



Department of Energy

Washington, DC 20585

April 30, 2026

Via email: Caribbean_es@fws.gov

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Subject: United States Department of Energy Office of Legacy Management *Biological Assessment for the Site Characterization Study for the Boiling Nuclear Superheater Decommissioned Reactor Site in Rincon, Puerto Rico*

Dear Mr. López:

Enclosed please find the *Biological Assessment for the Site Characterization Study for the Boiling Nuclear Superheater Decommissioned Reactor Site in Rincon, Puerto Rico* to initiate Section 7 consultation under the Endangered Species Act.

Please contact me at (303) 404-6107 or jennifer.obrien@lm.doe.gov if you have any questions or comments.

Sincerely,

JENNIFER
O'BRIEN

Digitally signed by
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Biological Assessment for the Site Characterization Study for the Boiling Nuclear Superheater Decommissioned Reactor Site in Rincón, Puerto Rico

April 2026



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Abbreviations

BA	Biological Assessment
BONUS	Boiling Nuclear Superheater
DOE	U.S. Department of Energy
ESA	Endangered Species Act
LM	Office of Legacy Management
NOAA	National Oceanic and Atmospheric Administration
PREPA	Puerto Rico Electric Power Authority
SU	survey unit
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

Executive Summary

The U.S. Department of Energy Office of Legacy Management in partnership with the Puerto Rico Electric Power Authority is proposing a site characterization study at the Boiling Nuclear Superheater (BONUS) Decommissioned Reactor Site in Rincón, Puerto Rico, to reaffirm the post-cleanup determination of “no radiological contamination” at all areas of the 143-acre site outside of the reactor building. The actions would include gamma walkover surveys and radiological soil sampling across the site anticipated to occur in summer and fall 2026. Federally listed species that are present in the area and could be potentially impacted by the proposed actions include the green sea turtle (*Chelonia mydas*), hawksbill sea turtle (*Eretmochelys imbricata*), Puerto Rican boa (*Chilabothrus inornatus*), and the Vahl’s boxwood (*Buxus vahliei*). The proposed actions may affect, but are not likely to adversely affect, these species. Effects of the action include ground disturbance from the soil sampling, vehicular travel to sampling locations, and general human presence. Cumulative effects are insignificant. Conservation measures developed by the U.S. Fish and Wildlife Service Caribbean Ecological Services Field Office and other mitigation measures would be implemented to prevent adverse impacts to listed species during work activities.

1.0 Introduction

This document serves as a Biological Assessment (BA) to assess the effects of the proposed site characterization at the Boiling Nuclear Superheater (BONUS) Decommissioned Reactor Site in Rincón, Puerto Rico, to determine whether the associated actions may affect any threatened, endangered, proposed, or candidate species or their designated critical habitat as listed under the Endangered Species Act (ESA) (Title 16 *United States Code* Section 1531 et seq. [16 USC 1531 et seq.]). This BA is prepared by the U.S. Department of Energy (DOE) Office of Legacy Management (LM) in accordance with legal requirements set forth under Section 7 of the ESA and current implementing regulations. In addition, the following information is provided to comply with statutory requirements to use the best scientific and commercial information available when assessing the risks posed to listed or proposed species and designated or proposed critical habitat by proposed federal actions.

1.1 Location and Environmental Setting

The BONUS Decommissioned Reactor site is on the westernmost part of Puerto Rico near the city of Rincón on point Punta Higuera (see the [BONUS, Puerto Rico, Decommissioned Reactor Site Fact Sheet](#)). The entire site is approximately 143 acres, which includes a 5-acre fenced restricted area boundary that encompasses the domed building that contains the entombed decommissioned reactor system and outside support facilities (Figure 1). Dome Beach, the El Faro lighthouse, and several unofficial, human-made trails are within the 143 -acre site and are accessible to the public.

Coastline borders the northern and western portions of the site whereas the inner portion is mostly forested. The average elevation of the site is approximately 25 feet above sea level. The regional climate is tropical marine, with warm temperatures and high humidity throughout most of the year; an average of 80 °F (27 °C). Precipitation is greatest during April through November, with the dry season occurring from December through March. The region receives between 40 and 150 inches of annual precipitation. Most of Puerto Rico's rainfall is orographic (i.e., moisture-laden air is cooled while ascending over the mountains, causing condensation in the form of rain). Soil at the site consists primarily of silty sand, dark sandy clay, and sandstone. Clay loam occurs on side slopes and ridge tops of limestone hills (DOE 2003).

Although the site is located along the coastline, it is within a subtropical moist forest ecological life zone. This is the largest life zone of Puerto Rico which covers more than 50% of the main island. Ecological features of this type of forest include high species diversity, tall broadleaf evergreen hardwood trees, and stratification of forest species such as canopy, subcanopy, shrubs, herbs, and ground cover. Puerto Rico has diverse flora and fauna. More than 180 higher vascular plant families and 3100 species are present. Vegetation includes a variety of tropical plants. Most trees in Puerto Rico are tropical evergreen hardwoods, unlike the fast-growing evergreen pine forests of the southeastern United States. These trees are slow growers, with high wood density and good commercial value. Wildlife is also diverse. About 50% of the animals in Puerto Rico are terrestrial, while marine species comprise 38%. Other species are considered freshwater. Birds are the largest group of terrestrial species followed by reptiles. Puerto Rico also provides unique habitat for a variety of bat and frog species (USDA 2009).



Figure 1. BONUS Site Location

1.2 Purpose and Need

LM, in coordination with the U.S. Army Corps of Engineers (USACE), is proposing to complete a site characterization study at the BONUS site. The BONUS facility and surrounding 143 acres are currently owned and controlled by Puerto Rico Electric Power Authority (PREPA). LM is the long-term custodian of the low-level radiological waste that resides within the site and ensures compliance with applicable federal, state, and local environmental protection laws and regulations; executive orders; and internal DOE policies. Furthermore, in accordance with a letter of agreement between LM and PREPA, LM maintains compliance with applicable portions of Title 10 *Code of Federal Regulations* Part 835 (10 CFR 835) through its radiological monitoring of the BONUS site (DOE 2025). Through annual site monitoring and inspections, it was determined that a complete site characterization study would reaffirm the post-cleanup determination of “no radiological contamination” and was needed to identify hazards that may exist at the site, including potential exposure to the hazards.

1.3 Project Description

The proposed action would be completed in accordance with the project Delivery Order (DO) W912DR24F0373 under USACE Contract No. W912DR20D0012 and supporting documents. Actions would include visual site inspections, gamma walkover surveys, and surficial radiological soil sampling. Gamma walkover surveys and radiological soil sampling would be performed to confirm that concentrations of the radionuclides of concern associated with soils are below the derived concentration guideline levels.

All actions would occur in 10 survey units (SUs) in the following locations (Figure 2 through Figure 5):

- Class 1 areas (SUs 1–3) surround the domed building within the fence boundary and two areas outside the site fence line which includes a seawater intake and water discharge
- Class 2 areas (SUs 4 and 5) include a 25-foot buffer around the fence line and an area of coastline
- Class 3 areas (SU 6) include a 100-foot buffer around the Class 2 areas
- Class 3 areas (SUs 7–10) include nonimpacted areas

The proposed actions include civil surveys, subsurface utility locates, gamma walkover surveys, and surficial soil sampling. Civil surveys would be performed using a combination of GPS and total stations to mark and log the outer boundary of site. Subsurface utility location and mapping would use electromagnetic survey techniques and ground-penetrating radar to accurately locate and map underground utilities present. Gamma walkover surveys would be completed using hand-carried detectors within the reactor and across all SUs. The detector would be suspended approximately 4 inches over the surface being measured. The surveyor would move at a maximum rate of approximately 0.5 meters per second along paths that are approximately 1.0 meter apart to perform measurements over the required survey area for each of the SUs being investigated.

Soil investigation activities would focus on radionuclides and would include the collection of both biased surface soil samples based on the gamma survey results throughout the class areas

and systematic surface soil samples. Approximately 18 locations are anticipated in each individual SU within Class 3 and nonimpacted areas and approximately 28 locations are anticipated in Class 1 and 2 SUs. Biased sampling locations would be subject to a two-step reacquisition process to ensure that the sample matrix is representative of the gamma survey results that served as the basis for the selection of each biased sampling location. Specifically, a handheld GPS unit would be used to place a pin flag at each selected location. Soil samples in Class 1 and 2 are anticipated to be up to 1-foot deep, while samples in Class 3 and nonimpacted areas are anticipated to be no more than 6 inches deep. All soil sampling would be completed using hand tools. Soil locations would be adjusted as needed to avoid disturbing trees, shrubs, or ground cover. If grass is present, the sod would be removed to expose soil and then replaced after the sample is collected. Some limited vegetation clearance may occur in Class 1 and 2 SUs, but no off-road driving would occur in any SU. No changes to the reactor structures, systems, or components would occur.

The actions would be completed by USACE and its subcontractors. All vehicular travel would occur on previously disturbed unofficial human-made trails. All proposed actions are anticipated to begin in summer and fall 2026 and are expected to last for approximately 7 weeks, but the schedule may be extended as needed. All actions would occur during daylight hours.



Figure 2. BONUS Site Class 1 Action Area



Figure 3. BONUS Site Class 2 Action Area



Figure 4. BONUS Site Class 3 Action Area

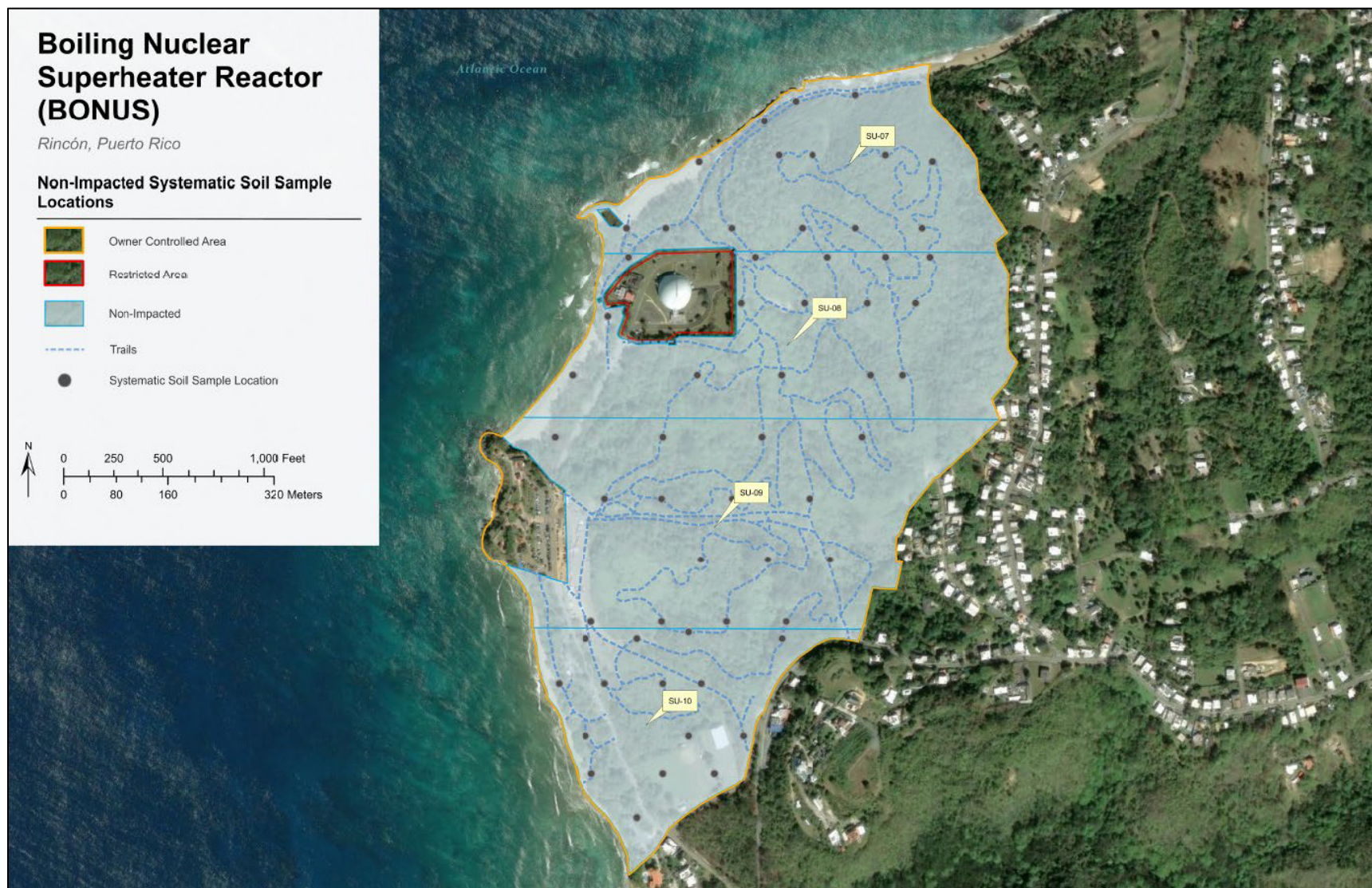


Figure 5. Soil Sampling Nonimpacted Locations at the BONUS Site

1.3.1 Anticipated Environmental Stressors

Anticipated environmental stressors include minor soil disturbance for soil sampling and general human presence. Soil sampling would require earth disturbance in various locations throughout the site including on the beach and in the forested areas. The surveys would increase human activity throughout more remote locations of the site which could disturb wildlife and sensitive habitat. Transportation to sample locations could require vehicle traffic on unofficial human-made trails.

1.3.2 Action Area

The action area includes the entirety of the site within the site boundary as shown in Figure 1. Soil sampling completed in the nonimpacted areas would be sparse and localized to the sampling location, including areas on the beach and in the forested areas. These sampling locations are intended to be randomized across a large area and can be adjusted in the field as needed. Figure 2 through Figure 5 show the locations of the different class areas where actions are proposed as described in Section 1.3.

1.4 Prior Consultation History

A Section 7 consultation was completed during the *Environmental Assessment for Authorizing the Puerto Rico Electric Power Authority (PREPA) to Allow Public Access to the Boiling Nuclear Superheat (BONUS) Reactor Building, Rincón, Puerto Rico* (DOE 2003). Comments were received from the U.S. Fish and Wildlife Service (USFWS), regarding potential impacts of the proposed action on the hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), and the Vahl's boxwood (*Buxus vahlii*). At that time, the beaches adjacent to the BONUS facility provided potential nesting habitat for those two species of sea turtles, and a population of Vahl's boxwood is within the action area adjacent to the BONUS facility. DOE responses were transmitted to USFWS in a letter dated February 8, 2002. USFWS indicated its concurrence with these responses in a letter dated March 20, 2002, stating that no further consultation was required (attached in Appendix A).

2.0 Species Accounts and Effects Analysis

This section describes the effects of the proposed action on species that are federally listed as threatened, endangered, proposed, or candidate species.

Table 1 lists all species obtained from the USFWS Information for Planning and Consultation species list (USFWS 2026a) for the defined action area of the proposed project along with a rationale as to why the species was or was not included in the effects analysis. A copy of this list can be found in Appendix B. Only species that may be affected by the proposed action are included in the analysis. There is no designated critical habitat within or near the action area.

Table 1. Federally Listed Species and Critical Habitat Considered

Species	Listing Status	Include/Exclude	Rationale
West Indian manatee (<i>Trichechus manatus</i>)	Threatened	Exclude	The proposed actions would have no impact to marine environments as work would not occur in the water.
Roseate tern (<i>Sterna dougallii</i>)	Threatened	Exclude	Breeding for this species occurs primarily on small offshore islands, or marine rocks, cays, and islets where they are protected from predators. They rarely breed on large islands such as the main island of Puerto Rico. From consultation discussions with USFWS during a December 2025 site visit, the transient nature of the tern would preclude any impacts to species from the proposed actions.
Green sea turtle (<i>Chelonia mydas</i>)	Threatened	Include	This species is known to nest at or near Dome Beach and the proposed actions could impact nesting turtles.
Hawksbill sea turtle (<i>Eretmochelys imbricata</i>)	Endangered	Include	This species is known to nest at or near Dome Beach and the proposed actions could impact nesting turtles.
Leatherback sea turtle (<i>Dermochelys coriacea</i>)	Endangered	Exclude	In the past, the leatherback sea turtle was known to nest at the beaches near the action area. Currently, the nearest occurrence of leatherback sea turtle's nests are approximately 10–15 miles from the proposed action area based on information provided by the USFWS in a December 2025 site visit.
Puerto Rican boa (<i>Chilabothrus inornatus</i>)	Endangered	Include	Potential habitat for the boa exists within the action area and proposed actions could disturb the species.
Palo de rosa (<i>Ottoschulzia rhodoxylon</i>)	Threatened	Exclude	There is no suitable habitat (soil composition) within the project area.
Vahl's boxwood (<i>Buxus vahlII</i>)	Endangered	Include	This plant species is known to exist only in Puerto Rico and St. Croix, and the proposed action area is one of five known locations on the island of Puerto Rico; one of the largest populations. Activities could have the potential to impact this species.

2.1 Green Sea Turtle

2.1.1 Species Status and Environmental Baseline

Green sea turtles are the largest of all the hard-shelled sea turtles, but have comparatively small heads. Adults are typically 3 to 4 feet long and weigh up to 350 pounds. The species are found worldwide in subtropical and temperate regions. They feed primarily on seagrasses and algae which contributes to their green appearance. The life cycle of green sea turtles involves a series of stages of development from hatchling to adult. After emerging from the nest, hatchlings swim to offshore areas, where they live for several years in pelagic (open ocean) habitat. Juveniles eventually leave the open ocean habitat and travel to nearshore foraging grounds in shallow coastal habitats, where they mature to adulthood and spend the remainder of their lives. Green sea turtles can live for 70 years or more. Females reach maturity at 25–35 years of age and migrate every 2–5 years from their coastal foraging areas to the nesting beaches where they originally hatched to reproduce. They will use their rear flippers to dig egg chambers approximately 20–30 inches deep into the sand and lay about 110 eggs per nest then return to nest every 2 weeks over several months before swimming back to their foraging grounds. Eggs incubate in the warm sand for about 2 months before the hatchlings emerge and make their way to the water to begin the same cycle (NOAA Fisheries 2026a).

Nesting season for sea turtles in Puerto Rico is March 1 to November 30. The beaches within the action area provide suitable habitat and the turtles are known to nest there on occasion. The beaches are not large with minimal area between the hightide marker and the forest, however, the turtles also nest within the vegetated/forested areas off the beach.

2.1.2 Influences and Species Conservation Needs

Influences on green sea turtle nesting success includes predation, inundation, and erosion. Human influences can increase these stressors through coastal development, increased human presence, and recreational activities on the beaches. Erosion of nesting beaches can result in partial or total loss of suitable nesting habitat. This natural process can be accelerated through coastal development and associated activities that increases erosion rates along coastlines. Beach armoring occurs when the shoreline is engineered with sea walls, riprap, sandbag installations, groins and jetties, or drift fences to save human-made structures along the coastline. These structures can influence erosion processes at neighboring beaches thereby degrading suitable nesting habitat of those areas, and the structures can impede nesting attempts or trap emergent hatchlings and nesting females. Increased human presence, including recreational activities, can also influence nesting success of sea turtles. Human activity on the beaches can influence a female sea turtle to abort nesting attempts. Recreational beach equipment and beach vehicular driving can also deter nesting attempts and directly harm incubating egg clutches and sea approach of hatchlings (NMFS and USFWS 1991).

The green sea turtle is protected under the ESA throughout its range. The National Oceanic and Atmospheric Administration (NOAA) Fisheries and USFWS have joint jurisdiction for the species and are working together, along with other international entities, to conserve and recover the turtles through regulations that eliminate or reduce threats to sea turtles. The *Recovery Plan for U.S. Population of Atlantic Green Turtle* (NMFS and USFWS 1991) serves as a road map for green sea turtle recovery and outlines the path and tasks required to restore and secure self-sustaining wild populations. Recovery actions as listed in this Recovery Plan include:

- Protecting sea turtles on nesting beaches and in marine environments.
- Protecting nesting and foraging habitats.
- Working with partners internationally to protect turtles in all life stages.
- Supporting research and conservation projects consistent with Recovery Plan priorities.

2.1.3 Effects of the Action

The proposed project could result in direct and indirect effects on nesting green sea turtles when actions are performed during nesting season. Soil sampling actions on and near the beach could directly disturb incubating egg clutches. Soil sampling would require digging up to 6 inches into the sand and soil in locations where nests could be present. Indirect effects could occur from increased human presence in nesting areas during the nesting season. This human presence could deter females from nesting, when present. All proposed actions would occur during daylight hours and there would be no human presence on the beaches at night. Therefore, there would be no impacts to the turtles during sensitive nighttime hours.

2.1.4 Conservation Measures

The USFWS Caribbean Ecological Services Field Office has developed conservation measures for sea turtles in Puerto Rico with the purpose of assisting the action agency to avoid and minimize adverse impacts to sea turtles in coastal regions (USFWS 2022). These measures were considered while developing this BA and are included in Table 2.

Table 2. Summary of Anticipated Environmental Stressors for the Green Sea Turtle

Stressor	Conservation Measure	Species Response
Ground disturbance	Qualified sea turtle monitors would be hired to survey for and flag all sea turtle nests within the action area prior to any sampling actions to avoid disturbing turtles, nests, and hatchlings. Sampling locations can be adjusted in the field as needed.	Species would not be affected if conservation measure is followed.
Vehicular travel	Vehicular travel will be limited to existing and navigable roads and dirt trails. No vehicles, equipment, staging, or debris shall be used, parked, or stored on the primary dune or in vegetated areas. Staging, parking, and storage areas should be located on paved surfaces as much as possible and outside vegetated areas or the primary dune.	Species is unlikely to be affected if conservation measures are followed.
Human presence	Qualified sea turtle monitors would be present during the proposed actions to prevent impacts to nesting turtles, egg clutches, and hatchlings. If a dead, injured, or sick sea turtle is found or if nests have been disturbed by other actions, stop all work and contact the LM environmental compliance representative who would report the finding to USFWS and PRDNER.	Species is unlikely to be affected if conservation measures are followed.

Abbreviation:

PRDNER = Puerto Rico Department of Natural and Environmental Resources

2.1.5 Discussion and Conclusion

The proposed actions may affect but are not likely to adversely affect the green sea turtle. The environmental stressors that would occur from the proposed action would be mitigated through conservation measures to prevent impacts to the turtle or nests, if present. Some minor disturbance could occur, but would be closely monitored to prevent adverse effects. Sampling locations can be adjusted in the field as needed.

2.2 Hawksbill Sea Turtle

2.2.1 Species Status and Environmental Baseline

Hawksbill sea turtles are found in tropical and subtropical waters of all major oceans. The hawksbill is named for its unique beaklike mouth, which resembles that of a hawk and is perfect for finding food in hard-to-reach cracks and crevices of coral reefs. These turtles use a variety of habitats during different stages of their life cycle, but largely inhabit nearshore foraging grounds, especially healthy coral reef habitats. Hawksbills can live up to 60 years and reach maturity between 20 and 35 years. Once mature, female hawksbill sea turtles return to nest on the beaches where they were hatched every 1–5 years. Hawksbills generally lay three to five nests per season, which contain an average of 130 to 160 eggs each. Hawksbills typically nest at night on small and isolated “pocket” beaches, with little or no sand and a rocky approach. They usually nest high up on the beach under or in vegetation. After about 2 months incubating in the warm

sand, the eggs hatch, and the hatchlings make their way to the water. Hatchlings will orient toward the ocean by moving away from dark silhouettes on the land to crawl toward the brightest horizon. This is why artificial light can disturb the success of hatchlings making it to the ocean (NOAA Fisheries 2026b).

Nesting season for sea turtles in Puerto Rico is March 1 to November 30. The beaches within the action area provide suitable habitat and the turtles are known to nest there on occasion. The beaches are not large with minimal area between the hightide marker and the forest, however, the turtles will also nest within the vegetated/forested areas off the beach.

2.2.2 Influences and Species Conservation Needs

The hawksbill sea turtle's decline is due primarily to human exploration for the tortoiseshell. Legal shell trade ended in 1993, but illegal trade continues. Other influences that affect the turtle are similar to the green sea turtle including erosion, human development, and modifications to beaches, and increased human presence on beaches (NMFS and USFWS 1993).

The hawksbill sea turtle is protected under the ESA throughout its range. NOAA Fisheries and USFWS have joint jurisdiction for the species and are working together, along with other international entities, to conserve and recover the turtles through regulations that eliminate or reduce threats. The *Recovery Plan for Hawksbill Turtles in the U.S. Caribbean Sea, Atlantic Ocean, and Gulf of Mexico* (NMFS and USFWS 1993) was issued which provides a blueprint for the conservation of the species and measurable criteria to gauge recovery progress. Efforts to conserve hawksbill turtles as listed in this Recovery Plan include:

- Protecting habitat and designating critical habitat.
- Eliminating the killing of turtles and the collection of their eggs.
- Eliminating the harassment of turtles on nesting beaches and foraging habitats through education and enforcement.
- Consulting with federal agencies to ensure their activities are not likely to jeopardize the continued existence of listed species.

2.2.3 Effects of the Action

The proposed project could result in direct and indirect effects on nesting hawksbill sea turtles when actions are performed during nesting season. Soil sampling actions on and near the beach could directly disturb incubating egg clutches. Soil sampling would require digging up to 6 inches into the sand and soil in locations where nests could be present. Indirect effects could occur from increased human presence in nesting areas during the nesting season. This human presence could deter females from nesting, when present. All proposed actions would occur during daylight hours and there would be no human presence on the beaches at night. Therefore, there would be no impacts to the turtles during sensitive nighttime hours.

2.2.4 Conservation Measures

The USFWS Caribbean Ecological Services Field Office has developed conservation measures for sea turtles in Puerto Rico with the purpose of assisting the action agency to avoid and minimize adverse impacts to sea turtles in coastal regions (USFWS 2022). These measures were considered while developing this BA and are included in Table 3.

Table 3. Summary of Anticipated Environmental Stressors for the Hawksbill Sea Turtle

Stressor	Conservation Measure	Species Response
Ground disturbance	Qualified sea turtle monitors would be hired to survey for and flag all sea turtle nests within the action area prior to any sampling actions to avoid disturbing turtles, nests, and hatchlings. Sampling locations can be adjusted in the field as needed.	No effect to species if conservation measures are followed.
Vehicular travel	Vehicular travel would be limited to existing and navigable roads and dirt trails. No vehicles, equipment, staging, or debris shall be used, parked, or stored on the primary dune or in vegetated areas. Staging, parking, and storage areas should be located on paved surfaces as much as possible and outside vegetated areas or the primary dune.	Species is unlikely to be affected if conservation measures are followed.
Human presence	Qualified sea turtle monitors would be present during the proposed actions to prevent impacts to nesting turtles, egg clutches, and hatchlings. If a dead, injured, or sick sea turtle is found or if nests have been disturbed by other actions, stop all work and contact the LM environmental compliance representative who would report the finding to USFWS and PRDNER.	Species is unlikely to be affected if conservation measures are followed.

Abbreviation:

PRDNER = Puerto Rico Department of Natural and Environmental Resources

2.2.5 Discussion and Conclusion

The proposed actions may affect but are not likely to adversely affect the hawksbill sea turtle. The environmental stressors that would occur from the proposed action would be mitigated through conservation measures to prevent impacts to the turtle if present. Some minor disturbance could occur, but would be closely monitored to prevent adverse effects. Sampling locations can be adjusted in the field as needed.

2.3 Puerto Rican Boa

2.3.1 Species Status and Environmental Baseline

The Puerto Rican boa is the largest endemic snake species in Puerto Rico. Most adults range from 3.3 to 6.6 feet long. The snake is not venomous, is considered timid, and generally keeps distance from human presence. These boas can be difficult to find because of their cryptic coloration and habits. The boa is a habitat generalist and can tolerate a wide variety of habitat types including rocky areas and haystack hills, trees, rotting stumps, plantations, various types of forested areas, urban, and rural areas. Boas prey on smaller animals including rats, bats, lizards, birds, and frogs, capturing the prey in their mouth and constricting it to kill through asphyxiation. They are considered a beneficial species because they help control rodent populations. The species reproductive cycle is synchronized with the seasonal patterns of precipitation and temperature. Courtship and copulation occurs between February and May and gestation period is

approximately 5–6 months. Young are born between August and November. They are mostly nocturnal and concealed but may lie in the sun during the day. Often they will seek shelter in debris piles (USFWS 2026b).

Suitable habitat for the boa exists within the action area and the species could use the area for courtship, finding prey, and resting during the day.

2.3.2 Influences and Species Conservation Needs

The Puerto Rican boa was listed under the ESA due to its decline in both population size and distribution because of widespread deforestation. Today, the boas are more common and widely distributed than previously known, but habitat loss, degradation, and fragmentation are still influences that threaten their existence. Other threats include diseases, vehicle strikes, and increased conflicts with humans and exotic animals such as cats (USFWS 2024).

2.3.3 Effects of the Action

The proposed action could impact the snake if present during work activities. Workers could encounter and disturb the snake while performing surveys and during soil sampling activities.

2.3.4 Conservation Measures

The USFWS Caribbean Ecological Services Field Office issued conservation measures to be incorporated into planned projects to minimize possible impacts to the species (USFWS 2024). These measures were considered while developing this BA and are included in Table 4.

Table 4. Summary of Anticipated Environmental Stressors for the Puerto Rican Boa

Stressor	Conservation Measure	Species Response
Ground disturbance, vehicle use, and human presence	Inform all project personnel about the potential presence of the Puerto Rican boa in areas where the proposed work will be conducted. A preconstruction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming Puerto Rican boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.	Species is unlikely to be affected if conservation measures are followed.
Ground disturbance, vehicle use, and human presence	For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Puerto Rican boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior. Report findings to PRDNER.	Species is unlikely to be affected if conservation measures are followed.
Ground disturbance, vehicle use, and human presence	Measures should be taken to avoid and minimize Puerto Rican boa casualties by heavy machinery or motor vehicles used onsite.	Species is unlikely to be affected if conservation measures are followed.

Abbreviation:

PRDNER = Puerto Rico Department of Natural and Environmental Resources

2.3.5 Discussion and Conclusion

The proposed actions would cause minimal disturbance to the Puerto Rican boa if present. However, workers would be educated on the snake's potential presence and instructed to not disturb any snake species that are identified during work activities. By implementing avoidance and conservation measures, the proposed actions may affect but are not likely to adversely affect the species.

2.4 Vahl's Boxwood

2.4.1 Species Status and Environmental Baseline

Vahl's boxwood is an evergreen shrub or small tree endemic to the islands of Puerto Rico. It is a member of the boxwood family (*Buxaceae*) reaching 16 feet in height with a 5-inch stem diameter. The species generally flower and seed between December and April. The flowers are small and unisexual. The fruit is a three-horned capsule approximately 0.25 inches long. There are nine known natural populations that occur within the subtropical dry forest and subtropical moist forest life zones in Puerto Rico and St. Croix. These populations are showing a stable, increasing trend across its range with approximately 4500 individuals (USFWS 2019).

The action area includes one of the largest known existing populations in Puerto Rico which is adjacent to the BONUS facility. The plants are mostly in the northern region of the site.

2.4.2 Influences and Species Conservation Needs

The reason for the rarity of this species is not well understood, but most likely attributed to the extensive deforestation and human development that has occurred throughout the lowland areas of the island. The species continues to be threatened by habitat destruction and modification and other influences including human-induced fires, hurricanes, and droughts (USFWS 1987).

USFWS developed a recovery plan to maintain genetic variability, provide adequate representation throughout the species range, and increase resiliency during stochastic events. The recovery criteria have been designed to protect and manage privately owned populations such as at the BONUS site and establish new self-sustaining populations to ensure long-term viability of the species. These are threat-based strategies to maintain viability of the species (USFWS 2019).

2.4.3 Effects of the Action

The proposed actions include some minor soil disturbance that could harm seedlings and younger boxwood plants. Vehicle traffic for transport to survey and sampling locations could crush smaller plants if not limited to existing roads and trails.

2.4.4 Conservation Measures

Vahl's Boxwood (*Buxus vahlii*) *Recovery Plan* was developed by USFWS in 1987 and amended in 2019; it outlines strategies to recover and conserve the species. These strategies were considered during the development of this BA and related conservation measures are listed in Table 5.

Table 5. Summary of Anticipated Environmental Stressors for Vahl's Boxwood

Stressor	Conservation Measure	Species Response
Ground disturbance	Workers would be educated on how to identify the boxwood species including photos for reference and proposed actions would be performed with an ecological monitor present to ensure that the species is not disturbed or harmed. Sampling locations can be adjusted in the field as needed.	Species is unlikely to be affected if conservation measures are followed.
Vehicle use	Vehicular travel would be limited to existing and navigable roads and dirt trails. No vehicles, equipment, staging, or debris shall be used, parked, or stored on the primary dune or in vegetated areas. Staging, parking, and storage areas should be located on paved surfaces as much as possible and outside vegetated areas.	Species is unlikely to be affected if conservation measures are followed.

2.4.5 Discussion and Conclusion

The proposed actions may affect but are not likely to adversely affect Vahl's boxwood. The environmental stressors that would occur from the proposed action would be mitigated through conservation measures to prevent impacts to the plant species. Some minor disturbance could occur, but would be closely monitored to prevent adverse effects. Sampling locations can be adjusted in the field as needed to protect the boxwood.

3.0 Cumulative Effects

Cumulative effects could result from increased human presence and use of the site from the tourist attractions and recreational use of the El Faro lighthouse, Dome Beach, and trails that are within the action area. However, this consistent human presence at the site could deter certain wildlife activity making species presence less likely. Other cumulative effects include routine surveillance and maintenance of the BONUS site. However, these actions are minor, of short duration, and would have minimal effects to wildlife and their habitat.

4.0 Summary of Discussion and Conclusion

LM has determined that the proposed actions related to the site characterization study at the BONUS site may affect, but are not likely to adversely affect, the green sea turtle, hawksbill sea turtle, Puerto Rican boa, or Vahl's boxwood and would have no effect on the West Indian manatee, roseate tern, leatherback sea turtle, and palo de rosa. Environmental stressors from soil sampling and surveys would be minor and conservation measures would be applied to prevent any adverse impacts to these species as described in Table 6.

Table 6. Conservation Measures and Effect Determination Summary

Species	Conservation Measures	Effect Determination
Green sea turtle (<i>Chelonia mydas</i>) and hawksbill sea turtle (<i>Eretmochelys imbricata</i>)	- Qualified sea turtle monitors would flag any sea turtle nests to avoid during ground disturbing activities. - Sampling locations can be adjusted in the field as needed. - Vehicular travel will be limited to existing and navigable roads and dirt trails. No vehicles, equipment, staging, or debris shall be used, parked or stored on the primary dune or in vegetated areas. Staging, parking, and storage areas should be located on paved surfaces as much as possible and outside vegetated areas or the primary dune. - Qualified sea turtle monitors would be present during the proposed actions to prevent impacts to nesting turtles, egg clutches, and hatchlings. If a dead, injured, or sick sea turtle is found or if nests have been disturbed by other actions, stop all work and contact the LM environmental compliance representative who would report finding to USFWS and PRDNER.	NLAA
Puerto Rican boa (<i>Chilabothrus inornatus</i>)	- Inform all project personnel about the potential presence of the Puerto Rican boa in areas where the proposed work will be conducted. A preconstruction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming Puerto Rican boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site. - For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Puerto Rican boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior. Report findings to PRDNER. - Measures should be taken to avoid and minimize Puerto Rican boa casualties by heavy machinery or motor vehicles used onsite.	NLAA
Vahl's boxwood (<i>Buxus vahliei</i>)	- All soil sampling actions would be performed with a monitor from USFWS to ensure the species is not disturbed or harmed by the proposed actions. - Sampling locations can be adjusted in the field as needed. - Vehicular travel will be limited to existing and navigable roads and dirt trails. No vehicles, equipment, staging, or debris shall be used, parked, or stored on the primary dune or in vegetated areas. Staging, parking, and storage areas should be located on paved surfaces as much as possible and outside vegetated areas or the primary dune.	NLAA

Abbreviations:

NLAA = not likely to adversely affect

PRDNER = Puerto Rico Department of Natural and Environmental Resources

5.0 References

10 CFR 835. U.S. Department of Energy, "Occupational Radiation Protection," *Code of Federal Regulations*.

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USFWS (U.S. Fish and Wildlife Service), 2019. *Vahl’s Boxwood (Buxus vahlii) Recovery Plan*, Amendment 1, https://ecos.fws.gov/docs/recovery_plan/Vahl_s%20Boxwood%20Recovery%20Plan%20Amendment.pdf, September.

USFWS (U.S. Fish and Wildlife Service), 2022. *Conservation Measures for Sea Turtles in Puerto Rico and the U.S. Virgin Islands*, Caribbean Ecological Services Field Office, July, <https://www.fws.gov/sites/default/files/documents/Conservation%20Measures%20for%20sea%20turtles%20in%20Puerto%20Rico%20and%20the%20U.S.%20Virgin%20Islands.pdf>, accessed March 4, 2026.

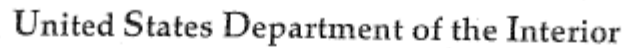
USFWS (U.S. Fish and Wildlife Service), 2024. *Conservation Measures for the Puerto Rican Boa (Chilabothrus inornatus)*, Caribbean Ecological Services Field Office, January, https://www.fws.gov/sites/default/files/documents/conservation-measures_puerto-rican-boa.pdf, accessed March 4, 2026.

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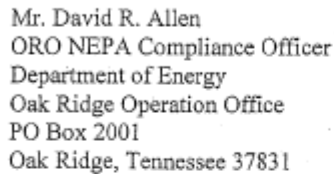
Appendix A

Prior Consultation History



FISH AND WILDLIFE SERVICE

Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622
March 20, 2002



Re: Section 7 Consultation
Public Access to the Boiling Nuclear Superheat
Entombed Reactor Building, Rincón, PR

Dear Mr. Allen:

Thank you for your letter of February 8, 2002, requesting comments regarding the above referenced project. Based on the information provided the Department of Energy's only action is to ensure that radiation levels inside the entombed reactor building are safe to allow Puerto Rico Electric and Power Authority (PREPA) to open the facility to the public. In addition, your letter stated that you recommended PREPA meet with the Service to discuss measures to minimize any possible impacts of existing lighting on possible sea turtle nesting beaches and to protect populations of *Bucus vahlii* occurring on the BONUS property. Based on the information provided and your recommendations to PREPA, we concur with the determination that the proposed project is not likely to adversely affect any endangered species or its habitat. Therefore, no further consultation is required. Nevertheless, if the project is modified or if information on impacts to listed species becomes available this office should be contacted concerning the need for the initiation of consultation under section 7 of the Act. Our comments are provided in accordance with the Endangered Species Act (Act) of 1973, as amended (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

If you have any questions, please call Marelisa Rivera at 787-851-7297.

Sincerely,

Sincerely,

James P. Oland
Field Supervisor

OFFICIAL FILE COPY
AMESQ

mtr

Log No. 54745

Date Received MAR 26 2002

File Code: _____

Appendix B

U.S. Fish and Wildlife Service Official Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 622-0491
Phone: (939) 320-3135 Fax: (787) 851-7440
Email Address: CARIBBEAN_ES@FWS.GOV

In Reply Refer To:

03/04/2026 20:05:48 UTC

Project Code: 2026-0058255

Project Name: Historical Site Assessment and Site Characterization for the Department of Energy Office of Legacy

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS

The purpose of the Endangered Species Act (Act) is to provide a means whereby threatened, and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect those species and/or their designated critical habitat.

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". The enclosed species list provides information to assist with the U.S. Fish and Wildlife Service (Service) consultation process under section 7 of the Act. However, **the enclosed species list does not complete the required consultation process**. The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area and what effect the proposed action may have on those species. This process initiates informal consultation.

Once a species list is obtained for the proposed project, an effect determination for endangered and threatened species should be made. The applicant could make an effect determination by using available keys on IPaC for specific species. For species with no determination keys, the applicant should request concurrence from the Service by sending a project package

to caribbean_es@fws.gov. To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

<https://www.fws.gov/sites/default/files/documents/consultation-under-section-7-of-the-endangered-species-act-with-the-caribbean-ecological%20Services-field-office-template-letter.pdf>

When a federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete, and the proposed project moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (B.A.) to assist in its determination of the project's effects on species and their habitat. However, a B.A. is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a B.A. where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a B.A. are described at 50 CFR 402.12.

If a federal agency determines, based on its B.A. or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to further consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation process. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species.

This list is provided pursuant to Section 7 of the Endangered Species Act and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". Please use this list to determine whether your project requires consultation and to make your effects determination. For more guidance, use the Guideline for Consultation under Section 7 of the Endangered Species Act with the Caribbean Ecological Services Field Office by clicking [here](#).

This species list is provided by:

Caribbean Ecological Services Field Office

caribbean_es@fws.gov

Post Office Box 491

Boqueron, PR 00622-0491

(786) 244-0081

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Marine Mammals
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Caribbean Ecological Services Field Office

Post Office Box 491

Boqueron, PR 622-0491

(939) 320-3135

PROJECT SUMMARY

Project Code: 2026-0058255

Project Name: Historical Site Assessment and Site Characterization for the Department of Energy Office of Legacy

Project Type: Scientific Research/Monitoring

Project Description: The U.S. Department of Energy (DOE) Office of Legacy Management (LM) in partnership with the Puerto Rico Electric Power Authority (PREPA) is proposing a historical site assessment and site characterization study at the Boiling Nuclear Superheater Decommissioned Reactor Site (BONUS site) in Rincon, Puerto Rico to validate the post clean-up determination of “no radiological contamination” at all areas of the site outside of the reactor building. The actions would include gamma walkover surveys and soil sampling across the 143-acre site in the summer months (June through September) of 2026.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.362356,-67.26799625430279,14z>



Counties: Rincón County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
West Indian Manatee <i>Trichechus manatus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. <i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i> Species profile: https://ecos.fws.gov/ecp/species/4469 General project design guidelines: https://ipac.ecosphere.fws.gov/project/BRZYAPMGV5CT7BN35GGLU6HYO4/documents/generated/7138.pdf	Threatened

BIRDS

NAME	STATUS
Roseate Tern <i>Sterna dougallii dougallii</i> Population: Western Hemisphere except NE U.S. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Threatened

REPTILES

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: North Atlantic DPS There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6199 General project design guidelines: https://ipac.ecosphere.fws.gov/project/BRZYAPMGV5CT7BN35GGLU6HYO4/documents/generated/7133.pdf	Threatened
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3656 General project design guidelines: https://ipac.ecosphere.fws.gov/project/BRZYAPMGV5CT7BN35GGLU6HYO4/documents/generated/7131.pdf	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493 General project design guidelines: https://ipac.ecosphere.fws.gov/project/BRZYAPMGV5CT7BN35GGLU6HYO4/documents/generated/7132.pdf	Endangered
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6628 General project design guidelines:	Endangered

NAME	STATUS
https://ipac.ecosphere.fws.gov/project/BRZYAPMGV5CT7BN35GGLU6HYO4/documents/generated/7159.pdf	

FLOWERING PLANTS

NAME	STATUS
Palo De Rosa <i>Ottoschulzia rhodoxylon</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5741	Threatened
Vahl's Boxwood <i>Buxus vahlia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4454	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA). Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

MARINE MAMMALS

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act¹ and the Convention on International Trade in Endangered Species of Wild Fauna and Flora².

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries³ [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The [Endangered Species Act](#) (ESA) of 1973.
2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

NAME

West Indian Manatee *Trichechus manatus*

Species profile: <https://ecos.fws.gov/ecp/species/4469>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: Department of Energy
Name: Rebecca Stern
Address: 2597 Legacy Way
City: Grand Junction
State: CO
Zip: 81503
Email: rebecca.stern@lm.doe.gov
Phone: 8046878986