto Rico Department of Natural and Environmental Resources
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
USACE	United States Army Corps of Engineers

EXECUTIVE SUMMARY

This Explanation of Significant Differences (ESD) documents a change to the Record of Decision (ROD) for the Culebrita and Cayo Botella Impact Area Munitions Response Site (MRS), Project Number I02PR006819, located within the Culebra, Puerto Rico Formerly Used Defense Site (FUDS). The United States Army Corps of Engineers (USACE) Chief of Environmental Division, Directorate of Military Programs signed the ROD on September 22, 2023. The change is a reduction in the size of the area being remediated and the associated decrease in cost.

The selected remedy includes surface and subsurface removal of military munitions using advanced geophysical classification on the Culebrita beaches (with a 25-foot buffer) and trails, surface clearance within the former target area, and land use controls throughout the MRS. The ROD identified the trails as 0.77 acres. Following the execution of the ROD, the land manager, the U.S. Fish and Wildlife Service (FWS), notified USACE that the 0.59 acre “trail” going to the “Jacuzzi Recreation Area” is not an authorized trail, and the FWS is not maintaining it. As such, this area is completely overgrown with vegetation and is no longer present or used by the public. Removing the vegetation, which would be required to search for and remove any potentially present munitions, would recreate an unofficial/unauthorized trail. The FWS objects to both removing vegetation within the National Wildlife Refuge and establishing a trail in this area.

The change in the length of trails being treated and the cost reduction constitute a significant difference to the remedial action. However, these changes do not fundamentally alter the selected remedy for this FUDS.

The changes do not alter the remedial action objective for the MRS. The Remedial Action Objectives for Culebrita and Cayo Botella Impact Area - Land (MRS 19) are as follows.

- Culebrita: To limit the likelihood of an explosive event due to exposure to the presence of MEC (20mm projectiles, 75mm projectile, Mk 5 rockets, Mk 8 demo hose, mechanical time fuze, powder train time fuze, flare, and 3-inch projectile) to natural resource workers and recreational users on the surface within the MRS, to a depth of three feet below ground surface on beaches, and one foot on trails such that acceptable risk conditions are achieved.
- Cayo Botella: To limit the likelihood of an explosive event due to exposure to the presence of MEC (Mk 76 practice bombs, Mk 80 bomb, Mk 106, 2.75-inch rockets, and point detonating fuze) to natural resource workers and recreational users on the surface of the cay such that acceptable risk conditions are achieved.

Since the 0.59 acres are not used by, and are inaccessible to, natural resource workers or recreational users, there is no unacceptable risk associated with that area. The selected remedy in the ROD remains protective of human health and the environment; complies with Applicable or Relevant and Appropriate Requirements (ARAR); and significantly and permanently reduces the toxicity, volume, and mobility of hazardous waste (munitions).

USACE provided this ESD to the lead regulatory agency, the Puerto Rico Department of Natural and Environmental Resources (PRDNER), twice and also discussed it during a meeting. The agency did not provide comment.

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I. DECLARATION FOR THE EXPLANATION OF SIGNIFICANT DIFFERENCES

1.0 PROJECT NAME AND LOCATION

Culebra, Puerto Rico Formerly Used Defense Site (FUDS)
Property Number I02PR0068
Culebrita and Cayo Botella Impact Area - Land
Project Number 19
Culebra, Puerto Rico

2.0 STATEMENT AND BASIS OF PURPOSE

This Explanation of Significant Differences (ESD) addresses the change in the size of the area being treated during the Munitions and Explosives of Concern (MEC) removal action and the associated cost change since the United States Army Corps of Engineers (USACE), Chief of Environmental Division, Directorate of Military Programs, signed the Record of Decision (ROD) on September 22, 2023. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 117(c), 42 United States Code (U.S.C.) § 9617(c), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) § 300.435(c)(2)(i), requires that an ESD be prepared when differences in the remedial action significantly change but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost. When the USACE prepared the Remedial Investigation/Feasibility Study (RI/FS), people within the community shared that they followed a trail from the beach to the “Jacuzzi Pools,” so USACE included the trail in the Remedial Action area. When the USACE team visited the site March 21, 2024, the trail did not exist. USACE coordinated further with the U.S. Fish and Wildlife Service (FWS), the property owner/manager, and they confirmed the 0.59 acre trail is not part of their trail system, and the agency does not maintain a trail in that area (official or unofficial).

The United States Army is the lead agency on behalf of the Department of Defense (DoD), and USACE has mission execution authority for the FUDS program.

USACE provided this ESD to the lead regulatory agency, the Puerto Rico Department of Natural and Environmental Resources (PRDNER), twice and also discussed it during a meeting. The agency did not provide comment.

This ESD will become part of the Administrative Record, which is available to the public at the Fundación de Culebra (Bo. San Idelfonso Antiguo Campamento Naval, Culebra, PR 00775) and the Jacksonville District Office. USACE has also posted documents on the project website.

3.0 ASSESSMENT OF THE MUNITIONS RESPONSE SITE

This ESD for the Culebrita and Cayo Botella Impact Area MRS is necessary to protect human health and public safety from Munitions and Explosives of Concern (MEC). The ROD selected remedy satisfies the CERCLA § 121(b) (42 U.S.C. § 9621(b)) and the NCP, 40 CFR Part 300. The selected remedy, as described in the ROD with the changes addressed in this ESD, remains protective of human health and the environment, complies with Applicable or Relevant and Appropriate Requirements (ARARs) and significantly and permanently reduces the toxicity, volume, and mobility of hazardous waste (MEC) within the MRS.

4.0 DESCRIPTION OF THE SIGNIFICANT DIFFERENCES

The difference to the signed ROD is the reduction of 0.59 acres in the area undergoing a MEC removal action and associated \$325,148 decrease in cost. The trail that reportedly existed when USACE prepared the RI/FS is now completely overgrown, no longer exists, and is not accessible by the public. (See Part II Section 3 for more information.)

5.0 STATUTORY DETERMINATION

The selected remedy in the ROD for Culebra MRS 19 remains protective of human health and the environment, complies with federal and commonwealth ARARs, and utilizes permanent solutions to the maximum extent practicable. The selected remedy satisfies the statutory preference for treatment as a principal element of the remedy. The selected remedy will not achieve Unlimited Use/Unrestricted Exposure, and Five-Year Reviews are required in accordance with 40 CFR 300.430(f)(4)(ii) and Section 121(c) of CERCLA (42 U.S.C. § 9621(c)).

6.0 AUTHORIZING SIGNATURE

This ESD documents the reduction in acreage being treated and the associated cost decrease to the ROD for the Culebrita and Cayo Botella Impact Area in Culebra, Puerto Rico. The U.S. Army is the lead agency at the Culebra FUDS under the Defense Environmental Restoration Program, and USACE has mission execution authority for the FUDS Program. USACE developed this ESD consistent with CERCLA and the NCP and coordinated with PRDNER. This ESD will be incorporated into the Administrative Record file for Culebra MRS 19.

This ESD, which documents the decrease in acreage and costs, is approved by the undersigned pursuant to the delegated authority in the Assistant Secretary of the Army (Installations, Energy, and Environment) memorandum dated May 25, 2022, Subject: “Assignment of Mission Execution Functions Associated with Department of Defense Lead Agent Responsibilities for the Formerly Used Defense Sites Program,” and subsequent re-delegations.

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Date: 2025-07-25T08:40:24-0400

STEPHANIE L. HALL, PMP, SES
Director of Regional Business
South Atlantic Division

25 July 2025

Date

II. DECISION SUMMARY FOR THE EXPLANATION OF SIGNIFICANT DIFFERENCES

1.0 SITE NAME, LOCATION, AND DESCRIPTION

The MRSs associated with the Culebra FUDS encompass almost all of the main island of Culebra and the surrounding smaller islands known as cayos. Culebra is approximately 17 miles east of the main island of Puerto Rico.

- 02 Culebra Adjacent Cayos - Water
- 03 Flamenco Bay Water Area
- 04 Flamenco Beach Maneuver Area
- 05 Mortar and Combat Range Area
- 06 Artillery Firing Area
- 07 Culebrita and Cayo Botella Impact Area - Water
- 08 Cayo Norte Impact Area
- 09 Soldado Point Mortar and Bombing Areas
- 10 Defensive Firing Area 1
- 11 Defensive Firing Area 2
- 12 Luis Peña Channel Water Areas
- 13 Cayo Luis Peña Impact Area
- 14 Airport and Camp Area
- 16 Northwest Peninsula Congressionally Authorized Areas
- 17 Remaining Lands
- 18 Culebra Adjacent Cays - Land
- **19 Culebrita and Cayo Botella Impact Area - Land**



Figure 1: Map of Culebra Highlighting the Culebrita and Cayo Botella Impact Area - Land

The Culebrita and Cayo Botella Impact Area MRS includes all of Cayo Botella and part of Culebrita. Both are smaller islands on the east side of the main island of Culebra. These are

former target areas where munitions have been identified, see Figure 2. Culebrita and Cayo Botella land areas encompass 150.37 and 3.93 acres, respectively. The U.S. Department of the Interior (DOI) owns the land within the MRS, and the FWS manages the land as part of the Culebra Wildlife Refuge.

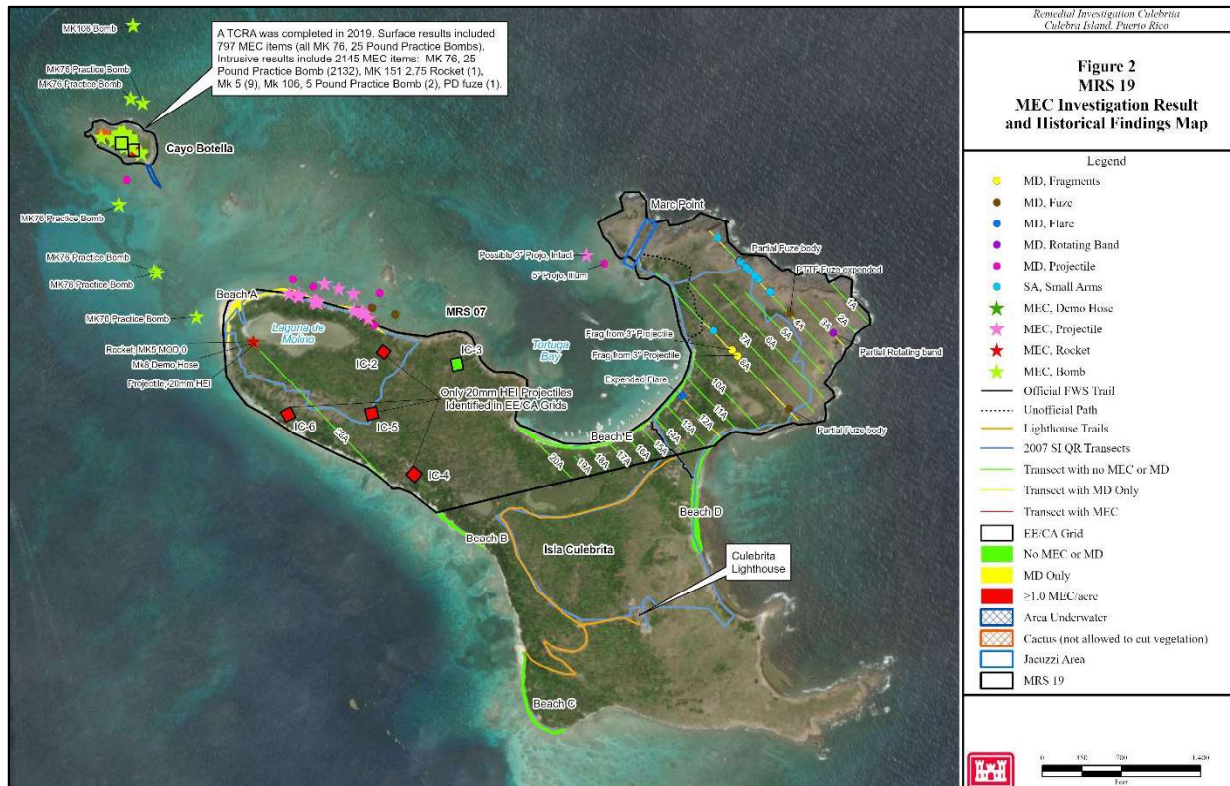


Figure 2: Map Showing Results of Previous Investigations/Removals

USACE delineated MRS 07 which originally included land and water areas. The land areas are now MRS 19, and the water acreage remained within MRS 07. As such, the results of the investigation of this MRS are found within the *May 2021 Final Remedial Investigation/Feasibility Study (RI/FS) for Culebra Cerro Balcón and Adjacent Cays (MRS 02) – I02PR006802, Flamenco Lagoon Maneuver Area (MRS 04) – I02PR006804, Mortar and Combat Range Area (MRS 05) – I02PR006805, and Culebrita Artillery Impact Area (MRS 07) – I02PR006807*.

When USACE prepared the RI/FS report, there appeared to be a trail leading from the beach to an area known as the “Jacuzzi Recreation Area.” That trail, if it existed, was an unofficial trail that goats on the island may have cleared. The goats have since been eradicated, and when USACE walked the site with representatives from the FWS on March 21, 2024, the trail was no longer visible.

The FWS confirmed that they did not establish nor ever maintain a trail to the “Jacuzzi Recreational Area,” and that area is not sanctioned for recreational activities. The agency does not support nor approve the development or use of a trail leading to the “pools” and does not anticipate that a trail to the “pools” would be included in the Culebra National Wildlife Refuge trail system in the foreseeable future.

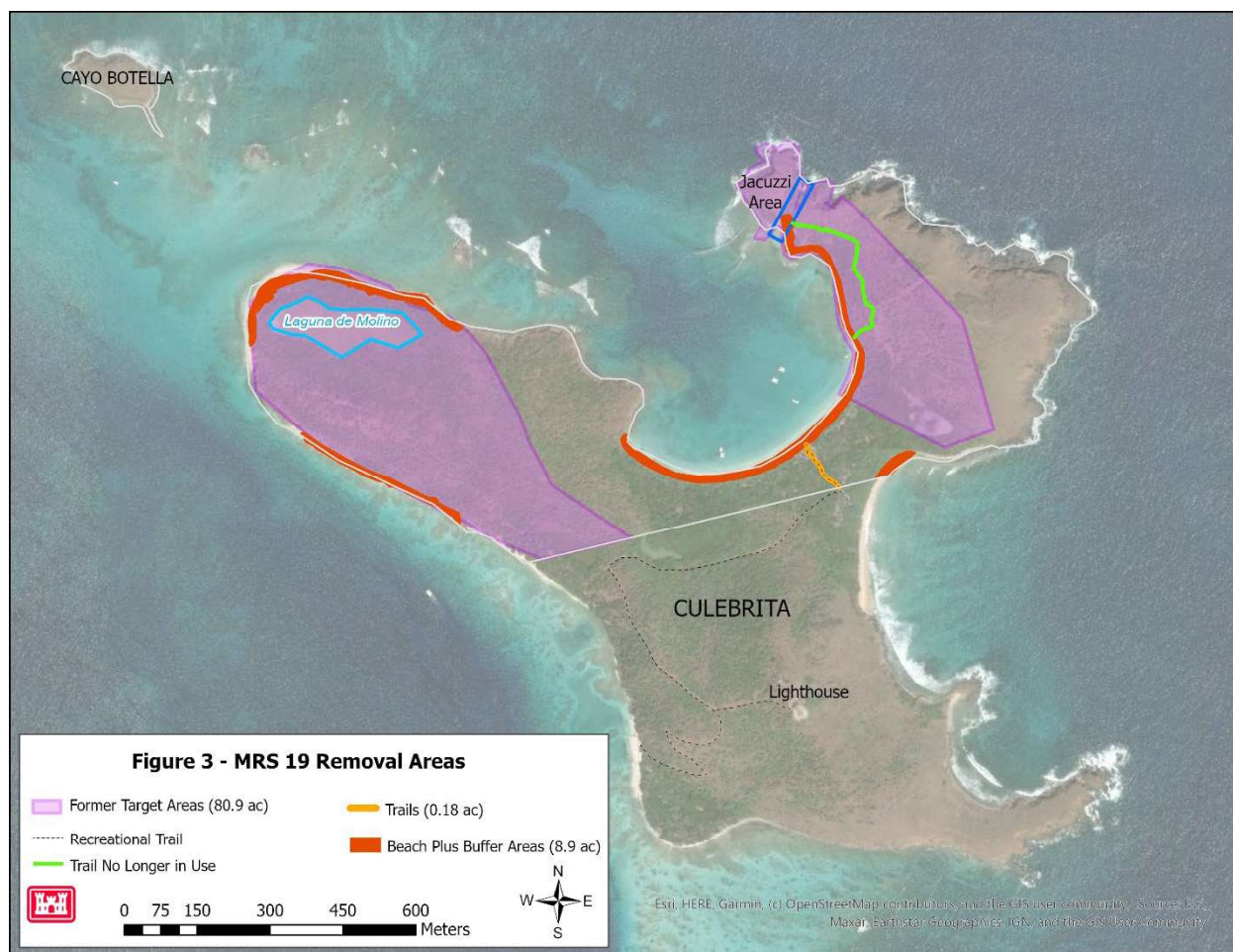


Figure 3: Map Showing Target Areas, Trails, and Beach Areas within Culebrita

2.0 SITE HISTORY AND POST-RECORD OF DECISION ACTIVITIES

2.1 Site History

The U.S. military began using Culebra in 1903, initially as a coaling station and radio transmitter facility. During the Vietnam War era, the U.S. Navy continued to use the island and surrounding cays for both ship and aerial ordnance training. U.S. Navy operations were terminated in 1975 and, beginning in 1978, the federal government transferred the property to multiple agencies including the DOI, PRDNER, the Commonwealth of Puerto Rico, the Puerto Rico Ports Authority, and the Municipality of Culebra. The FUDS includes Culebra Island, 16 nearby cayos, and surrounding water.

2.2 Summary of Contamination and Site Conditions

MEC and munitions debris recovered at the site during various investigations include high-explosives 20 mm projectiles, 2.75-inch rockets, 75 mm projectiles, MK 8 demolition hose, and 25-pound practice bombs.

Based on the results of the RI/FS, munitions constituents do not pose an unacceptable risk to human health and the environment.

The Culebra National Wildlife Refuge protects important habitats for migratory shore birds and

nesting seabirds; therefore, complete vegetation removal is prohibited. The FWS has agreed to allow some vegetation trimming; however, the agency has expressed concern that any vegetation trimming should not create new pathways into vegetated areas. Current vegetation helps prevent site users from disturbing Culebrita's sensitive habitats.

2.3 Selected Remedy in the Approved Record of Decision

The selected remedy in the signed ROD is surface and subsurface removal of military munitions using Advanced Geophysical Classification with Land Use Controls (LUCs) at the Culebrita beaches (with a 25-foot buffer) and trails, surface clearance with LUCs within the former target area, and LUCs only for the Inland Area and Cayo Botella. As documented in the ROD, no action was recommended for munitions constituents at Culebrita and Cayo Botella Impact Area.

In order to implement the surface and subsurface MEC removal along the trails, USACE will need to remove the vegetation in the designated areas so that the geophysical equipment can move along the ground surface to map anomalies. The FWS would not authorize clearing the area currently overgrown with vegetation on a "trail" reportedly present during the RI because that would create new pathways to unsanctioned recreational area.

2.4 Post-Decision Document Activities

USACE signed the ROD September 22, 2023, and the project is currently in the Remedial Design phase to prepare the Performance Work Statement and complete the activities necessary to award a contract to implement the selected remedy. During a pre-award site visit, USACE noted the trail to the "Jacuzzi Recreational Area" no longer exists and is overgrown with vegetation.

3.0 DESCRIPTION OF KEY CHANGES

USACE will reduce the trails being treated by 0.59 acres for the area leading to the "Jacuzzi Recreational Area," and the cost to implement the remedy will be reduced accordingly (estimate to be \$325,148).

3.1 Description of Differences

USACE will conduct the remedial action for the Culebrita and Cayo Botella Impact Area in accordance with CERCLA and the NCP. However, due to changes in conditions and possibly incorrect or outdated information in the RI report, the following differences are noted.

- The 0.59 acre trail that reportedly was present during the RI no longer exists.
- The "Jacuzzi Recreational Area" is not a sanctioned recreational area, and the FWS would not authorize or maintain a trail to this area.
- Removing the trail from the area undergoing surface and subsurface MEC removal will reduce the acreage by 0.59 acres and decrease the cost an estimated \$325,148.

3.2 Difference in Remedy

The only difference documented in this ESD is the reduction in trail acreage that would be remediated and the costs associated therewith; there are no other differences. The reduction in acreage and cost documented in this ESD would not affect the remaining 0.18 acres of trails and would not change other components of the selected remedy in the ROD.

4.0 EXPECTED OUTCOMES

USACE will implement the selected remedy as documented in the signed ROD with the exception of the changes to the trail acreage.

5.0 SUPPORT AGENCY COMMENTS ON THIS EXPLANATION OF SIGNIFICANT DIFFERENCES

USACE coordinated with the FWS, and on April 12, 2024, the agency confirmed the alleged trail is not part of their system, and they would not authorize USACE to conduct vegetation removal to conduct the surface and subsurface MEC removal. Both parties agree with the revised approach which includes implementing the remedy as stated in the current ROD without the trail to the “Jacuzzi Recreational Area.”

6.0 STATUTORY DETERMINATIONS

The ESD documents significant changes to the 2023 ROD for the Culebrita and Cayo Botella Impact Area MRS 19. The remedy satisfies CERCLA § 121 (42 U.S.C. § 9621) and the NCP (40 CFR Part 300). The selected remedy in the ROD remains protective of human health and the environment; complies with ARARs; and permanently reduces the toxicity, volume, and mobility of hazardous waste (MEC).

7.0 PUBLIC PARTICIPATION AND COMPLIANCE

When this ESD is finalized, USACE will publish a Notice of Availability and a brief description of the ESD in *El Nuevo Dia*. This ESD will be made available to the public and become part of the Administrative Record. These actions will fulfill the public participation and compliance requirements set forth in 40 CFR § 300.435(c)(2)(i).

8.0 REFERENCES

USACE. *Remedial Investigation/Feasibility Study for MRS 02, MRS 04, MRS 05, MRS 07. Culebra Island Site, Puerto Rico*. May 2021.

USACE. *Record of Decision Culebrita and Cayo Botella Impact Area – Land Munitions Response Site 19 Culebra, Puerto Rico*. September 2023.