Rehabilitation of the Ferry Ramp at the Culebra Ferry Terminal

COMMONWEALTH OF PUERTO RICO
Ports Authority

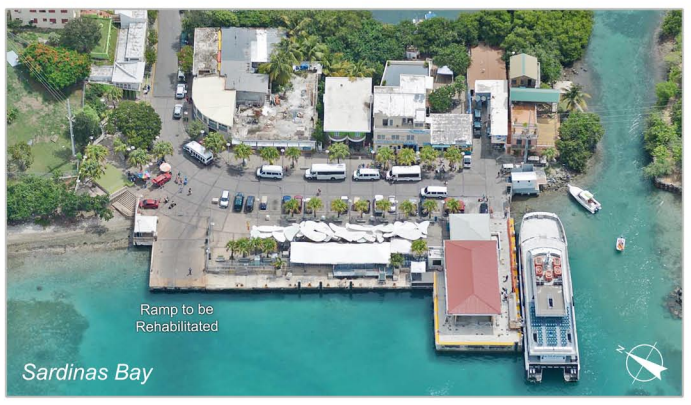
PUERTO RICO PORTS AUTHORITY

A. Purpose and Need of the Proposed Action

The Ferry Ramp at the Culebra Ferry Terminal (Ferry Ramp) in Sardinas Bay has deteriorated, including its concrete platform, its horizontal beams and its vertical support piles.

These damages have been identified since 2010, and apparently have been caused by strong wave action during swells, hurricanes and storms. The deterioration of the structure is such that it is not economically feasible to repair it.

Presently, the Ferry Ramp is the only ramp available for the island municipality of Culebra. Sardinas Bay is exposed to winds and swells that frequently prevent safe docking for the ferries.

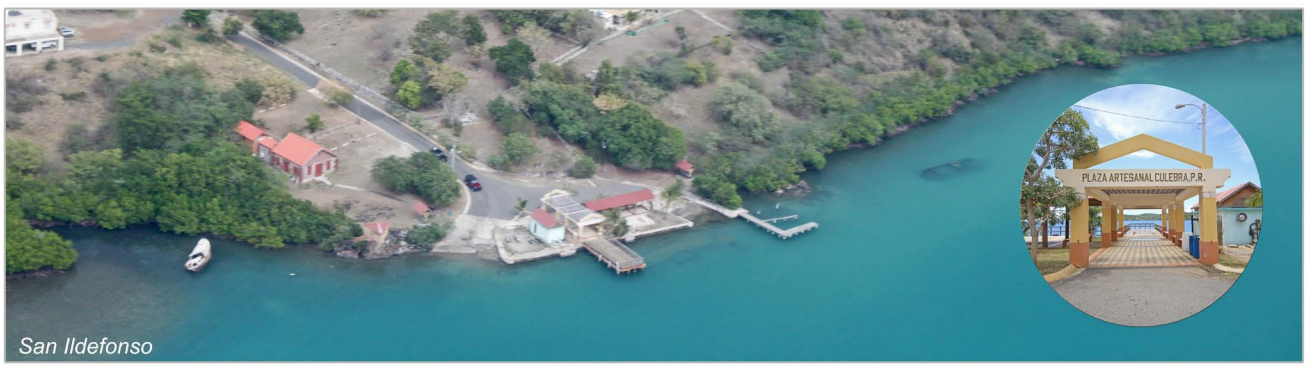


B. Proposed Action

The proposed action includes the rehabilitation of the Ferry Ramp, which consists of:

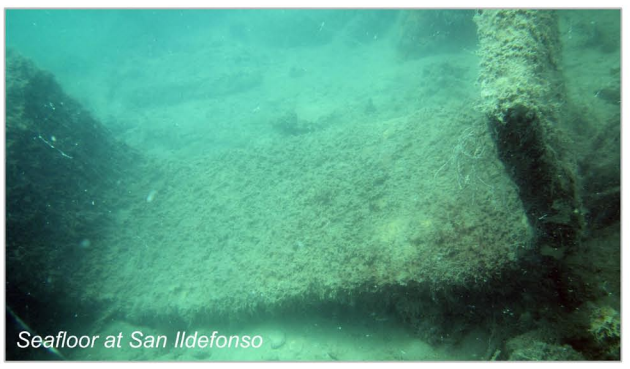
1. *Demolition of the existing concrete ramp, with an area of approximately 4,907 square feet.*
2. *Removal of approximately 27 pilings.*
3. *Drive approximately 25 new pilings with a 20 inch diameter on the existing ramp footprint.*
4. *Construct a new concrete ramp with an area of approximately 5,501 square feet.*
5. *Install a passenger catwalk measuring 10 x 100 feet for passengers to safely board and disembark the ferries separate from the vehicles. The ramp will rest on a mooring dolphin structure, which will enable the bow of the ferry to be secured while in port and allow a safer docking during adverse weather conditions.*

The limited available area in the existing Ferry Terminal does not allow for the simultaneous operation and rehabilitation of the Ferry Ramp. Therefore, the proposed action includes the construction of an Auxiliary Terminal for the ferry to dock in San Ildefonso during the rehabilitation of the Ferry Ramp.



The construction of the Auxiliary Terminal consists of:

1. *The installation of 4-6 pilings with a 14 inch diameter for the floating pontoon dock.*
2. *The installation of 14 "H-piles", pile cap and fender.*
3. *A floating pontoon platform with an area of approximately 2,334 square feet.*
4. *A vehicular bridge platform measuring approximately 770 square feet to connect the floating pontoon platform to land.*
5. *A catwalk to connect the existing pier and the pontoon platform. This catwalk will allow passengers to board and disembark the ferry separately from vehicular loading and unloading.*
6. *Required landside facilities, such as a ticket booth, and parking area.*



Once the rehabilitation of the ferry ramp is completed, the Auxiliary Terminal will remain as an alternative docking facility to mitigate risks and to ensure a reliable service of the Maritime Transportation Authority ferries to Culebra.

C. Alternatives Considered but Dismissed

1. **Fulladosa Dock**: This dock was considered as an Auxiliary Terminal, but due to its small dimensions, the required dredging of the seabottom, limited areas for traffic, parking, ticket booths, waiting areas, among others, and no utility services (electrical and water connections), it was dismissed. In addition, to comply with US Coast Guard regulations, the road leading to the dock would have to be closed during the operation of the ferry. Using the Fulladosa Dock would increase costs and would have additional adverse environmental consequences.
2. **Restoration of the Existing Pilings**: Various alternatives were considered. This alternative was dismissed because no protected species were found on the existing pilings and it would extend the work schedule, increasing the costs.
3. **Install New Pilings without Removing the Existing Ones**: Various alternatives were considered. The operation would be more delicate and costly, and due to the absence of protected species, the additional effort would not be necessary.

D. Summary of Environmental Effects

No significant adverse effects are expected during the construction and operation of the proposed action. However, some of the possible effects related to the construction and operation of the terminal are listed below:

1. The construction of the Auxiliary Terminal is expected to last 6 months. Afterwards, it would take another 6 months for the rehabilitation of the Ferry Ramp to be completed.
2. An increase in the vehicular traffic along PR-250, and in turn, an equivalent reduction of vehicular traffic in the Dewey area.
3. An increase in the maritime traffic within Ensenada Honda, and in turn, an equivalent reduction of maritime traffic in Sardinas Bay.
4. An increase in noise emissions during construction, particularly during pile driving operations and the demolition of the concrete slab, and during the operation of the ferries in the Auxiliary Terminal in San Ildefonso.
5. Slight increase of fugitive dust during the construction and demolition works.
6. Resuspension of sediments during the ferry docking maneuvers at San Ildefonso.
7. Possible impacts to the water intake structure of the Puerto Rico Acueduct and Sewer Authority Desalination Plant, presently out of service, due to resuspended sediments in the water column.

E. Project Commitments

1. Turbidity barriers will be installed surrounding the area during the construction of the facilities.
2. All noises emitted during the construction will be limited to daylight hours.
3. No negative effects are expected on protected species.
4. Adverse environmental effects during the construction and operation period will be mitigated.

For additional information, the **Environmental Assessment Report** is available at the **"Biblioteca Comunitaria de Culebra"**.

Feel free to send any comments or questions to **culebrapier@prpa.pr.gov** or the following address:

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JUNTOS MOVIENDO A PUERTO RICO