### GOVERNMENT OF PUERTO RICO LA FORTALEZA SAN JUAN, PUERTO RICO

Administrative Bulletin Number: OE-2023-009

EXECUTIVE ORDER OF THE GOVERNOR OF PUERTO RICO, HON. PEDRO R. PIERLUISI, DECLARING AN EMERGENCY AS A RESULT OF THE EFFECTS OF COASTAL EROSION ON THE ISLAND AND IMPLEMENTING PREVENTION, MITIGATION, ADAPTATION, AND RESILIENCY MEASURES; AND OTHER RELATED MATTERS.

### WHEREAS:

Climate change is a phenomenon that is manifesting itself in a variety of ways on our island and on a global level. Its effects include prolonged periods of drought, more frequent forest fires, loss of flora and fauna, rising sea levels, and coastal erosion, among others. Due to Puerto Rico geological condition, these last two effects represent two of the most imminent risks of the island and must therefore be addressed swiftly.

### WHEREAS:

A rise in sea levels is defined as an increase to the average level of the sea, which is primarily caused by thermic expansion of water as temperatures increase in the oceans and seas. It is also caused by the melting of layers of ice on the ground, which are mainly concentrated in the polar ice caps, as well as by other local factors such as coastal erosion, land subsidence, and storm surges. These increases have caused, and will continue to cause, damage that affects the safety, property, and lives of everyone living in Puerto Rico.

### WHEREAS:

Coastal erosion is the loss or displacement of material from the earth's crust along the coast that is caused by the sea, wind, runoff water or infiltration, either due to natural or anthropogenic causes. Because of coastal erosion, Puerto Rico and its inhabitants regularly suffer and will continue to suffer incalculable economic and patrimonial losses because infrastructure projects, entire communities, flora and fauna, small businesses, homes, parks, recreational facilities, tourism facilities, port areas, industrial areas, schools, natural structures serving as coastal barriers, and its most precious natural resource, its beaches, will all be affected.



### WHEREAS:

Puerto Rico has approximately 1,121 kilometers of coastline, which includes beaches, cliffs and rocks, vegetation, alluvial and anthropogenic coast. Around 37% of that coastal strip is composed of beaches. It is important to point out that our coastal strip runs through 44 municipalities and nearly 67% of the island's population lived in those coastal municipalities as of 2020.



### WHEREAS:

According to research conducted by the Coastal Research and Planning Institute of Puerto Rico (CoRePI-PR), assigned to the Graduate School of Planning of the Rio Piedras Campus of the University of Puerto Rico<sup>1</sup>, approximately 99 kilometers of the shoreline has migrated inland within the past several years. The most affected municipalities were Vieques, Cabo Rojo, Arecibo, Humacao, Isabela, Vega Baja, Fajardo, Luquillo, Loíza, and Hatillo. Similarly, around 58 kilometers of shoreline at beaches migrated inland. The municipalities identified as having the greatest amount of inland beach shoreline movement are: Vieques, Humacao, Hatillo, Mayagüez, Aguada, Arecibo, Camuy, Isabela, Vega Baja, and Rincón. Recently, coastal erosion has been recorded in several municipalities, such as Luquillo, Loíza, Patillas, Humacao, Dorado, Ponce, Arecibo, among others.

### WHEREAS:

Puerto Rico has taken steps in the correct direction. To that effect, Law No. 416-2004, as amended, known as the "Environmental Public Policy Act," was approved. In addition, in more recent years, and as a reaction to the amplified effects of global warming and climate change, Law No. 33-2019, as amended, known as the "Climate Change Mitigation, Adaptation, and Resilience Act," was enacted. Similarly, through Administrative Bulletin OE-2021-066, I declared an ecological emergency due to the stony coral tissue loss disease, and I ordered the Department of Natural and Environment Resources (DNER) to implement measures to treat the coral. Also, the Puerto Rico Committee of Climate Change Experts and Advisors (CEACC, for its initials in Spanish) developed a series of courses of action to correct, mitigate, and prevent the effects of climate change in Puerto Rico's coastal areas, which serve as a basis for this Executive Order. It is therefore, without a doubt, urgent to take measures to combat coastal erosion on the island.



WHEREAS: Article 5.10 of Act 20-2017, as amended, better known as the

"Puerto Rico Public Safety Department Act," empowers me as Governor to decree a state of emergency, to "issue any state regulation, order, plan, or measure for emergency situations or disasters, or to modify them at their discretion," and to "enact, amend, and repeal any regulation, and issue, amend, and rescind any order that I deem convenient to govern during the state of emergency or disaster."

<sup>&</sup>lt;sup>1</sup> Available at: https://storymaps.arcgis.com/stories/61653d2d9a1748168488235d866f3e89



WHEREAS: Through this Executive Order, we seek to implement concrete

prevention, mitigation, adaptation, and resiliency measures in

response to rising sea levels and coastal erosion.

**THEREFORE:** I, PEDRO R. PIERLUISI, Governor of Puerto Rico, by virtue of the

powers inherent to my office and the authority vested in me by the Constitution and the laws of the Government of Puerto Rico,

hereby declare and order the following:

Section 1: EMERGENCY DECLARATION. I hereby declare an emergency

in Puerto Rico due to the effects of coastal erosion, which represents a threat to the lives, health, and safety of the island's residents, as well as to public and private property in Puerto Rico located within coastal zones, as defined in the Joint Guidelines of the Planning Board, or in any special guidelines. I also declare and order that the permits, endorsements, consultations, or certifications related to the measures authorized and ordered through this Executive Order shall be processed in accordance with law No. 76-2000, as amended, known as the "Procedures in Emergency Situations or Events Act," and Administrative Bulletin

OE 2023-003, as potentially amended and extended in the future.

INTEGRATED PUBLIC POLICY FOR THE PROTECTION OF

COASTAL AREAS. It shall be the public policy of the Executive Branch of the Government of Puerto Rico to ensure the greatest protection, conservation, and sustainable use of coastal areas and all natural resources within them. In that sense, the protection of said resource through a balance between public and private development within coastal zones and the management of coastal resources in a sustainable manner, is public policy. Similarly, it is the priority of the Government of Puerto Rico to promote scientific research, public participation, and the assistance of coastal communities, especially those that are most socially vulnerable,

as well as to promote resiliency and sustainability.

Section 3: <u>INVENTORY OF ABANDONED OR RUINED PROPERTIES</u>

AND STRUCTURES WITHIN COASTAL ZONES. In order to be able to effectively implement the measures established in Section 6 of this Executive Order, based on the fiscal resources assigned herein and to the extent that they are sufficient, the DNER is hereby ordered to take inventory of uninhabited properties and

abandoned or ruined structures within coastal zones in

Section 2:

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collaboration with the municipalities, the Planning Board, and other public, private, and nonprofit entities, as well as academic institutions.

## Section 4: <u>CREATION OF THE ACTION COMMITTEE FOR ADAPTATION</u> AND RESILIENCY IN RESPONSE TO COASTAL EROSION.

The Action Committee for Adaptation and Resiliency In Response To Coastal Erosion ("Action Committee") is hereby established. It shall be charged with the evaluation of listed inventory of uninhabited properties and abandoned or ruined structures in costal zones, which is ordered in Section 3 of this Executive Order. In addition, the Action Committee shall determine which of the measures listed in Section 6 of this Executive Order shall be implemented in each coastal zone. The Action Committee shall be composed of the following people:

- 1. The Secretary of the DNER;
- **2.** A member of the Puerto Rico Committee of Climate Change Experts and Advisors, who shall be selected by the Governor, and
- **3.** A representative of La Fortaleza, who shall be selected by the Governor.

The Governor may designate other members at his discretion.

# Section 5: POWERS AND DUTIES OF THE ACTION COMMITTEE. The Action Committee shall have all of the powers necessary and convenient to comply with the purposes of this Executive Order, including:

- 1. authority to establish its work plans;
- 2. authority to request information from the agencies of the Government of Puerto Rico that may aid in carrying out its duties, and
- 3. authority to require and receive technical or administrative assistance, or other types of assistance.

The Governor shall determine who presides over the Action Committee. This Committee shall meet as often as it deems necessary to fulfill the purposes of this Order. In order to comply with what is established herein, the Action Committee may invite representatives from other government agencies or private entities to its meetings, if it deems it necessary. In addition, the Action Committee shall adopt its own regulations regarding the



manner in which it functions and operates.

Members of the Action Committee shall carry out their duties ad honorem and shall serve for the necessary term at the sole discretion of the Governor. For administrative purposes, the Action Committee is assigned to the DNER.

### Section 6:

PREVENTION, MITIGATION, ADAPTATION, AND RESILIENCY MEASURES IN RESPONSE TO THE EFFECTS OF COASTAL EROSION. The DNER is hereby ordered to evaluate and implement—in collaboration with the Infrastructure Financing Authority through an agreement and the allocation of the corresponding budgets—the following prevention, mitigation, adaptation, and resiliency measures to combat coastal erosion and its effects:

- 1. demarcation of public assets in the maritime-terrestrial zone in accordance with applicable regulations;
- 2. acquisition of uninhabited or abandoned properties within coastal zones through legal means, including forced expropriation if necessary;
- demolition and removal of ruined or abandoned structures, as well as of rubble and solid structures that are public nuisances or that are no longer serving their purpose of protecting or mitigating risks in coastal zones;
- 4. replenishment of beaches with sand that is compatible with each coastal region;
- 5. restoration of coral reefs;
- 6. development of artificial reefs, taking into account the morphology and different types of coasts;
- 7. planting of mangroves and restoration of marshland and wetlands in order to achieve living shorelines;
- 8. planting of native grasses and vegetation to reduce erosion and provide support to sand dunes;
- 9. restoration and maintenance of sand dunes;
- 10. development of boardwalks to protect fragile sand dunes and facilitate public pedestrian access to beaches;
- 11. development of green streets in coastal zones;
- 12. planting of vegetation at river basins;
- 13. removal of sediment and rubble at river outlets;
- 14. maintenance and establishment of intertidal and





marshland ecosystems;

- 15. programs and measures for the collection and management of gulfweed;
- 16. when appropriate and as a last viable and cost-effective option to protect health, safety, lives, and property, the construction of groynes, rip-raps, breakwaters, bulkheads, jetties, seawalls, and other hard structures; and
- 17. any other additional measure or strategy that helps to combat the effects of coastal erosion in Puerto Rico.

### Section 7:

PROTOCOL FOR MANAGING COASTAL EROSION. The DNER is hereby ordered to update its management plan for coastal zones in order to adapt it to the effects associated with climate change in Puerto Rico. All of the amendments presented must be consistent and in compliance with applicable state and federal laws. In addition, the DNER is ordered to develop a new protocol for the management of coastal erosion in Puerto Rico, which must be based on scientific data and information regarding coastal changes.

### Section 8:

**CRITICAL INFRASTRUCTURE IN COASTAL ZONES.** Agencies are hereby ordered to develop a plan—to the extent that it is possible, feasible, and fiscally viable—to locate new infrastructure works that are not dependent on or for the enjoyment of the sea, outside of coastal zones. In addition, in the event that certain existing infrastructure works, that are not depending on or for the enjoyment of the sea, deteriorate and merit being replaced or reconstructed, the fiscal viability of the planned and ordered relocation outside of coastal zones must be evaluated.

### Section 9:

MASS REFORESTATION. The DNER is hereby ordered to continue conducting mass reforestation in order to replace trees damaged by the atmospheric phenomena that have affected Puerto Rico in the past several years. Mass reforestation must be directed toward reducing sedimentation in our bodies of water and preventing additional damage to coral reefs and drainage basins, among others. As part of this reforestation, collaborative agreements shall be established with agencies, municipalities, and private and nonprofit entities in order to streamline and accelerate the reforestation process.







### Section 10:

**PUERTO RICO MULTI-RISK PLAN.** The Bureau for Emergency and Disaster Management of the Department of Public Safety is hereby ordered to include coastal erosion in the Puerto Rico Multi-Risk Plan as one of the vulnerabilities and risks affecting the island.

### Section 11:

ALLOCATION OF FUNDS. The Disbursement Oversight Committee created through Administrative Bulletin OE-2020-040, in accordance with their extended duties under Administrative Bulletin OE-2021-034, to set aside five million dollars (\$5,000,000) from the available balances of the funds allocated to the Government of Puerto Rico through Public Law 117-2, known as the American Rescue Plan Act of 2021 (ARPA), to implement the measures established in this Executive Order.

The Secretary of the Department of Housing is hereby ordered to allocate one hundred million dollars (\$100,000,000) from the Community Development Block Grant Mitigation (CDBG-MIT) program to implement the measures established in this Executive Order and others in line with its purposes.

In addition, the DNER and other relevant agencies are hereby ordered to conduct all necessary tasks to allocate additional state and federal funds for the implementation of the initiatives contained in this Executive Order.

### Section 12:

<u>ENGINEERS.</u> The DNER is hereby ordered to continue to collaborate, cooperate, and coordinate with the Puerto Rico Coastal Study of the U.S. Army Corps of Engineers in the municipality of Rincón and other parts of Puerto Rico.

### Section 13:

**EDUCATION, ORIENTATION, TRAINING, AND PUBLIC PARTICIPATION.** The DNER is hereby ordered to collaborate with other public, university, private, and nonprofit entities to develop an educational and informative campaign about the effects of coastal erosions in Puerto Rico. In addition, the DNER must provide continuing training on this topic to employees of the Executive Branch working on matters related to coastal zones. The DNER is also ordered to include public participation as it implements the measures authorized by this Executive Order.





Section 14:

<u>UPDATE OF RELATED DOCUMENTS</u>. The DNER and other relevant agencies are hereby ordered to update their guidelines, manuals, policies, and other administrative documents to adapt them to what is established in this Executive Order and Law No. 33-2019. In that process, they must also integrate the provisions of the *International Guidelines on Natural and Nature Based Features for Flood Risk Management 2021*, published by the U.S. Army Engineer Research and Development Center, and *A Guide to Assessing Green Infrastructure Costs and Benefits for Flood Reduction*, published by the National Oceanic and Atmospheric Administration (NOAA), that are applicable and compatible with this Executive Order.

Section 15:

ADHERENCE TO CURRENT REGULATIONS. All of the actions taken to comply with this Executive Order shall adhere to state and federal laws and regulations, with federal ones taking precedence in the case of a conflict.

Section 16:

**PRIOR ORDERS SUPERSEDED.** This Executive Order shall supersede the parts of any executive order that may, in whole or in part, be inconsistent with the provisions herein, to the extent of such inconsistency, and shall enter into effect immediately.

Section 17:

<u>DEFINITION OF THE TERM 'AGENCY'</u>. For the purposes of this Executive Order, the term "agency" refers to any agency, instrumentality, office, or department of the Executive Branch of the Government of Puerto Rico, including public corporations, regardless of their name.

Section 18:

NON-CREATION OF ENFORCEABLE RIGHTS. This Executive Order is not intended to create any rights, substantive or procedural, enforceable at law or equity, by any person or entity, in any matter, civil, criminal, or administrative, against the Government of Puerto Rico or its agencies, officials, employees, or any other person.



Section 19:

**SEVERABILITY.** The provisions of this Executive Order are separate and independent of each other, and if any part, section, provision, or sentence of this Executive Order is declared unconstitutional, void, or invalid by a court of jurisdiction and venue, such decision shall not affect the validity of the remaining



provisions, which shall remain in full force.

**Section 20:** PUBLICATION. This Executive Order must be filed immediately

with the Department of State and the widest possible publication

is hereby ordered.

Section 21: <u>VALIDITY</u>. This Executive Order shall enter into force

immediately.



**IN TESTIMONY WHEREOF**, I hereby issue this Executive Order under my signature and cause the Great Seal of the Government of Puerto Rico to be affixed, at La Fortaleza, in San Juan, Puerto Rico, on this 11<sup>th</sup> day of April, 2023.

PEDRO R. PIERLUISI GOVERNOR

Enacted in accordance with the law on this 11th day of April, 2023.

OMAR J. MARRERO DÍAZ SECRETARY OF STATE