RESTORE Council FPL 3 Proposal Document

General Information

Proposal Sponsor:
State of Florida Department of Environmental Protection

Title:
Florida Strategic Gulf Coast Land Acquisition Program

Project Abstract:
Florida, through the Florida Department of Environmental Protection (FDEP), is requesting $20M in Council-Selected Restoration Component funding for the proposed Florida Strategic Gulf Coast Land Acquisition Program. This would include $2M in planning funds as FPL Category 1, as well as a separate $18M implementation component as an FPL Category 2 priority for potential funding. The program would support the primary RESTORE Comprehensive Plan goal to restore and conserve habitat through a suite of linked activities to increase conserved and protected State owned or managed lands by 10,000 to 20,000 acres. Program activities include implementation of land acquisitions, partnering with the existing Florida Forever Program (FF), Florida's premier conservation and recreation lands acquisition program. The proposed program would utilize the FF priority list to identify parcels for acquisition; parcels on the FF priority list are ranked using a thorough scientific review and a comprehensive natural resource analysis. FDEP would target lands draining into the Gulf of Mexico that are in the FF Critical Natural Lands and Climate Change Lands categories or other FF parcels with similar attributes. Land acquisitions could include both fee simple acquisition and conservation easements from willing sellers.

Program activities would result in environmental benefits to Florida's natural resources and ecosystems by protecting critical habitats, preserving native biodiversity and ecosystem function, mitigating sea level rise, flooding, and other current and future risks to coastal communities. Program duration is 10 years.

FPL Category: Cat1: Planning/ Cat2: Implementation

Activity Type: Program

Program: Florida Strategic Gulf Coast Land Acquisition Program

Co-sponsoring Agency(ies): N/A

Is this a construction project?:
No

RESTORE Act Priority Criteria:
(II) Large-scale projects and programs that are projected to substantially contribute to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast ecosystem.
(III) Projects contained in existing Gulf Coast State comprehensive plans for the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.

Priority Criteria Justification:
The proposed Florida Strategic Gulf Coast Land Acquisition Program includes acquiring lands for conservation. Acquisitions would be strategically linked conservation activities that in combination result in a greater impact, increasing protected areas, strengthening natural resources, and improving resiliency. This program meets both the large-scale and existing Gulf Coast State comprehensive plans priority criteria.

As a program, it is designed to result in large-scale environmental benefits including protecting a range of natural resources and habitats such as beaches and coastal wetlands. This program would be large in scale (i.e., numerous acquisitions; 10,000 to 20,000 acres acquired). The program is also readily scalable to the funding allocated. The program is long in duration, likely to last 10 years and lands acquired would be protected in perpetuity. The program would target lands in the FF Critical Natural Lands and Climate Change Lands categories, or other FF parcels with similar attributes, including functional landscape-scale natural and hydrological systems, significant imperiled natural communities, wildlife corridors, and lands that improve resiliency, promote carbon sequestration, or mitigate effects of sea level rise. Environmental benefits include strengthening natural resources, sustaining healthy habitats for threatened and endangered species, providing opportunities for species and habitat migrations in changing environmental conditions, protecting natural areas for recreation, and preserving cultural heritage.

The lands that would be acquired include parcels evaluated and prioritized as part of the existing FF (FF 2019a). The lands proposed for acquisition undergo a thorough scientific review and comprehensive natural resource analysis and scoring process using FL Natural Areas Inventory (FNAI) database information, a series of geographic data layers, and several project ranking criteria.

Project Duration (in years): 10

Goals

Primary Comprehensive Plan Goal:
Restore and Conserve Habitat

Primary Comprehensive Plan Objective:
Restore , Enhance, and Protect Habitats

Secondary Comprehensive Plan Objectives:
N/A

Secondary Comprehensive Plan Goals:
N/A

PF Restoration Technique(s):
Protect and conserve coastal, estuarine, and riparian habitats: Land acquisition

Location

Location:
Florida watersheds that drain to the Gulf of Mexico including Perdido, Pensacola, Choctawhatchee – St. Andrew, Apalachicola – Chipola, Ochlocknee – St. Marks, Suwannee, Springs Coast, Withlacoochee, Tampa Bay, Tampa Bay Tributaries, Sarasota-Peace-Myakka, Charlotte Harbor, Caloosahatchee, Everglades West Coast, Everglades, and Florida Keys.

HUC8 Watershed(s):
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Perdido Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Escambia(Lower Conecuh)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Perdido)
South Atlantic-Gulf Region(St. Johns) - St. Johns(Lower St. Johns)
South Atlantic-Gulf Region(Southern Florida) - Kissimmee(Kissimmee)
South Atlantic-Gulf Region(Southern Florida) - Kissimmee(Western Okeechobee Inflow)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Lake Okeechobee)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Everglades)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Florida Bay-Florida Keys)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Big Cypress Swamp)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Caloosahatchee)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Florida Southeast Coast)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Peace)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Myakka)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Charlotte Harbor)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Sarasota Bay)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Manatee)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Little Manatee)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Alafia)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Hillsborough)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Tampa Bay)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Crystal-Pithlachascotee)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Withlacoochee)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Waccasassa)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Econfina-Steinhatchee)
South Atlantic-Gulf Region(Suwannee) - Suwannee(Santa Fe)
South Atlantic-Gulf Region(Ochlockonee) - Ochlockonee(Lower Ochlockonee)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Apalachicola)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(New)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Apalachicola Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(St. Andrew-St. Joseph Bays)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Choctawhatchee Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Pensacola Bay)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Chipola)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Yellow)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Blackwater)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Choctawhatchee(Pea)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Choctawhatchee(Lower Choctawhatchee)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Escambia(Escambia)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Aucilla)

South Atlantic-Gulf Region(Ochlockonee) - Ochlockonee(Apalachee Bay-St. Marks)

State(s):
Florida

County/Parish(es):
FL - Broward
FL - Escambia
FL - Pasco
FL - Calhoun
FL - Pinellas
FL - Charlotte
FL - Citrus
FL - Clay
FL - Collier
FL - Columbia
FL - Dixie
FL - Franklin
FL - Gadsden
FL - Gilchrist
FL - Polk
FL - Putnam
FL - Sarasota
FL - Sumter
FL - Suwannee
FL - Taylor
FL - Union
FL - Wakulla
FL - Alachua
FL - Baker
FL - Bay
FL - Bradford
FL - Glades
FL - Gulf
FL - Hamilton
FL - Santa Rosa
FL - Walton
FL - Washington
FL - DeSoto
FL - Hardee
FL - Hernando
FL - Highlands
FL - Hillsborough
FL - Holmes
FL - Jackson
FL - Jefferson
FL - Lafayette
FL - Lake
FL - Lee
FL - Leon
FL - Levy
FL - Liberty

FL - Madison
FL - Manatee
FL - Marion
FL - Miami-Dade
FL - Monroe
FL - Okaloosa
FL - Palm Beach
FL - Hendry

Congressional District(s):
FL - 3
FL - 21
FL - 14
FL - 15
FL - 26
FL - 11
FL - 23
FL - 13
FL - 20
FL - 16
FL - 18
FL - 5
FL - 12
FL - 1
FL - 19
FL - 25
FL - 2
FL - 9
FL - 17

Narratives

Introduction and Overview:

The proposed Florida Strategic Gulf Coast Land Acquisition Program includes a suite of land acquisitions, increasing State ownership or management by 10,000 to 20,000 acres. The primary goal is to restore and conserve habitat through acquisitions from willing sellers (fee simple acquisitions or conservation easements). The proposed program would include strategically linked conservation activities that in combination result in a greater impact, increasing protected areas, strengthening natural resources, and improving resiliency. All program activities would occur in watersheds that drain to the Gulf of Mexico and would address the same environmental stressors of habitat loss and fragmentation.

Fee simple acquisitions and conservation easements are key components of natural resource conservation and management in Florida and lead to sustained environmental benefits through the protection of lands in perpetuity. The goals and benefits of this land acquisition program include protecting threatened species and rare habitats, conserving natural habitats, preserving public recreation areas, and improving resiliency in the face of climate change impacts.

The majority of funds for the proposed program would be used for implementation. A limited amount of planning funds will be used for program management, monitoring and adaptive management, and data management. Florida is not requesting RESTORE funds for land management; however, alternate funds would be utilized for management activities occurring on lands conserved under this proposed program. Florida would leverage the existing science-based FF evaluation process to identify lands for acquisition, and parcels would be selected from the FF priority list. The FF Act (Section 259.105, F.S.) describes the program, which is Florida's premier conservation and recreation lands acquisition program, serving as a blueprint for conserving natural resources and cultural heritage (FF 2019a). The FF priority list is updated annually by the Acquisition and Restoration Council (ARC), which includes scientific representatives, using a science-based process to rank each project for selection. ARC is assisted by the technical and scientific resources of the FNAI (FF 2019a). Under the proposed program, priority parcels in the FF Critical Natural Lands and Climate Change Lands categories or other FF parcels with similar attributes, in watersheds that are hydrologically connected to the Gulf of Mexico, would be selected. Priority would be given to parcels that leverage other funding sources or that can be acquired for less than appraised values.

Goal/Objective: This program meets the Restore and Conserve Habitat Comprehensive Plan Goal. Through acquisition of parcels in FF Critical Natural Lands and Climate Change Lands categories, or other FF parcels with similar attributes, this program would protect ecologically important natural areas, helping to conserve the health, diversity, and resilience of Florida habitats and communities. This program meets the objective of Restore, Enhance, and Protect Habitats by protecting coastal and estuarine wildlife habitats such as beaches, dunes, coastal wetlands, and coastal forests.

Commitments: This program allows for a regional ecosystem-based approach to habitat protection as parcels are ranked through FF without regard to geographic location. FF utilizes a science-based evaluation process for decision making in regards to prioritizing lands for acquisition. Parcels are ranked with the goal of conserving environmentally unique and irreplaceable or rare ecosystems, native flora and fauna, providing natural areas for recreation, and preserving archaeological or historic sites (Section 259.105, F.S.). Parcels undergo a thorough scientific review and comprehensive analysis and scoring process using FNAI's data, a series of geographic data layers (e.g., critical habitats, rare species, biodiversity measures), and several project ranking criteria (e.g., percent inundation at 1-meter sea level rise, restoration priority, etc.; FNAI 2018a). This program would leverage resources by partnering with and building on the work of FF, including $142.5 million committed over the past 5 years. This collaboration maximizes the impact of habitat protections in

Florida and streamlines the process of identifying lands for acquisition by utilizing the FF priority list. FF also has a strong history of partnering with local entities; the successful acquisition of many State lands is the direct result of these partnerships as demonstrated by the numerous partners involved in the projects on the FF priority list (FF 2019a).

Florida is committed to public engagement, inclusion, and transparency. The public can participate in the project nomination process and the ARC holds meetings that are publicly noticed. Non-profit organizations often help acquire the conserved lands. In addition to the science-based approach to evaluating lands for acquisition, habitat protection is a proven approach to strengthening natural resources and sustaining diverse populations of wildlife, in accordance with Florida's commitment to delivering results. Florida's success with land conservation is proven by the over 3.9 million acres that are currently managed under Land Use or Land Management plans that are updated and reviewed at least every 10 years (FF 2019a). This program also includes efforts to measure outcomes to ensure funds have been invested in a meaningful way. The acreage of lands acquired and managed will be tracked to ensure the habitats have been conserved.

Benefits: The proposed program would result in significant environmental benefits to Florida's ecosystems and coastal communities by protecting critical habitats, preserving native biodiversity and ecosystem function, and mitigating sea level rise, storm surge, flooding, and other current and future risks. Social and economic benefits of the program include increasing opportunities for recreational use of public lands and preserving cultural heritage. Through land acquisition, the program would conserve unique and valuable habitats, including wildlife corridors, which help sustain populations that depend on healthy, connected habitats. Conservation of these lands reduces habitat loss and degradation, allowing natural communities to adapt to increasing challenges associated with global climate change (e.g., allowing for migration in response to changing environmental conditions). Well-planned land acquisition programs in Florida have demonstrated that habitat connectivity provides an opportunity to protect and conserve biological diversity (DeFreese 1995). Land conservation also enhances water resource protection and management, reducing impervious surfaces, allowing water to filter naturally, and reducing flooding, thereby improving water quantity and quality (Shepard et al. 2016).

Lands acquired under this proposed program include areas prioritized through the existing FF science-based process and include lands critical for sustaining healthy ecosystems and mitigating global climate change. Lands targeted in the FF Critical Natural Lands category include functional landscape-scale natural systems, large hydrological systems, imperiled natural communities, and corridors linking large landscapes, as identified and developed using the best available scientific analysis by the FNAI. Protecting lands in this category would result in significant environmental benefits, protecting habitat for threatened and endangered species, wildlife corridors, and expanding protected natural areas for conservation and recreation. Conserving parcels in the Climate Change Lands category includes acquiring lands that would help strengthen Florida's land, water, and coastal resources, promote carbon sequestration, and mitigate effects of sea level rise.

Environmental Stressors: Comprehensive resource management and planning efforts, such as FF, Florida Gulf Environmental Benefit Fund Restoration Strategy, Basin Management Action Plans, and other efforts have identified stressors and threats to Florida's natural resources including habitat loss, fragmentation, hydrologic alterations, climate change, and sea level rise. This proposed program would directly address habitat fragmentation and climate change stressors by acquiring and protecting critical natural areas, large functional landscapes, large hydrologic systems, imperiled natural communities, wildlife corridors, and lands that would strengthen Florida's land, water, and coastal resource resiliency, promote carbon sequestration, and mitigate sea level rise effects.

Costs: $20,000,000. Funds requested for this proposed program will leverage State funds of $142.5 million over the past 5 years, and possibly additional funds committed for fiscal year 2020-21. Timeline: The FF priority list is developed annually (FF 2019b) and implementation of land acquisitions could begin as funding is received. The duration of program implementation is expected to be 10 years; however, lands would be maintained in perpetuity.

Partners: This program partners with FF, Florida's premier conservation lands acquisition program. Since 1963, Florida has invested approximately $8 billion to conserve approximately 3.9 million acres of land for environmental, recreational, and preservation purposes through FF and predecessor programs (FF 2019a). This program proposes to leverage the FF science-based approach to conservation and streamline the land acquisition process. FDEP would also work with nonprofit organizations for help during the acquisition process.

FPL 3 Planning Framework: This proposed program is consistent with the Protect and Conserve Coastal, Estuarine, and Riparian Habitats priority approach. The primary goal and objective is to acquire and conserve lands that drain to the Gulf of Mexico, including coastal, estuarine, and riparian habitats, critical natural areas such as large functional landscapes and hydrological systems as well as wildlife corridors, and lands that would help strengthen Florida's land, water, and coastal resources, promote carbon sequestration, and mitigate effects of sea level rise.

Proposed Methods :

The proposed Florida Strategic Gulf Coast Land Acquisition Program would consist of a suite of land acquisitions which would result in an increase in State ownership or management by 10,000 to 20,000 acres. No construction activities are included in the proposed program; funds are being requested for acquisition only. The proposed method for all program activities is land acquisition for the conservation and protection of critical natural lands including landscape-scale natural systems, hydrological systems, wildlife corridors, and a range of potential habitats such as coastal beach and dunes, marshes, forested habitats, and wetlands; as well as lands that would help strengthen Florida's land, water, and coastal resources, promote carbon sequestration, protect habitat and coastal lands, and mitigate effects of sea level rise. Land acquisitions would be from willing sellers and could include both fee simple acquisition and conservation easements.

While Florida is not seeking any RESTORE funds for land management activities, the lands acquired and protected under this proposed program would be under improved management practices or current conservation management practices would be maintained. Management activities would be funded and conducted by the State for fee simple acquisitions and would be included in the requirements for landowners in conservation easement agreements. Land management activities could include habitat restoration and improvement, hydrological preservation and restoration, invasive and non-native species control, and prescribed burns, depending on natural communities and habitats present on the conserved lands. Finally, as part of FF, the ARC and FNAI conduct periodic evaluations of acquired lands and Land Management Plans to ensure management activities are being conducted as outlined in the plans.

To select land acquisitions under this proposed program, Florida would utilize the land acquisition priority list produced through FF. The list is updated and adopted annually by the ARC, a 10-member group including scientific representatives from four State agencies, four appointees of the Governor, one appointee by the Fish and Wildlife Conservation Commission, and one appointee by the Commissioner of Agriculture and Consumer Services. Members of the ARC have backgrounds in scientific disciplines of land, water, environmental sciences, wildlife management, forestry, and outdoor recreation (FF 2019a). The ARC utilizes a science-based evaluation process for decision-making when developing the priority list for acquisition. To select lands for acquisition, Florida would

identify the priority parcels in the Critical Natural Lands and Climate Change Lands categories, or other parcels with similar attributes, that have not already been acquired and determine which are in watersheds that drain into the Gulf of Mexico. Priority would be given to those parcels that leverage other funding sources or those that can be acquired for less than the appraised value.

Once selected, FDEP would follow the land acquisition procedures outlined in the Florida Statutes, Chapter 259, Land Acquisitions for Conservation or Recreation. FDEP's Division of State Lands and its acquisition partners would contract an appraisal of land from an independent private sector appraiser to estimate market value, negotiate with owners to buy the land, conduct any required due diligence such as site environmental assessments, and complete the acquisition on behalf of the State. Lands acquired would be titled to the State and protected in perpetuity.

As noted above, FDEP would utilize FF to identify priority parcels for land acquisitions. FF utilizes a science-based process including a thorough scientific review and a comprehensive natural resource analysis and scoring process to rank parcels. The process starts when parcels are recommended for acquisition by members of the public or private organizations. The ARC then reviews each parcel and ranks them within the following categories: Critical Natural Lands, Partnerships/Regional Incentives, Less-than-Fee, Climate Change Lands, Substantially Complete, and Critical Historical Resources. Activities under this proposed program would be limited to land acquisitions in the Critical Natural Lands and Climate Change Lands categories or other FF parcels with similar attributes.

In general, the ARC ranks parcels with the goal of conserving environmentally unique and irreplaceable lands or rare ecosystems, native flora and fauna, important breeding locations, natural areas for recreation, and archaeological or historic sites (Section 259.105, F.S.). FF and the ARC rely on the FF Conservation Needs Assessment (FFCNA), which is a series of geographic data layers that correspond to specific measures in the FF Act (FNAI 2018a, b). Each FFCNA data layer is designed to address a specific measure in the FF Act. FFCNA layers provide information on strategic habitat conservation areas, rare species habitat conservation priorities, under-represented natural communities, fragile coastal resources (e.g., uplands, lakes), ecological greenways, landscape-sized protection areas, significant surface waters, natural floodplains, functional wetlands, fragile coastal resources (e.g., wetlands), aquifer recharge areas, recreational trails, archaeological or historical sites, sustainable forestry, and forest lands for recharge.
To allow for the FFCNA information, which can be redundant across layers, to be evaluated comprehensively, FFCNA layers are combined into functional groupings for analysis purposes. These groupings are decision support data layers which inform two of the primary evaluation criteria for FF projects: Single Resource Evaluation (SRE) and the FF Tool for Efficient Resource Acquisition and Conservation (F-TRAC; FNAI 2018a).

SREs provide the ARC with concise scores for each acquisition project based on functional resource groupings, such as species, natural communities, surface waters, or other groupings. Projects are scored based on their contribution to that single resource only, without regard to other resource types. The primary purpose of the SRE is to provide a straightforward method for comparing current and proposed land acquisitions based on specific resource goals. FF typically uses a weighted score approach for most SRE project scores where the calculated acres of each project in the different priority classes of each resource type are multiplied by a weight factor corresponding to the priority class. The weighted acres are summed and then divided by the acres of the project to eliminate size bias (FNAI 2018a). Alternative approaches are utilized for landscapes, trail networks, and cultural resources as described in more detail in FNAI (2018a).

The F-TRAC tool is a systematic reserve design tool that assists decision-makers with evaluating

acquisitions for a fixed cost (Oetting et al. 2006). F-TRAC provides a single, concise evaluation of current and potential land acquisition projects across multiple resource types and is tied to the actual amount of acreage projected to be acquired (FNAI 2018a). F-TRAC is based on a computer modeling approach to conservation reserve design called Iterative Site Selection (FNAI 2018a). The F-TRAC analysis considers seven natural resource categories: species,communities, landscape connectivity, surface waters, wetlands, sustainable forestry, and aquifer recharge; and identifies a suite of sites that efficiently protects those resources (FNAI 2018a). The goal is to identify the most efficient grouping (i.e., the optimal solution of the greatest resource protection in a given amount of land).

In addition to the FNAI information, SREs, and F-TRAC layers, the ARC evaluates several additional criteria for each project including sea level rise, population within 100 miles of the project, percentage in urban areas, acres in storm surge zones, flood protection, restoration priority, and soil carbon storage (FNAI 2018a).

Environmental Benefits:

Florida has more than 80 distinct ecosystems, with over 25,000 square miles of forested habitats, 1,350 miles of coastal beaches, dunes and estuarine habitats, and 10 million acres of wetlands (Beaver 2006, Dahl 2005, FNAI 2010). Florida's natural resources support the State's communities and economy.

As a land acquisition program, the public lands acquired for conservation would result in significant environmental benefits through the protection of Florida's critical habitats, native biodiversity, rare and imperiled species, ecosystem function, landscape connectivity, and reduced pressure from development in some cases (Damschen et al. 2019, DeFreese 1995, Tewksbury et al. 2002). Conserving coastal ecosystems can enhance community and ecosystem resiliency to both direct and indirect impacts of climate change (USGCRP 2018). These lands would mitigate a number of impacts resulting from climate change by protecting habitats that reduce impacts from sea level rise, and flooding, among others, and promote carbon sequestration. Land conservation also enhances water resource protection and management, reducing impervious surfaces, allowing water to filter naturally, and reducing flooding, thereby improving water quantity and quality (Shepard et al. 2016).

Conserve biodiversity and rare species: There are approximately 269 species that are endemic to Florida (Stein 2002). Over a large geographic area, diverse climatic conditions support a large number of rare and imperiled species (Stys et al. 2017). Habitat loss due to urbanization is a primary cause of species endangerment in the U.S. (Czech 2004). Press et al. (1996) suggested that land acquisition is the most attractive approach for conserving rare species because the scale of land acquisition is often appropriate for the range of rare species. Despite protections provided by the Endangered Species Act, Hull (2015) suggests that "State and local governments play an increasingly vital role in species protection efforts as climate-induced changes alter natural systems at the local level." FDEP is targeting the FF Critical Natural Lands and Climate Change Lands categories, and other FF parcels with similar attributes, to help conserve Florida's biodiversity, including rare and imperiled species, by protecting large tracts of habitats needed to support these species.

Improve habitat connectivity: Through land acquisition, the program would conserve unique and valuable habitats, including wildlife corridors that help sustain populations that depend on a healthy, connected landscape. Land conservation reduces habitat loss and degradation and allows natural communities to adapt to increasing challenges associated with global climate change by providing more area over which species can migrate in response to changing environmental conditions. Conservation of habitat buffers and other natural corridors helps to maintain population connectivity, promote genetic diversity, and mitigate the effects of habitat fragmentation, all of

which have environmental benefits (Damschen et al. 2019, Tewksbury et al. 2002).

Mitigate climate change: Coastal land in Florida is increasingly susceptible to sea level rise and storm surge due to low elevations across the State. The Florida Keys and the Everglades are particularly vulnerable as elevations are on average less than one meter above present sea level (Stys et al. 2017). Conservation and restoration of coastal habitats such as marshes, mangroves, submerged aquatic vegetation (SAV), oyster reef, coral reef, and barrier islands increase resiliency against the impacts of sea level rise, flooding, increasing wave energy, erosion, and in some cases, storm surge (Beck et al. 2018, Boutwell and Westra 2016, Ferrario et al. 2014, Guannel et al. 2016, Liu et al. 2013, USGCRP 2018, Zhang et al. 2012). Florida ranks in the top three States nationally where existing coastal habitat is expected to defend the greatest number of people and property from projected sea level rise (Arkema et al. 2013). It is estimated that preserving and restoring coastal habitats in the U.S. could reduce the impacts of sea level rise on people and their property by half (Arkema et al. 2013). Furthermore, conservation of riparian buffers and other natural flowways can help mitigate floods and protect coastal communities most susceptible to flood risk (Daily et al. 1997).

Promote carbon sequestration: Vegetated coastal habitats (e.g., marsh, mangrove, seagrass) contribute one- to two-orders of magnitude greater carbon sequestration per unit area compared to terrestrial forests (Mcleod et al. 2011). Thus, conserving and protecting these vegetated coastal ecosystems will contribute positively to offsetting increased atmospheric carbon dioxide and thus help to reduce the effects of climate change.

Metrics:

Metric Title: HC001 : Conservation easements - Acres protected under easement
Target: TBD
Narrative: Florida proposes this as a program-wide metric to evaluate the success of the program. Program success would be determined by the total number of acres protected under a conservation easement. The purpose of the program metric would be to verify that the conservation easement has been acquired and recorded in property records. Florida's target would be approximately 10,000 to 20,000 acres protected under either a conservation easement or acquired in fee. Each project or activity under the program would have specific metric(s) aimed at evaluating the success of the individual project or activity.

Metric Title: HC003 : Land acquisition - Acres acquired in fee
Target: TBD
Narrative: Florida proposes this as a program-wide metric to evaluate the success of the program. Program success would be determined by the total number of acres protected through fee simple acquisition. The purpose of the program metric would be to verify that the acquisition has been completed, and the performance measure would be an executed and recorded deed. Florida's target would be approximately 10,000 to 20,000 acres protected under either a conservation easement or acquired in fee. Each project or activity under the program would have specific metric(s) aimed at evaluating the success of the individual project or activity.

Risk and Uncertainties:

FDEP has a long history of successfully executing land acquisition projects (FF 2019a), thus there are few risks and uncertainties associated with the implementation of this proposed program. However, there are risks and uncertainties inherent to the acquisition process and sustaining long-term benefits associated with each parcel acquired. The proposed program would promote long-term environmental benefits and coastal resiliency with each land acquisition through site-specific

considerations of local and regional risks and uncertainties (e.g., selecting parcels that improve coastal resiliency, reduce erosion, support native flora and fauna), and long-term land use planning (e.g., selecting parcels ecologically connected to other protected areas such as corridors and areas that strengthen Florida's natural resources).

Near-term risks and uncertainties associated with land acquisition include the continued availability of properties, the successful negotiation of sales with landowners (e.g., title issues), and the cost of the land to be acquired (e.g., appraisals, seller price expectations, inflation of land value). The properties proposed for purchase through FF are nominated by private citizens or organizations and have willing sellers. As such, using FF priority list parcels minimizes the risk associated with identifying parcels available for acquisition. Some of these risks can be mitigated through thoughtful discussion with landowners, quality appraisals, the availability of alternate parcels, and due diligence. Ultimately, the number of parcels and the specific parcels acquired will depend on the FF priority list and will be scaled to the program budget.

Long-term risks and uncertainties regarding sustaining benefits associated with acquired lands may result directly or indirectly from climate change, including sea level rise, extreme weather, drought, or wildfires; other unforeseen changes in environmental conditions (e.g., erosion, abundance of invasive species); and land use (e.g., land management practices). The risks that these conditions pose on the long-term success of the program are based on projections, which have their own set of uncertainties (for example, a range of projected sea level rise estimates). The sections below summarize some of the risks and uncertainties associated with climate change as well as the risks and uncertainties associated with land conservation and the long-term success of the program.

Conserve biodiversity and rare species: Climate change is expected to induce shifts in the geographic distribution of plants and animals worldwide; however, the extent to which each individual species' range of distribution will change is uncertain (Heller and Zavaleta 2009). Studies have demonstrated the direct impact of sea level rise, reducing abundance and distribution of plant and animal species restricted to low elevation habitats in Florida (LaFever et al. 2007, Ross et al. 1994). Given the significant number of rare and endemic species in Florida, there is a heightened need to consider the long-term protection of threatened and endangered species through conservation of critical areas that incorporate projections for climate change impacts on rare and imperiled species (Heller and Zavaleta 2009). Both the Critical Natural Lands and Climate Change Lands categories are designed to protect large, intact, natural lands with significant imperiled communities, corridors, and buffers (FF 2019a). Through monitoring and long-term adaptive management that include projections for climate change-induced range shifts, this proposed program may mitigate some of the risk of climate change induced species and biodiversity endangerment.

Habitat connectivity: In general, land conservation is a low risk method to offset impacts of future development; however, there is uncertainty with determining the appropriate spatial extent. The FF Critical Natural Lands category promotes the conservation of large, intact hydrological systems and increased habitat connectivity through protection of corridors. Protecting habitat and wildlife corridors helps to maintain population connectivity, promote genetic diversity, and mitigate the effects of habitat fragmentation (Damschen et al. 2019, Tewksbury et al. 2002). However, the degree to which individual conservation lands and corridors achieve connectivity is uncertain. The effectiveness of a corridor depends on a variety of factors (e.g., size and shape of the patches connected by the corridor, distance between patches) and may be difficult to quantify (Tewksbury et al. 2002). Wildlife corridors have been effective in promoting connectivity for a variety of animal populations in Florida (Braden et al. 2008, Dixon et al. 2006). Long-term monitoring of corridor effectiveness will inform future corridor design and help ensure habitat connectivity benefits are achieved.

Climate change: Coastal land in Florida is increasingly susceptible to climate change impacts due to low elevations. A range of climate change models exist, which vary in their projection of future conditions; thus, there is uncertainty associated with using models to forecast future impacts and to plan appropriate mitigation measures (FOCC 2010, Strauss et al. 2014, Sweet et al. 2017). Despite these uncertainties, the risk associated with sea level rise is clear; an evaluation by Emrich et al. (2014) found every coastal county in Florida at risk for storm surge and 12 counties had residents at extreme risk to the lowest prediction of sea level rise investigated. As cited in Stys et al. (2017), 25 percent of 1,200 species tracked by the FNAI are expected to lose more than half of their current habitat area due to sea level rise. Increasingly, an understanding of the adverse effects of hardened shorelines and the value of natural shorelines for shoreline protection has led to a reprioritization of coastal management policy (Bilkovic and Mitchell 2017, Reguero et al. 2018). Conservation of coastal habitats that provide a natural buffer to sea level rise and in some cases, storm surge (e.g., marshes, mangroves, SAV, oyster reef, coral reef, barrier islands) will increase Florida's resiliency to climate change (Beck et al. 2018, Boutwell and Westra 2016, Ferrario et al. 2014, Guannel et al. 2016, Liu et al. 2013, USGCRP 2018, Zhang et al. 2012). Feagin et al. (2010) suggest that while coastal vegetation is effective in attenuating short-period wave energy, they may be less effective in reducing the impacts of storm surge. Thus, some uncertainty is associated with the ability of coastal habitats to reduce storm surge impacts.

Arkema et al. (2013) estimate that preserving and restoring coastal habitats in the U.S. could reduce the impacts of sea level rise on people and their property by half. Some risk and uncertainty remain for the long-term conservation of the coastal habitats under unknown future climate scenarios. In the long-term, some land acquired may become submerged due to rising sea level and/or land subsidence; however, Land Management Plans would be developed and updated to address such risks. Conservation of parcels in the FF Climate Change Lands category is expected to promote coastal resiliency against future risks associated with sea level rise and land subsidence.

In addition to sea level rise, a number of other indirect environmental changes that introduce additional risks and uncertainties for the long-term success of land acquisition projects are anticipated as a consequence of climate change. These changes include increased frequency and duration of extreme weather events (e.g., hurricanes, storm surge, floods, drought), wildfires, increased air and water temperatures, and increased abundance of invasive species. While some uncertainty exists regarding projected increases in storm frequency, warming ocean water fuels stronger storms and data suggests a trend of increasing wind speeds and rainfall rates associated with hurricanes over the last 20 years (EPA 2016). Menges and Hawkes (1998) studied fire and microhabitat of plants in Florida scrub ecosystems. While individual species demonstrate variable response to fire, the Florida scrub plant community is generally resilient to fire, which demonstrates that conserving lands dominated by scrub communities may increase resilience to the increased frequency and duration of wildfires associated with climate change. Increasing air and water temperatures may promote increased abundance of invasive species; native species may become more susceptible to foreign and domestic pathogens and parasites; thus, native species and natural communities may be subject to multiple stressors with uncertain consequences (Burgiel and Muir 2010, Stys et al. 2017). Increasing water temperatures may have a range of impacts on marine and aquatic species, including coral bleaching and increased susceptibility to disease (Harvell et al. 1999, Sullivan et al. 2018). The conservation and protection of large areas of natural communities may mitigate some of these impacts in the long-term. Additional monitoring and adaptive management may also help identify long-term mechanisms to protect Florida's native species and communities.

Carbon sequestration: In addition to conserving and protecting natural lands, to the extent possible, FDEP would conserve lands with a high carbon sequestration potential, resulting in positive benefits

towards mitigating climate change. Vegetated coastal habitats (e.g., marsh, mangrove, SAV) contribute one- to two-orders of magnitude greater carbon sequestration per unit area compared to terrestrial forests (Mcleod et al. 2011). Mcleod et al. (2011) outline some of the uncertainties associated with the mechanisms that control carbon sequestration; however, there is no doubt that conserving and protecting these vegetated coastal ecosystems will contribute positively to offsetting increased atmospheric carbon dioxide and climate change.

Socioeconomic: There may be socioeconomic risks associated with some land acquisition projects, which could limit economic development, also resulting in lost property tax revenues in most areas; however, these are likely offset by the socioeconomic benefit of the program overall in reducing costs associated with storm and flood damage.

Through the prioritization of FF Critical Natural Lands and Climate Change Lands, the Florida Strategic Gulf Coast Land Acquisition Program would preserve habitats in Florida that promote connectivity, resiliency, and mitigate the effects of climate change. While some risks and uncertainties exist for the long-term success of individual land acquisition projects, these may be mitigated through monitoring and adaptive management.

Monitoring and Adaptive Management:

Program-wide monitoring for the metrics HC001: Conservation easements - Acres protected under easement and HC003: Land acquisition - Acres acquired in fee would occur for the duration of the program. The restoration objective of this proposed program is to acquire and protect critical natural areas and lands that, if protected, would help reduce the effects of climate change in Florida watersheds that drain to the Gulf of Mexico. Program success would be tracked as the total number of acres protected under easement or acquired in fee.

Florida will utilize a monitoring and adaptive management framework consistent with the Deepwater Horizon NRDA MAM Manual (DWH Trustees 2019) and the RESTORE Interim Observational Data Plan (ODP) Guidance (RESTORE 2018). As projects or activities are implemented, the program would be adaptively managed to ensure the greatest benefits are achieved. For example, as lessons are learned regarding the land acquisition process, these would be utilized to improve future acquisitions.

Project or activity monitoring including the metrics, duration, performance criteria, and adaptive management activities, would vary depending on the technique implemented in each project or activity.

Monitoring for the metrics HC001: Conservation easements - Acres protected under easement and HC003: Land acquisition - Acres acquired in fee would take place following acquisition. Acres acquired would be verified by survey or aerial imagery, consistent with methods in the NRDA MAM Manual (DWH Trustees 2019) and ODP Guidance (RESTORE 2018).

Data Management:

FDEP would develop an ODP and Data Management Plan detailing how data will be collected and managed at the time a project or activity is selected and provide a central location to access relevant data. Data would be collected on the acquisition process and each selected parcel (e.g., property information, location, acreage acquired). Other data may be collected such as, but not limited to, the habitats acquired, presence of rare species, or other FNAI information. FDEP would partner with FF

and negotiations on conservation easements are confidential until approved by the Board of Trustees. Once closed, property information will be made available on the FDEP Oculus site. Information on any FF activities are available at http://www.dep.state.fl.us/lands/FFplan_county.htm.

To the extent any environmental data are collected, field personnel would utilize standardized datasheets. Relevant data that are handwritten will be transcribed into standard digital format or scanned to PDF. Transcribed data will be verified and validated prior to being released. After any identified errors are addressed, data would be considered QA/QC'd. Spatial data collected will have properly documented FGDC/ISO metadata, a data dictionary that defines codes and fields, or a Readme file describing how data was collected, QA/QC procedures, relationships to other data, origin, usage, or format. FDEP would utilize the RESTORE MEtadata Records Library and Information Network for metadata records creation.

Collaboration:

The proposed Florida Strategic Gulf Coast Land Acquisition Program was developed based on the environmental benefits of conserving natural habitats, and on public input, which highlights the value the public places on protection of natural lands in Florida. FDEP would partner with FF, utilizing the FF priority list to identify lands for acquisition. FF also has a long history of cooperative partnerships with local and national land trusts, water management districts, counties, cities and other local governments, as well as the Federal government; and partnerships with local governments have increased in recent years (FF 2019a). Nonprofit organizations may also play a role in the acquisition process. They can advocate for parcels to be placed onto the FF priority list and can act as intermediaries with owners, including assisting them with tax and estate planning issues. FF has previously collaborated with The Nature Conservancy, the Trust for Public Land, and The Conservation Fund.

Public Engagement, Outreach, and Education:

The Florida public places enormous value on conserving natural areas for the benefit of Florida's ecosystems, public recreation, and cultural preservation as demonstrated through the passing of several land acquisition acts and from the overall success of land acquisition programs since the 1960s. FF includes opportunities for public engagement, outreach, and education. The public has also proposed numerous land acquisition projects through Florida's DWH project portals. As such, FDEP developed this proposed program based on public input. Further, this proposed program would partner with FF to streamline the process of identifying land for acquisition by utilizing the FF priority land acquisition list.

FF promotes land acquisition on behalf of the public, in part to improve public land management and increase public access to natural areas. Thus, public engagement is a critical component of the selection process. Acquisition projects may be nominated by Federal, State and local government agencies, conservation organizations, or private citizens. ARC meetings are publicly noticed, and the public is encouraged to provide comment on the projects. Nonprofit organizations may play a role in helping acquire conservation lands. They advocate for parcels to be placed onto the FF priority list and can act as intermediaries with owners, including assisting them with tax and estate planning issues. FF has previously collaborated with The Nature Conservancy, the Trust for Public Land, and The Conservation Fund.

In addition to providing opportunities for the public to participate in the site selection and land acquisition process, FF provides education and outreach to ensure the public has knowledge of the accessibility of public lands. A publicly available database and mobile application are available to provide the public with information on the location, types of recreational opportunities, access

points, facilities, amenities, and restrictions for public lands in Florida (Section 259.105, F.S.).

Leveraging:

Funds: $142,000,000.00
Type: Bldg on Others
Status: Committed
Source Type: State
Description: This proposed program will leverage State funds already received and possibly additional funds committed for fiscal year 2020-21, along with resources from FF. The proposed program will leverage the FF priority list of land acquisitions which will allow FDEP to maximize the impact of habitat protection in Florida, eliminates duplication of effort, streamlines the process of identifying and acquiring lands, and builds on Florida's capacity for long-term integrated resource management. FDEP's Division of State Lands staff will coordinate with staff helping to administer the proposed program when identifying lands for potential acquisition, selecting parcels for acquisition, determining costs, and ensuring there are willing sellers.

Environmental Compliance:

As per the RESTORE FPL 3 Proposal Submission Guidelines, this program includes Category 1 funds for program management, monitoring and adaptive management, and data management activities. Implementation is currently proposed for Category 2. Florida is working with RESTORE Council staff and the U.S. Department of Agriculture to secure a categorical exclusion for National Environmental Policy Act requirements for land acquisition projects and activities implemented under this proposed program. All projects and activities funded under this proposed program would include land acquisition and protection only, and would not include any construction activities. As such, there would be no adverse environmental impacts, and only environmental benefits.

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Budget

Project Budget Narrative:
The budget for this proposed program consists of $20,000,000 in Category 1 and Category 2 funds, of which the vast majority would be spent on implementation of land acquisition projects or activities. The Category 1 funds (about $2,000,000) would be spent on Program management, monitoring and adaptive management, and data management activities. More specific budgets will be developed at the project or activity level when projects or activities are selected for funding. Category 2 funds are estimated at $18,000,000.

Total FPL 3 Project/Program Budget Request:
$ 20,000,000.00

Estimated Percent Monitoring and Adaptive Management: 2 %
Estimated Percent Planning: 0 %
Estimated Percent Implementation: 90 %
Estimated Percent Project Management: 7 %
Estimated Percent Data Management: 1 %
Estimated Percent Contingency: 0 %

Is the Project Scalable?:
Yes

If yes, provide a short description regarding scalability.:
This program could be scaled to allow for more or fewer acquisitions over a longer or shorter duration of time, which would affect the overall habitat conservation benefits that could be achieved.

Environmental Compliance[1]

Environmental Requirement	Has the Requirement Been Addressed?	Compliance Notes (e.g.,title and date of document, permit number, weblink etc.)
National Environmental Policy Act	Yes	The Council's NEPA Procedures applies only to Category 1 planning and program administration funds. FL will be seeking a categorical exclusion for NEPA for land acquisition.
Endangered Species Act	N/A	Note not provided.
National Historic Preservation Act	N/A	Note not provided.
Magnuson-Stevens Act	N/A	Note not provided.
Fish and Wildlife Conservation Act	N/A	Note not provided.
Coastal Zone Management Act	N/A	Note not provided.
Coastal Barrier Resources Act	N/A	Note not provided.
Farmland Protection Policy Act	N/A	Note not provided.
Clean Water Act (Section 404)	N/A	Note not provided.
River and Harbors Act (Section 10)	N/A	Note not provided.
Marine Protection, Research and Sanctuaries Act	N/A	Note not provided.
Marine Mammal Protection Act	N/A	Note not provided.
National Marine Sanctuaries Act	N/A	Note not provided.
Migratory Bird Treaty Act	N/A	Note not provided.
Bald and Golden Eagle Protection Act	N/A	Note not provided.
Clean Air Act	N/A	Note not provided.
Other Applicable Environmental Compliance Laws or Regulations	N/A	Note not provided.

[1] Environmental Compliance document uploads available by request (restorecouncil@restorethegulf.gov).

Maps, Charts, Figures

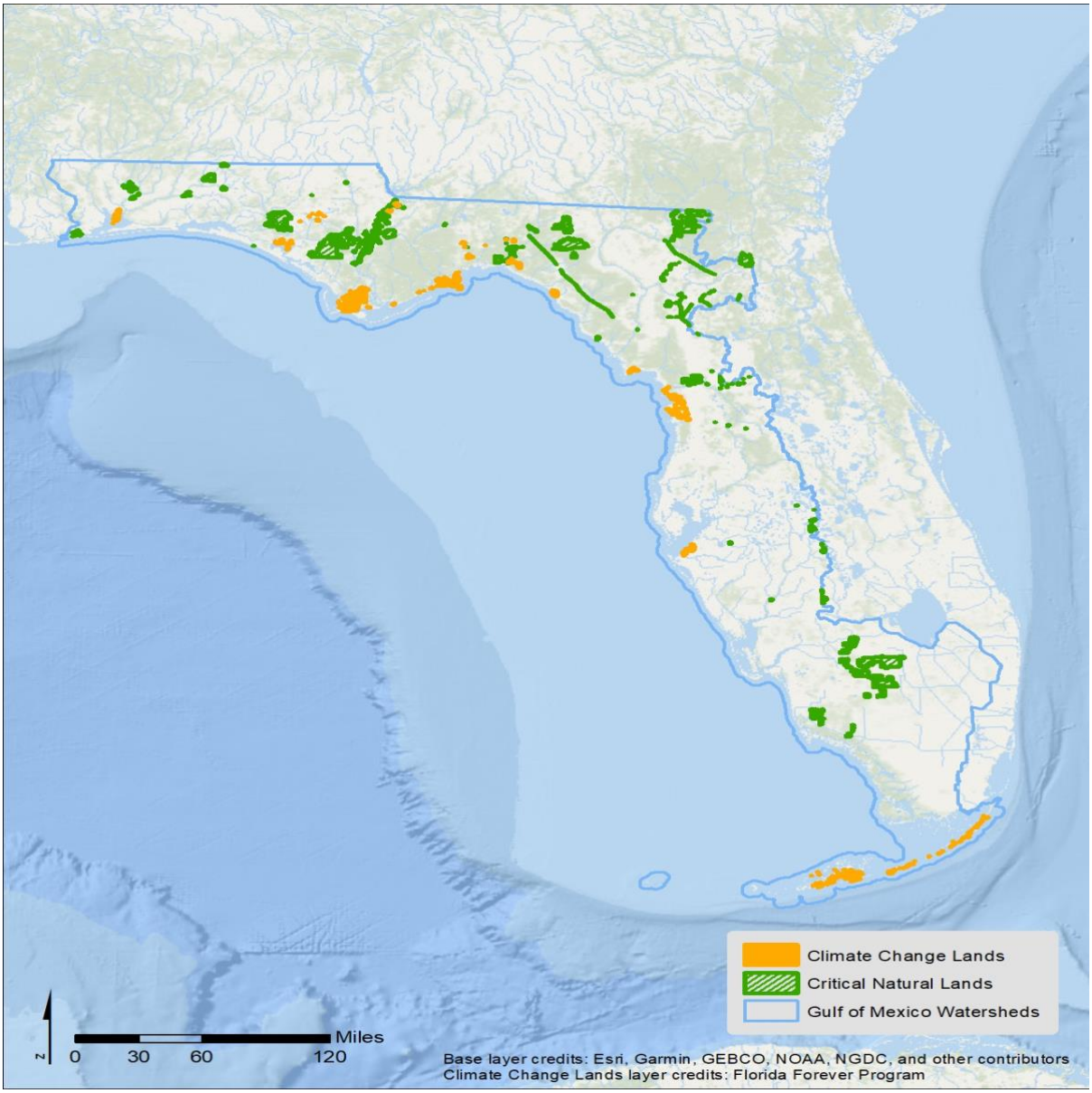

Figure 1: Map illustrating the proposed extent of the Florida Strategic Gulf Coast Land Acquisition Program, including watersheds in Florida draining to the Gulf of Mexico. Areas for potential acquisition under this proposed program, identified as Climate Change Lands or Critical Natural Lands on the Florida Forever Program priority list, are shown.

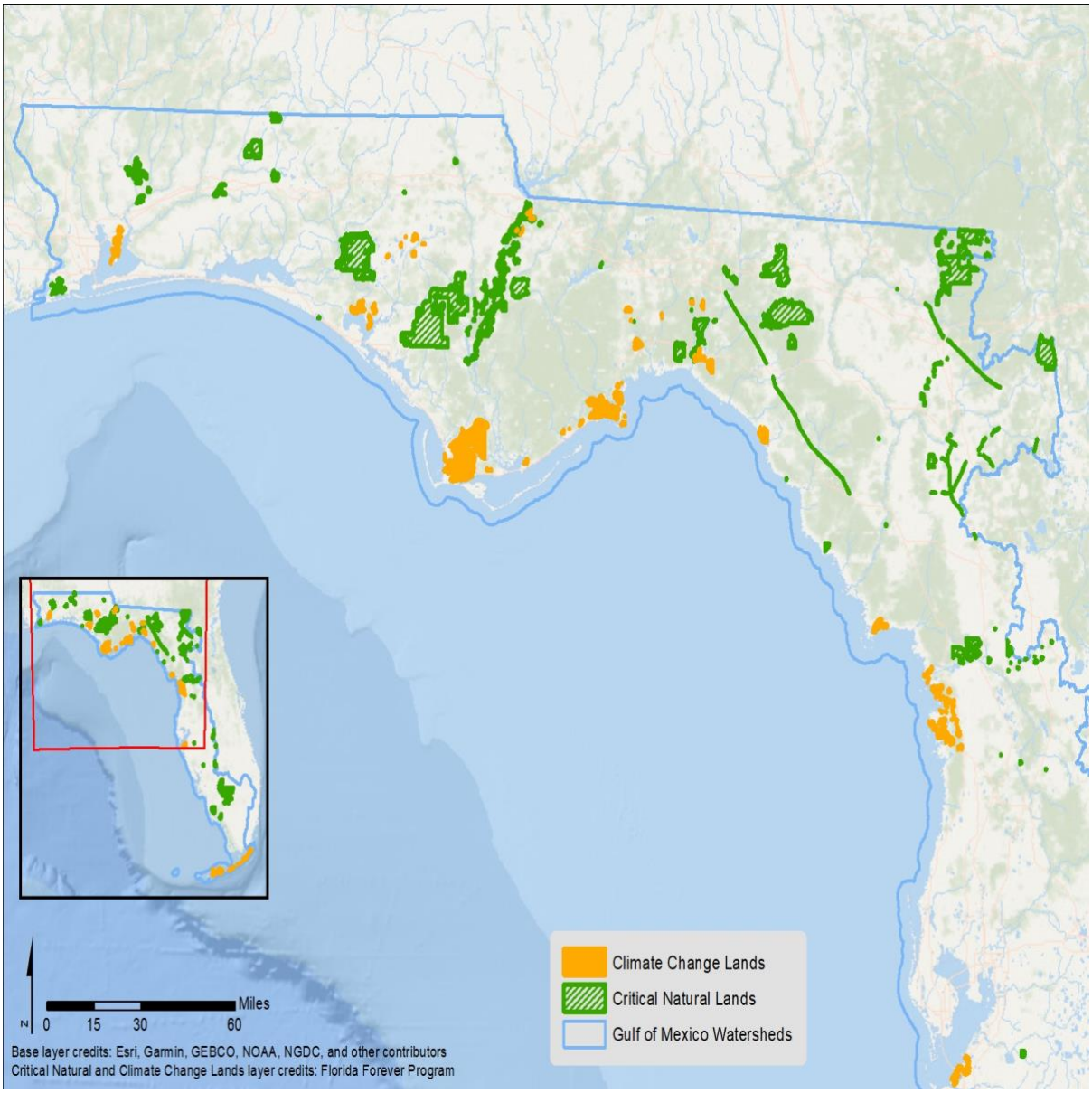

Figure 2: Map illustrating a closer view of the northern extent of the Florida Strategic Gulf Coast Land Acquisition Program and potential land acquisitions for northern Florida and the Panhandle.

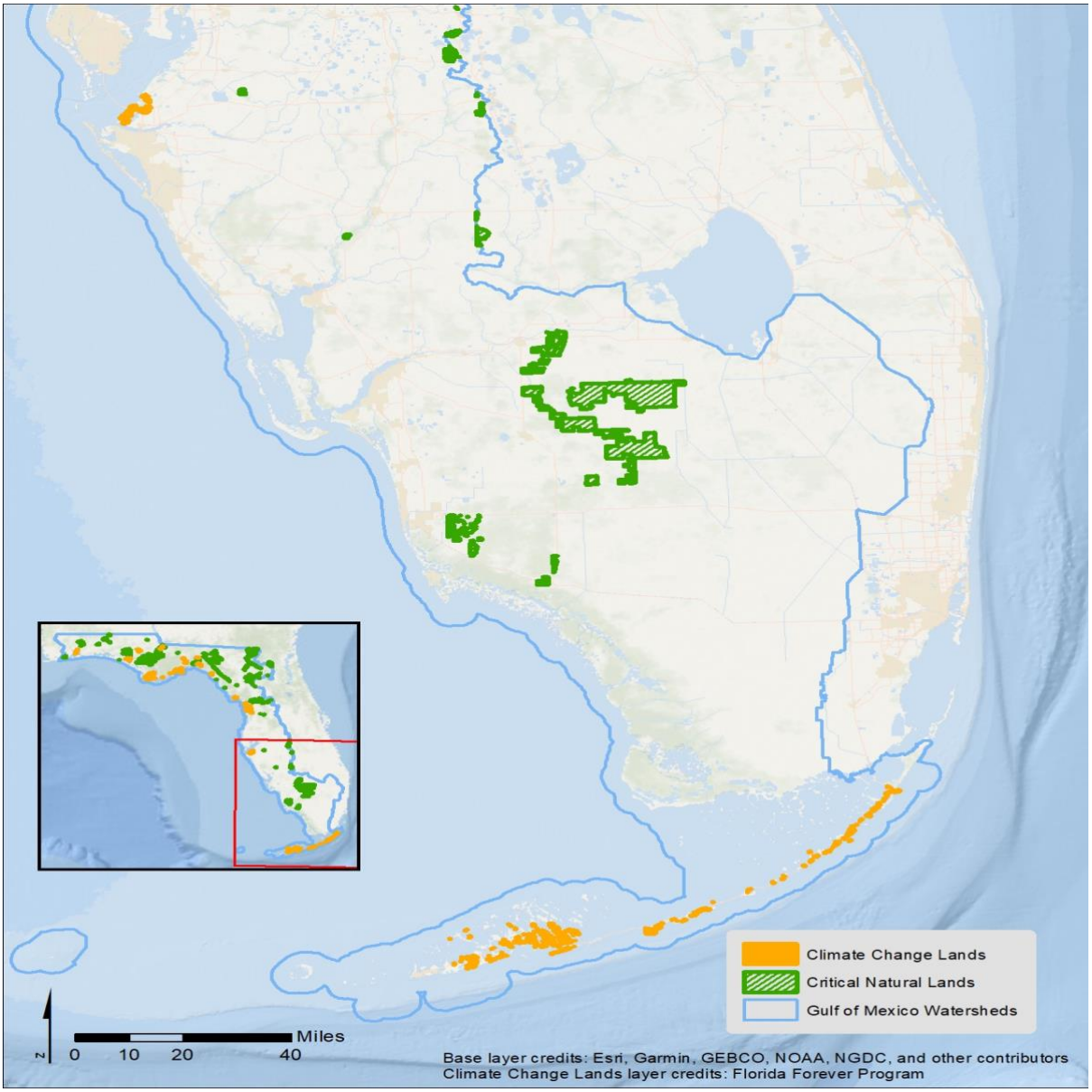

Figure 3: Map illustrating a closer view of the southern extent of the Florida Strategic Gulf Coast Land Acquisition Program and potential land acquisitions for southern Florida and the Keys.

RESTORE Council FPL 3 Proposal Document

General Information

Proposal Sponsor:
Florida Department of Environmental Protection

Title:
Florida Strategic Gulf Coast Land Acquisition Program

Project Abstract:
Florida, through the Department of Environmental Protection (FDEP), is requesting $20 million of Council-Selected Restoration Component funding for the proposed Florida Strategic Gulf Coast Land Acquisition Program. This program would include a suite of intrinsically-linked conservation activities, which together would increase conserved and protected State owned or managed lands by 10,000 to 20,000 acres. Program activities include implementation of land acquisitions, partnering with the existing Florida Forever Program (FF), Florida's premier conservation and recreation lands acquisition program. The proposed program would utilize the FF priority list to identify parcels for acquisition; parcels on the FF priority list, updated annually, are ranked using a thorough scientific review and a comprehensive natural resource analysis. FDEP would target lands draining into the Gulf of Mexico that are in the FF Critical Natural Lands and Climate Change Lands categories or other FF parcels with similar attributes. Land acquisitions could include both fee simple acquisition and conservation easements from willing sellers. Program activities would result in significant environmental benefits to Florida's natural resources and ecosystems by protecting critical habitats, preserving native biodiversity and ecosystem function, and mitigating sea level rise, storm surge, flooding, and other current and future risks to coastal communities. Program duration is expected to be 10 years.

FPL Category: Cat1: Planning/ Cat2: Implementation

Activity Type: Program

Program: Florida Strategic Gulf Coast Land Acquisition Program

Co-sponsoring Agency(ies): N/A

Is this a construction project?:
No

RESTORE Act Priority Criteria:
(II) Large-scale projects and programs that are projected to substantially contribute to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast ecosystem.
(III) Projects contained in existing Gulf Coast State comprehensive plans for the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.

Priority Criteria Justification:
The proposed Florida Strategic Gulf Coast Land Acquisition Program includes acquiring lands for conservation. Acquisitions would be strategically linked conservation activities that in combination result in a greater impact, increasing protected areas, strengthening natural resources, and

improving resiliency. This program meets both the large-scale and existing Gulf Coast State comprehensive plans priority criteria.

As a program, it is designed to result in large-scale environmental benefits including protecting a range of natural resources and habitats such as beaches and coastal wetlands. This program would be large in scale (i.e., numerous acquisitions; 10,000 to 20,000 acres acquired). The program is also readily scalable to the funding allocated. The program is long in duration, likely to last 10 years and lands acquired would be protected in perpetuity. The program would target lands in the FF Critical Natural Lands and Climate Change Lands categories, or other FF parcels with similar attributes, including functional landscape-scale natural and hydrological systems, significant imperiled natural communities, wildlife corridors, and lands that improve resiliency, promote carbon sequestration, or mitigate effects of sea level rise. Environmental benefits include strengthening natural resources, sustaining healthy habitats for threatened and endangered species, providing opportunities for species and habitat migrations in changing environmental conditions, protecting natural areas for recreation, and preserving cultural heritage.

The lands that would be acquired include parcels evaluated and prioritized as part of the existing FF (FF 2019a). The lands proposed for acquisition undergo a thorough scientific review and comprehensive natural resource analysis and scoring process using FL Natural Areas Inventory (FNAI) database information, a series of geographic data layers, and several project ranking criteria (e.g., storm surge, restoration priority, etc.).

Project Duration (in years): 10

Goals

Primary Comprehensive Plan Goal:
Restore and Conserve Habitat

Primary Comprehensive Plan Objective:
Restore , Enhance, and Protect Habitats

Secondary Comprehensive Plan Objectives:
N/A

Secondary Comprehensive Plan Goals:
N/A

PF Restoration Technique(s):
Protect and conserve coastal, estuarine, and riparian habitats: Land acquisition

Location

Location:
Florida watersheds that drain to the Gulf of Mexico including Perdido, Pensacola, Choctawhatchee – St. Andrew, Apalachicola – Chipola, Ochlocknee – St. Marks, Suwannee, Springs Coast, Withlacoochee, Tampa Bay, Tampa Bay Tributaries, Sarasota-Peace-Myakka, Charlotte Harbor, Caloosahatchee, Everglades West Coast, Everglades, and Florida Keys.

HUC8 Watershed(s):
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Perdido Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Escambia(Lower Conecuh)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Perdido)
South Atlantic-Gulf Region(St. Johns) - St. Johns(Lower St. Johns)
South Atlantic-Gulf Region(Southern Florida) - Kissimmee(Kissimmee)
South Atlantic-Gulf Region(Southern Florida) - Kissimmee(Western Okeechobee Inflow)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Lake Okeechobee)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Everglades)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Florida Bay-Florida Keys)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Big Cypress Swamp)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Caloosahatchee)
South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Florida Southeast Coast)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Peace)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Myakka)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Charlotte Harbor)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Sarasota Bay)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Manatee)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Little Manatee)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Alafia)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Hillsborough)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Tampa Bay)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Crystal-Pithlachascotee)
South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Withlacoochee)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Waccasassa)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Econfina-Steinhatchee)
South Atlantic-Gulf Region(Suwannee) - Suwannee(Santa Fe)
South Atlantic-Gulf Region(Ochlockonee) - Ochlockonee(Lower Ochlockonee)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Apalachicola)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(New)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Apalachicola Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(St. Andrew-St. Joseph Bays)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Choctawhatchee Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Pensacola Bay)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Chipola)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Yellow)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Blackwater)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Choctawhatchee(Pea)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Choctawhatchee(Lower Choctawhatchee)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Escambia(Escambia)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Aucilla)
South Atlantic-Gulf Region(Ochlockonee) - Ochlockonee(Apalachee Bay-St. Marks)

State(s):
Florida

County/Parish(es):

FL - Broward
FL - Escambia
FL - Pasco
FL - Calhoun
FL - Pinellas
FL - Charlotte
FL - Citrus
FL - Clay
FL - Collier
FL - Columbia
FL - Dixie
FL - Franklin
FL - Gadsden
FL - Gilchrist
FL - Polk
FL - Putnam
FL - Sarasota
FL - Sumter
FL - Suwannee
FL - Taylor
FL - Union
FL - Wakulla
FL - Alachua
FL - Baker
FL - Bay
FL - Bradford
FL - Glades
FL - Gulf
FL - Hamilton
FL - Santa Rosa
FL - Walton
FL - Washington
FL - DeSoto
FL - Hardee
FL - Hernando
FL - Highlands
FL - Hillsborough
FL - Holmes
FL - Jackson
FL - Jefferson
FL - Lafayette
FL - Lake
FL - Lee
FL - Leon
FL - Levy
FL - Liberty
FL - Madison
FL - Manatee
FL - Marion
FL - Miami-Dade
FL - Monroe
FL - Okaloosa
FL - Palm Beach
FL - Hendry

Congressional District(s):

FL - 3
FL - 21
FL - 14
FL - 15
FL - 26
FL - 11
FL - 13
FL - 20
FL - 16
FL - 5
FL - 12
FL - 1
FL - 19
FL - 25
FL - 2
FL - 9
FL - 17

Narratives

Introduction and Overview:

The proposed Florida Strategic Gulf Coast Land Acquisition Program includes a suite of land acquisitions, increasing State ownership or management by 10,000 to 20,000 acres. The primary goal is to restore and conserve habitat through acquisitions from willing sellers (fee simple acquisitions or conservation easements). The proposed program would include strategically linked conservation activities that in combination result in a greater impact, increasing protected areas, strengthening natural resources, and improving resiliency. All program activities would occur in watersheds that drain to the Gulf of Mexico and would address the same environmental stressors of habitat loss and fragmentation.

Funds for the proposed program would be used for implementation only. Florida is not requesting RESTORE funds for planning or land management; however, alternate funds would be utilized for management activities occurring on lands conserved under this proposed program. Florida would leverage the existing FF evaluation process to identify lands for acquisition, and parcels would be selected from the FF priority list. The FF Act (Section 259.105, F.S.) describes the program, which is Florida's premier conservation and recreation lands acquisition program, serving as a blueprint for conserving natural resources and cultural heritage (FF 2019a). The FF priority list, updated annually, is ranked by the Acquisition and Restoration Council (ARC), which includes scientific representatives. ARC is assisted by the technical and scientific resources of the FNAI (FF 2019a). Under the proposed program, priority parcels in the FF Critical Natural Lands and Climate Change Lands categories or other FF parcels with similar attributes, in watersheds that are hydrologically connected to the Gulf of Mexico, would be selected. Priority would be given to parcels that leverage other funding sources or that can be acquired for less than appraised values.

Goal/Objective: This program meets the Restore and Conserve Habitat Comprehensive Plan Goal. Through acquisition of parcels in FF Critical Natural Lands and Climate Change Lands categories, or other FF parcels with similar attributes, this program would protect ecologically important natural areas, helping to conserve the health, diversity, and resilience of Florida habitats and communities. This program meets the objective of Restore, Enhance, and Protect Habitats by protecting coastal and estuarine wildlife habitats such as beaches, dunes, coastal wetlands, and coastal forests.

Commitments: This program allows for a *regional ecosystem-based approach* to habitat protection as parcels are ranked through FF without regard to geographic location. FF utilizes *a science-based evaluation process for decision making* in regards to prioritizing lands for acquisition. Parcels are ranked with the goal of conserving environmentally unique and irreplaceable or rare ecosystems, native flora and fauna, providing natural areas for recreation, and preserving archaeological or historic sites (Section 259.105, F.S.). Parcels undergo a thorough scientific review and comprehensive analysis and scoring process using FNAI's data, a series of geographic data layers (e.g., critical habitats, rare species, biodiversity measures), and several project ranking criteria (e.g., storm surge, restoration priority; FNAI 2018a).

This program would *leverage resources by partnering* with and building on the work of FF, including $142.5 million committed over the past 5 years. This collaboration maximizes the impact of habitat protections in Florida and streamlines the process of identifying lands for acquisition by utilizing the FF priority list. FF also has a strong history of partnering with local entities; the successful acquisition of many State lands is the direct result of these partnerships as demonstrated by the numerous partners involved in the projects on the FF priority list (FF 2019a).

Florida is committed to *public engagement, inclusion, and transparency.* The public can participate in the project nomination process and the ARC holds meetings that are publicly noticed. Non-profit

organizations often help acquire the conserved lands. In addition to the *science-based approach* to evaluating lands for acquisition, habitat protection is a proven approach to strengthening natural resources and sustaining diverse populations of wildlife, in accordance with Florida's commitment to delivering results. Florida's success with land conservation is proven by the over 3.9 million acres that are currently managed under Land Use or Land Management plans that are updated and reviewed at least every 10 years (FF 2019a). This program also includes efforts to *measure outcomes* to ensure funds have been invested in a meaningful way. The acreage of lands acquired and managed will be tracked to ensure the habitats have been conserved.

Benefits: The proposed program would result in significant environmental benefits to Florida's ecosystems and coastal communities by protecting critical habitats, preserving native biodiversity and ecosystem function, and mitigating sea level rise, storm surge, flooding, and other current and future risks. Social and economic benefits of the program include increasing opportunities for recreational use of public lands and preserving cultural heritage. Through land acquisition, the program would conserve unique and valuable habitats, including wildlife corridors, which help sustain populations that depend on healthy, connected habitats. Conservation of these lands reduces habitat loss and degradation, allowing natural communities to adapt to increasing challenges associated with global climate change (e.g., allowing for migration in response to changing environmental conditions). Well-planned land acquisition programs in Florida have demonstrated that habitat connectivity provides an opportunity to protect and conserve biological diversity (DeFreese 1995). Land conservation also enhances water resource protection and management, reducing impervious surfaces, allowing water to filter naturally, and reducing flooding, thereby improving water quantity and quality (Shepard et al. 2016).

Lands acquired under this proposed program include areas prioritized through the existing FF science-based process and include lands critical for sustaining healthy ecosystems and mitigating global climate change. Lands targeted in the FF Critical Natural Lands category include functional landscape-scale natural systems, large hydrological systems, imperiled natural communities, and corridors linking large landscapes, as identified and developed using the best available scientific analysis by the FNAI. Protecting lands in this category would result in significant environmental benefits, protecting habitat for threatened and endangered species, wildlife corridors, and expanding protected natural areas for conservation and recreation. Conserving parcels in the Climate Change Lands category includes acquiring lands that would help strengthen Florida's land, water, and coastal resources, promote carbon sequestration, and mitigate effects of sea level rise.

Environmental Stressors: Comprehensive resource management and planning efforts, such as FF, Florida Gulf Environmental Benefit Fund Restoration Strategy, Basin Management Action Plans, and other efforts have identified stressors and threats to Florida's natural resources including habitat loss, fragmentation, hydrologic alterations, climate change, and sea level rise. This proposed program would directly address habitat fragmentation and climate change stressors by acquiring and protecting critical natural areas, large functional landscapes, large hydrologic systems, imperiled natural communities, wildlife corridors, and lands that would strengthen Florida's land, water, and coastal resource resiliency, promote carbon sequestration, and mitigate sea level rise effects.

Costs: $20,000,000. Funds requested for this proposed program will leverage State funds of $142.5 million over the past 5 years, and possibly additional funds committed for fiscal year 2020-21.

Timeline: The FF priority list is developed annually (FF 2019b) and implementation of land acquisitions could begin as funding is received. The duration of program implementation is expected to be 10 years; however, lands would be maintained in perpetuity.

Partners: This program partners with FF, Florida's premier conservation lands acquisition program. Since 1963, Florida has invested approximately $8 billion to conserve approximately 3.9 million acres of land for environmental, recreational, and preservation purposes through FF and predecessor programs (FF 2019a). This program proposes to leverage the FF science-based approach to conservation and streamline the land acquisition process. FDEP would also work with nonprofit organizations for help during the acquisition process.

FPL 3 Planning Framework: This proposed program is consistent with the Protect and Conserve Coastal, Estuarine, and Riparian Habitats priority approach. The primary goal and objective is to acquire and conserve lands that drain to the Gulf of Mexico, including coastal, estuarine, and riparian habitats, critical natural areas such as large functional landscapes and hydrological systems as well as wildlife corridors, and lands that would help strengthen Florida's land, water, and coastal resources, promote carbon sequestration, and mitigate effects of sea level rise.

Proposed Methods :

The proposed Florida Strategic Gulf Coast Land Acquisition Program would consist of a suite of land acquisitions which would result in an increase in State ownership or management by 10,000 to 20,000 acres. No construction activities are included in the proposed program; funds are being requested for acquisition only. The proposed method for all program activities is land acquisition for the conservation and protection of critical natural lands including landscape-scale natural systems, hydrological systems, wildlife corridors, and a range of potential habitats such as coastal beach and dunes, marshes, forested habitats, and wetlands; as well as lands that would help strengthen Florida's land, water, and coastal resources, promote carbon sequestration, protect habitat and coastal lands, and mitigate effects of sea level rise. Land acquisitions would be from willing sellers and could include both fee simple acquisition and conservation easements.

While Florida is not seeking any RESTORE funds for land management activities, the lands acquired and protected under this proposed program would be under improved management practices or current conservation management practices would be maintained. Management activities would be funded and conducted by the State for fee simple acquisitions and would be included in the requirements for landowners in conservation easement agreements. Land management activities could include habitat restoration and improvement, hydrological preservation and restoration, invasive and non-native species control, and prescribed burns, depending on natural communities and habitats present on the conserved lands. Finally, as part of FF, the ARC and FNAI conduct periodic evaluations of acquired lands and Land Management Plans to ensure management activities are being conducted as outlined in the plans.

To select land acquisitions under this proposed program, Florida would utilize the land acquisition priority list produced through FF. The list is updated and adopted annually by the ARC, a 10-member group including scientific representatives from four State agencies, four appointees of the Governor, one appointee by the Fish and Wildlife Conservation Commission, and one appointee by the Commissioner of Agriculture and Consumer Services. Members of the ARC have backgrounds in scientific disciplines of land, water, environmental sciences, wildlife management, forestry, and outdoor recreation (FF 2019a). The ARC utilizes a science-based evaluation process for decision-making when developing the priority list for acquisition. To select lands for acquisition, Florida would identify the priority parcels in the Critical Natural Lands and Climate Change Lands categories, or other parcels with similar attributes, that have not already been acquired and determine which are in watersheds that drain into the Gulf of Mexico. Priority would be given to those parcels that leverage other funding sources or those that can be acquired for less than the appraised value.

Once selected, FDEP would follow the land acquisition procedures outlined in the Florida Statutes, Chapter 259, Land Acquisitions for Conservation or Recreation. FDEP's Division of State Lands and its acquisition partners would contract an appraisal of land from an independent private sector appraiser to estimate market value, negotiate with owners to buy the land, conduct any required due diligence such as site environmental assessments, and complete the acquisition on behalf of the State. Lands acquired would be titled to the State and protected in perpetuity.

As noted above, FDEP would utilize FF to identify priority parcels for land acquisitions. FF utilizes a science-based process including a thorough scientific review and a comprehensive natural resource analysis and scoring process to rank parcels. The process starts when parcels are recommended for acquisition by members of the public or private organizations. The ARC then reviews each parcel and ranks them within the following categories: Critical Natural Lands, Partnerships/Regional Incentives, Less-than-Fee, Climate Change Lands, Substantially Complete, and Critical Historical Resources. Activities under this proposed program would be limited to land acquisitions in the Critical Natural Lands and Climate Change Lands categories or other FF parcels with similar attributes.

In general, the ARC ranks parcels with the goal of conserving environmentally unique and irreplaceable lands or rare ecosystems, native flora and fauna, important breeding locations, natural areas for recreation, and archaeological or historic sites (Section 259.105, F.S.). FF and the ARC rely on the FF Conservation Needs Assessment (FFCNA), which is a series of geographic data layers that correspond to specific measures in the FF Act (FNAI 2018a, b). Each FFCNA data layer is designed to address a specific measure in the FF Act. FFCNA layers provide information on strategic habitat conservation areas, rare species habitat conservation priorities, under-represented natural communities, fragile coastal resources (e.g., uplands, lakes), ecological greenways, landscape-sized protection areas, significant surface waters, natural floodplains, functional wetlands, fragile coastal resources (e.g., wetlands), aquifer recharge areas, recreational trails, archaeological or historical sites, sustainable forestry, and forest lands for recharge.

To allow for the FFCNA information, which can be redundant across layers, to be evaluated comprehensively, FFCNA layers are combined into functional groupings for analysis purposes. These groupings are decision support data layers which inform two of the primary evaluation criteria for FF projects: Single Resource Evaluation (SRE) and the FF Tool for Efficient Resource Acquisition and Conservation (F-TRAC; FNAI 2018a).

SREs provide the ARC with concise scores for each acquisition project based on functional resource groupings, such as species, natural communities, surface waters, or other groupings. Projects are scored based on their contribution to that single resource only, without regard to other resource types. The primary purpose of the SRE is to provide a straightforward method for comparing current and proposed land acquisitions based on specific resource goals. FF typically uses a weighted score approach for most SRE project scores where the calculated acres of each project in the different priority classes of each resource type are multiplied by a weight factor corresponding to the priority class. The weighted acres are summed and then divided by the acres of the project to eliminate size bias (FNAI 2018a). Alternative approaches are utilized for landscapes, trail networks, and cultural resources as described in more detail in FNAI (2018a).

The F-TRAC tool is a systematic reserve design tool that assists decision-makers with evaluating acquisitions for a fixed cost (Oetting et al. 2006). F-TRAC provides a single, concise evaluation of current and potential land acquisition projects across multiple resource types and is tied to the actual amount of acreage projected to be acquired (FNAI 2018a). F-TRAC is based on a computer modeling approach to conservation reserve design called Iterative Site Selection (FNAI 2018a). The F-

TRAC analysis considers seven natural resource categories: species,communities, landscape connectivity, surface waters, wetlands, sustainable forestry, and aquifer recharge; and identifies a suite of sites that efficiently protects those resources (FNAI 2018a). The goal is to identify the most efficient grouping (i.e., the optimal solution of the greatest resource protection in a given amount of land).

In addition to the FNAI information, SREs, and F-TRAC layers, the ARC evaluates several additional criteria for each project including sea level rise, population within 100 miles of the project, percentage in urban areas, storm surge, flood protection, restoration priority, and soil carbon storage (FNAI 2018a).

Environmental Benefits:

Florida has more than 80 distinct ecosystems, with over 25,000 square miles of forested habitats, 1,350 miles of coastal beaches, dunes and estuarine habitats, and 10 million acres of wetlands (Beaver 2006, Dahl 2005, FNAI 2010). Florida's natural resources support the State's communities and economy.

As a land acquisition program, the public lands acquired for conservation would result in significant environmental benefits through the protection of Florida's critical habitats, native biodiversity, rare and imperiled species, ecosystem function, landscape connectivity, and reduced pressure from development in some cases (Damschen et al. 2019, DeFreese 1995, Tewksbury et al. 2002). Conserving coastal ecosystems can enhance community and ecosystem resiliency to both direct and indirect impacts of climate change (USGCRP 2018). These lands would mitigate a number of impacts resulting from climate change by protecting habitats that reduce impacts from sea level rise, storm surge, and flooding, among others, and promote carbon sequestration. Land conservation also enhances water resource protection and management, reducing impervious surfaces, allowing water to filter naturally, and reducing flooding, thereby improving water quantity and quality (Shepard et al. 2016).

Conserve biodiversity and rare species: There are approximately 269 species that are endemic to Florida (Stein 2002). Over a large geographic area, diverse climatic conditions support a large number of rare and imperiled species (Stys et al. 2017). Habitat loss due to urbanization is a primary cause of species endangerment in the U.S. (Czech 2004). Press et al. (1996) suggested that land acquisition is the most attractive approach for conserving rare species because the scale of land acquisition is often appropriate for the range of rare species. Despite protections provided by the Endangered Species Act, Hull (2015) suggests that "State and local governments play an increasingly vital role in species protection efforts as climate-induced changes alter natural systems at the local level." FDEP is targeting the FF Critical Natural Lands and Climate Change Lands categories, and other FF parcels with similar attributes, to help conserve Florida's biodiversity, including rare and imperiled species, by protecting large tracts of habitats needed to support these species.

Improve habitat connectivity: Through land acquisition, the program would conserve unique and valuable habitats, including wildlife corridors that help sustain populations that depend on a healthy, connected landscape. Land conservation reduces habitat loss and degradation and allows natural communities to adapt to increasing challenges associated with global climate change by providing more area over which species can migrate in response to changing environmental conditions. Conservation of habitat buffers and other natural corridors helps to maintain population connectivity, promote genetic diversity, and mitigate the effects of habitat fragmentation, all of which have environmental benefits (Damschen et al. 2019, Tewksbury et al. 2002).

Mitigate climate change: Coastal land in Florida is increasingly susceptible to sea level rise and storm surge due to low elevations across the State. The Florida Keys and the Everglades are particularly vulnerable as elevations are on average less than one meter above present sea level (Stys et al. 2017). Conservation and restoration of coastal habitats that provide a natural buffer to storm surge (e.g., marshes, mangroves, submerged aquatic vegetation [SAV], oyster reef, coral reef, barrier islands) increase resiliency against the impacts of sea level rise, flooding, and increasing storm surge (Beck et al. 2018, Boutwell and Westra 2016, Ferrario et al. 2014, Guannel et al. 2016, Liu et al. 2013, USGCRP 2018). Florida ranks in the top three States nationally where existing coastal habitat is expected to defend the greatest number of people and property from projected sea level rise (Arkema et al. 2013). It is estimated that preserving and restoring coastal habitats in the U.S. could reduce the impacts of sea level rise on people and their property by half (Arkema et al. 2013). Furthermore, conservation of riparian buffers and other natural flowways can help mitigate floods and protect coastal communities most susceptible to flood risk (Daily et al. 1997).

Promote carbon sequestration: Vegetated coastal habitats (e.g., marsh, mangrove, seagrass) contribute one- to two-orders of magnitude greater carbon sequestration per unit area compared to terrestrial forests (Mcleod et al. 2011). Thus, conserving and protecting these vegetated coastal ecosystems will contribute positively to offsetting increased atmospheric carbon dioxide and thus help to reduce the effects of climate change.

Metrics:

Metric Title: HC001 : Conservation easements - Acres protected under easement : Habitat Conservation
Target: TBD
Narrative: Florida proposes this as a program-wide metric to evaluate the success of the program. Program success would be determined by the total number of acres protected under a conservation easement. The purpose of the program metric would be to verify that the conservation easement has been acquired and recorded in property records. Florida's target would be approximately 10,000 to 20,000 acres protected under either a conservation easement or acquired in fee. Each project or activity under the program would have specific metric(s) aimed at evaluating the success of the individual project or activity.

Metric Title: HC003 : Land acquisition - Acres acquired in fee : Habitat Conservation
Target: TBD
Narrative: Florida proposes this as a program-wide metric to evaluate the success of the program. Program success would be determined by the total number of acres protected through fee simple acquisition. The purpose of the program metric would be to verify that the acquisition has been completed, and the performance measure would be an executed and recorded deed. Florida's target would be approximately 10,000 to 20,000 acres protected under either a conservation easement or acquired in fee. Each project or activity under the program would have specific metric(s) aimed at evaluating the success of the individual project or activity.

Metric Title: HM006 : Habitat management and stewardship - Acres under improved management : Habitat Management
Target: TBD
Narrative: Florida proposes to have project or activity specific metrics that may include: number of acres acquired in fee, number of acres protected under an easement, as well as, number of acres under improved management. The project or activity metrics may be adjusted as needed once projects or activities are funded. Metrics may be added, removed, or replaced as appropriate at the project work plan application stage. The purpose of the acres under improved management metric

is to verify that the acreage acquired or placed under conservation easement is being managed for conservation purposes. The performance measure would be a management plan for parcels acquired under fee simple or a recorded conservation easement agreement with appropriate conservation language. The outcome would be an increase in acres under improved management practices.

Risk and Uncertainties:

FDEP has a long history of successfully executing land acquisition projects (FF 2019a), thus there are few risks and uncertainties associated with the implementation of this proposed program. However, there are risks and uncertainties inherent to the acquisition process and sustaining long-term benefits associated with each parcel acquired. The proposed program would promote long-term environmental benefits and coastal resiliency with each land acquisition through site-specific considerations of local and regional risks and uncertainties (e.g., selecting parcels that improve coastal resiliency, reduce erosion, support native flora and fauna), and long-term land use planning (e.g., selecting parcels ecologically connected to other protected areas such as corridors and areas that strengthen Florida's natural resources).

Near-term risks and uncertainties associated with land acquisition include the continued availability of properties, the successful negotiation of sales with landowners (e.g., title issues), and the cost of the land to be acquired (e.g., appraisals, seller price expectations). The properties proposed for purchase through FF are nominated by private citizens or organizations and have willing sellers. As such, using FF priority list parcels minimizes the risk associated with identifying parcels available for acquisition. Furthermore, some of these risks can be mitigated through thoughtful discussion with landowners, quality appraisals, and due diligence.

Long-term risks and uncertainties regarding sustaining benefits associated with acquired lands may result directly or indirectly from climate change, including sea level rise, extreme weather, drought, or wildfires; other unforeseen changes in environmental conditions (e.g., erosion, abundance of invasive species); and land use (e.g., land management practices). The risks that these conditions pose on the long-term success of the program are based on projections, which have their own set of uncertainties (for example, a range of projected sea level rise estimates). The sections below summarize some of the risks and uncertainties associated with climate change as well as the risks and uncertainties associated with land conservation and the long-term success of the program.

Conserve biodiversity and rare species: Climate change is expected to induce shifts in the geographic distribution of plants and animals worldwide; however, the extent to which each individual species' range of distribution will change is uncertain (Heller and Zavaleta 2009). Given the significant number of rare and endemic species in Florida, there is a heightened need to consider the long-term protection of threatened and endangered species through conservation of critical areas that incorporate projections for climate change impacts on rare and imperiled species (Heller and Zavaleta 2009). Both the Critical Natural Lands and Climate Change Lands categories are designed to protect large, intact, natural lands with significant imperiled communities, corridors, and buffers (FF 2019a). Through monitoring and long-term adaptive management that include projections for climate change-induced range shifts, this proposed program may mitigate some of the risk of climate change induced species and biodiversity endangerment.

Habitat connectivity: In general, land conservation is a low risk method to offset impacts of future development; however, there is uncertainty with determining the appropriate spatial extent. The FF Critical Natural Lands category promotes the conservation of large, intact hydrological systems and increased habitat connectivity through protection of corridors. Protecting habitat and wildlife corridors helps to maintain population connectivity, promote genetic diversity, and mitigate the effects of habitat fragmentation (Damschen et al. 2019, Tewksbury et al. 2002). However, the degree

to which individual conservation lands and corridors achieve connectivity is uncertain. The effectiveness of a corridor depends on a variety of factors (e.g., size and shape of the patches connected by the corridor, distance between patches) and may be difficult to quantify (Tewksbury et al. 2002). Wildlife corridors have been effective in promoting connectivity for a variety of animal populations in Florida (Braden et al. 2008, Dixon et al. 2006). Long-term monitoring of corridor effectiveness will inform future corridor design and help ensure habitat connectivity benefits are achieved.

Climate change: Coastal land in Florida is increasingly susceptible to climate change impacts due to low elevations. A range of climate change models exist, which vary in their projection of future conditions; thus, there is uncertainty associated with using models to forecast future impacts and to plan appropriate mitigation measures (FOCC 2010, Strauss et al. 2014, Sweet et al. 2017). Despite these uncertainties, the risk associated with sea level rise is clear; an evaluation by Emrich et al. (2014) found every coastal county in Florida at risk for storm surge and 12 counties had residents at extreme risk to the lowest prediction of sea level rise investigated. As cited in Stys et al. (2017), 25 percent of 1,200 species tracked by the FNAI are expected to lose more than half of their current habitat area due to sea level rise. Increasingly, an understanding of the adverse effects of hardened shorelines and the value of natural shorelines for shoreline protection has led to a reprioritization of coastal management policy (Bilkovic and Mitchell 2017, Reguero et al. 2018). Conservation of coastal habitats that provide a natural buffer to sea level rise and storm surge (e.g., marshes, mangroves, SAV, oyster reef, coral reef, barrier islands) will increase Florida's resiliency to climate change (Beck et al. 2018, Boutwell and Westra 2016, Ferrario et al. 2014, Guannel et al. 2016, Liu et al. 2013, USGCRP 2018). Arkema et al. (2013) estimate that preserving and restoring coastal habitats in the U.S. could reduce the impacts of sea level rise on people and their property by half. Some risk and uncertainty remains for the long-term conservation of the coastal habitats under unknown future climate scenarios; however, conservation of parcels in the FF Climate Change Lands category will promote coastal resiliency against sea level rise and increasing storm surge.

In addition to sea level rise, a number of other environmental changes that introduce additional risks and uncertainties for the long-term success of land acquisition projects are anticipated as a consequence of climate change. These changes include increased frequency and duration of extreme weather events (e.g., hurricanes, storm surge, floods, drought), wildfires, increased air and water temperatures, and increased abundance of invasive species. While some uncertainty exists regarding projected increases in storm frequency, warming ocean water fuels stronger storms and data suggests a trend of increasing wind speeds and rainfall rates associated with hurricanes over the last 20 years (EPA 2016). Menges and Hawkes (1998) studied fire and microhabitat of plants in Florida scrub ecosystems. While individual species demonstrate variable response to fire, the Florida scrub plant community is generally resilient to fire, which demonstrates that conserving lands dominated by scrub communities may increase resilience to the increased frequency and duration of wildfires associated with climate change. Increasing air and water temperatures may promote increased abundance of invasive species; native species may become more susceptible to foreign and domestic pathogens and parasites; thus, native species and natural communities may be subject to multiple stressors with uncertain consequences (Burgiel and Muir 2010, Stys et al. 2017). Increasing water temperatures may have a range of impacts on marine and aquatic species, including coral bleaching and increased susceptibility to disease (Harvell et al. 1999, Sullivan et al. 2018). The conservation and protection of large areas of natural communities may mitigate some of these impacts in the long-term. Additional monitoring and adaptive management may also help identify long-term mechanisms to protect Florida's native species and communities.

Carbon sequestration: In addition to conserving and protecting natural lands, to the extent possible, FDEP would conserve lands with a high carbon sequestration potential, resulting in positive benefits

towards mitigating climate change. Vegetated coastal habitats (e.g., marsh, mangrove, SAV) contribute one- to two-orders of magnitude greater carbon sequestration per unit area compared to terrestrial forests (Mcleod et al. 2011). Mcleod et al. (2011) outline some of the uncertainties associated with the mechanisms that control carbon sequestration; however, there is no doubt that conserving and protecting these vegetated coastal ecosystems will contribute positively to offsetting increased atmospheric carbon dioxide and climate change.

Through the prioritization of FF Critical Natural Lands and Climate Change Lands, the Florida Strategic Gulf Coast Land Acquisition Program would preserve habitats in Florida that promote connectivity, resiliency, and mitigate the effects of climate change. While some risks and uncertainties exist for the long-term success of individual land acquisition projects, these may be mitigated through monitoring and adaptive management.

Monitoring and Adaptive Management:

Program-wide monitoring for the metrics HC001: Conservation easements - Acres protected under easement and HC003: Land acquisition - Acres acquired in fee would occur for the duration of the program. The restoration objective of this proposed program is to acquire and protect critical natural areas and lands that, if protected, would help reduce the effects of climate change in Florida watersheds that drain to the Gulf of Mexico. Program success would be tracked as the total number of acres protected under easement or acquired in fee.

Florida will utilize a monitoring and adaptive management framework consistent with the Deepwater Horizon NRDA MAM Manual (DWH Trustees 2019) and the RESTORE Interim Observational Data Plan (ODP) Guidance (RESTORE 2018). As projects or activities are implemented, the program would be adaptively managed to ensure the greatest benefits are achieved. For example, as lessons are learned regarding the land acquisition process, these would be utilized to improve future acquisitions.

Project or activity monitoring including the metrics, duration, performance criteria, and adaptive management activities, would vary depending on the technique implemented in each project or activity.

Monitoring for the metrics HC001: Conservation easements - Acres protected under easement and HC003: Land acquisition - Acres acquired in fee would take place following acquisition. Acres acquired would be verified by survey or aerial imagery, consistent with methods in the NRDA MAM Manual (DWH Trustees 2019) and ODP Guidance (RESTORE 2018).

Monitoring for HM006: Improved management practices – Acres under improved management would be used to verify the number of acres and would include review of a management plan for parcels acquired under fee simple or a recorded conservation easement agreement with appropriate conservation language.

Data Management:

FDEP would develop an ODP and Data Management Plan detailing how data will be collected and managed at the time a project or activity is selected and provide a central location to access relevant data. Data would be collected on the acquisition process and each selected parcel (e.g., property information, location, acreage acquired). Other data may be collected such as, but not limited to, the habitats acquired, presence of rare species, or other FNAI information. FDEP would partner with FF and negotiations on conservation easements are confidential until approved by the Board of Trustees. Once closed, property information will be made available on the FDEP Oculus site.

Information on any FF activities are available at http://www.dep.state.fl.us/lands/FFplan_county.htm.

To the extent any environmental data are collected, field personnel would utilize standardized datasheets. Relevant data that are handwritten will be transcribed into standard digital format or scanned to PDF. Transcribed data will be verified and validated prior to being released. After any identified errors are addressed, data would be considered QA/QC'd. Spatial data collected will have properly documented FGDC/ISO metadata, a data dictionary that defines codes and fields, or a Readme file describing how data was collected, QA/QC procedures, relationships to other data, origin, usage, or format. FDEP would utilize the RESTORE MEtadata Records Library and Information Network for metadata records creation.

Collaboration:

The proposed Florida Strategic Gulf Coast Land Acquisition Program was developed based on the environmental benefits of conserving natural habitats, and on public input, which highlights the value the public places on protection of natural lands in Florida. FDEP would partner with FF, utilizing the FF priority list to identify lands for acquisition. FF also has a long history of cooperative partnerships with local and national land trusts, water management districts, counties, cities and other local governments, as well as the Federal government; and partnerships with local governments have increased in recent years (FF 2019a). Nonprofit organizations may also play a role in the acquisition process. They can advocate for parcels to be placed onto the FF priority list and can act as intermediaries with owners, including assisting them with tax and estate planning issues. FF has previously collaborated with The Nature Conservancy, the Trust for Public Land, and The Conservation Fund.

Public Engagement, Outreach, and Education:

The Florida public places enormous value on conserving natural areas for the benefit of Florida's ecosystems, public recreation, and cultural preservation as demonstrated through the passing of several land acquisition acts and from the overall success of land acquisition programs since the 1960s. FF includes opportunities for public engagement, outreach, and education. The public has also proposed numerous land acquisition projects through Florida's DWH project portals. As such, FDEP developed this proposed program based on public input. Further, this proposed program would partner with FF to streamline the process of identifying land for acquisition by utilizing the FF priority land acquisition list.

FF promotes land acquisition on behalf of the public, in part to improve public land management and increase public access to natural areas. Thus, public engagement is a critical component of the selection process. Acquisition projects may be nominated by Federal, State and local government agencies, conservation organizations, or private citizens. ARC meetings are publicly noticed, and the public is encouraged to provide comment on the projects. Nonprofit organizations may play a role in helping acquire conservation lands. They advocate for parcels to be placed onto the FF priority list and can act as intermediaries with owners, including assisting them with tax and estate planning issues. FF has previously collaborated with The Nature Conservancy, the Trust for Public Land, and The Conservation Fund.

In addition to providing opportunities for the public to participate in the site selection and land acquisition process, FF provides education and outreach to ensure the public has knowledge of the accessibility of public lands. A publicly available database and mobile application are available to provide the public with information on the location, types of recreational opportunities, access points, facilities, amenities, and restrictions for public lands in Florida (Section 259.105, F.S.).

Leveraging:

Funds: $142,000,000.00
Type: Bldg on Others
Status: Committed
Source Type: State
Description: This proposed program will leverage State funds already received and possibly additional funds committed for fiscal year 2020-21, along with resources from FF. The proposed program will leverage the FF priority list of land acquisitions which will allow FDEP to maximize the impact of habitat protection in Florida, eliminates duplication of effort, streamlines the process of identifying and acquiring lands, and builds on Florida's capacity for long-term integrated resource management. FDEP's Division of State Lands staff will coordinate with staff helping to administer the proposed program when identifying lands for potential acquisition, selecting parcels for acquisition, determining costs, and ensuring there are willing sellers.

Environmental Compliance:
Florida is working with RESTORE Council staff and the U.S. Department of Agriculture to secure a categorical exclusion for National Environmental Policy Act requirements for land acquisition projects and activities implemented under this proposed program. All projects and activities funded under this proposed program would include land acquisition and protection only, and would not include any construction activities. As such, there would be no adverse environmental impacts, and only environmental benefits.

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Budget

Project Budget Narrative:
The budget for this proposed program consists of $20,000,000 in Category 1 and Category 2 funds, of which the vast majority would be spent on implementation of land acquisition projects or activities. The Category 1 funds (about $1,400,000) would be spent on Program management, monitoring and adaptive management, and data management activities. More specific budgets will be developed at the project or activity level when projects or activities are selected for funding. Category 2 funds are estimated at $18,600,000.

Total FPL 3 Project/Program Budget Request:
$ 20,000,000.00

Estimated Percent Monitoring and Adaptive Management: 2 %
Estimated Percent Planning: 0 %
Estimated Percent Implementation: 90 %
Estimated Percent Project Management: 7 %
Estimated Percent Data Management: 1 %
Estimated Percent Contingency: 0 %

Is the Project Scalable?:
Yes

If yes, provide a short description regarding scalability.:
This program could be scaled to allow for more or fewer acquisitions over a longer or shorter duration of time, which would affect the overall habitat conservation benefits that could be achieved.

Environmental Compliance[1]

Environmental Requirement	Has the Requirement Been Addressed?	Compliance Notes (e.g.,title and date of document, permit number, weblink etc.)
National Environmental Policy Act	Yes	The Council's NEPA Procedures applies only to Category 1 planning and program administration funds. FL will be seeking a categorical exclusion for NEPA for land acquisition.
Endangered Species Act	N/A	Note not provided.
National Historic Preservation Act	N/A	Note not provided.
Magnuson-Stevens Act	N/A	Note not provided.
Fish and Wildlife Conservation Act	N/A	Note not provided.
Coastal Zone Management Act	N/A	Note not provided.
Coastal Barrier Resources Act	N/A	Note not provided.
Farmland Protection Policy Act	N/A	Note not provided.
Clean Water Act (Section 404)	N/A	Note not provided.
River and Harbors Act (Section 10)	N/A	Note not provided.
Marine Protection, Research and Sanctuaries Act	N/A	Note not provided.
Marine Mammal Protection Act	N/A	Note not provided.
National Marine Sanctuaries Act	N/A	Note not provided.
Migratory Bird Treaty Act	N/A	Note not provided.
Bald and Golden Eagle Protection Act	N/A	Note not provided.
Clean Air Act	N/A	Note not provided.
Other Applicable Environmental Compliance Laws or Regulations	N/A	Note not provided.

[1] Environmental Compliance document uploads available by request (restorecouncil@restorethegulf.gov).

Maps, Charts, Figures

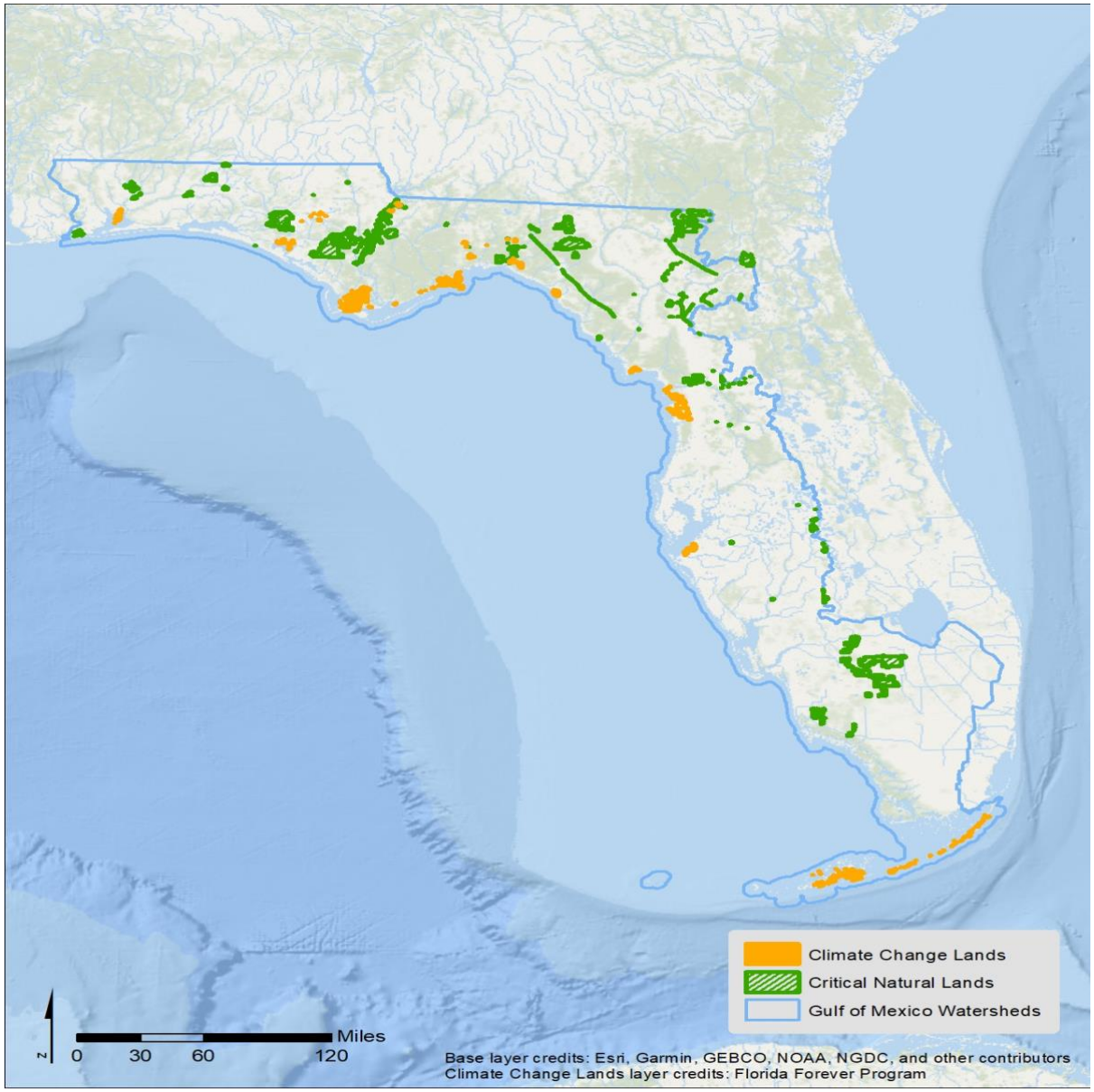

Figure 1 : Map illustrating the proposed extent of the Florida Strategic Gulf Coast Land Acquisition Program, including watersheds in Florida draining to the Gulf of Mexico. Areas for potential acquisition under this proposed program, identified as Climate Change Lands or Critical Natural Lands on the Florida Forever Program priority list, are shown.

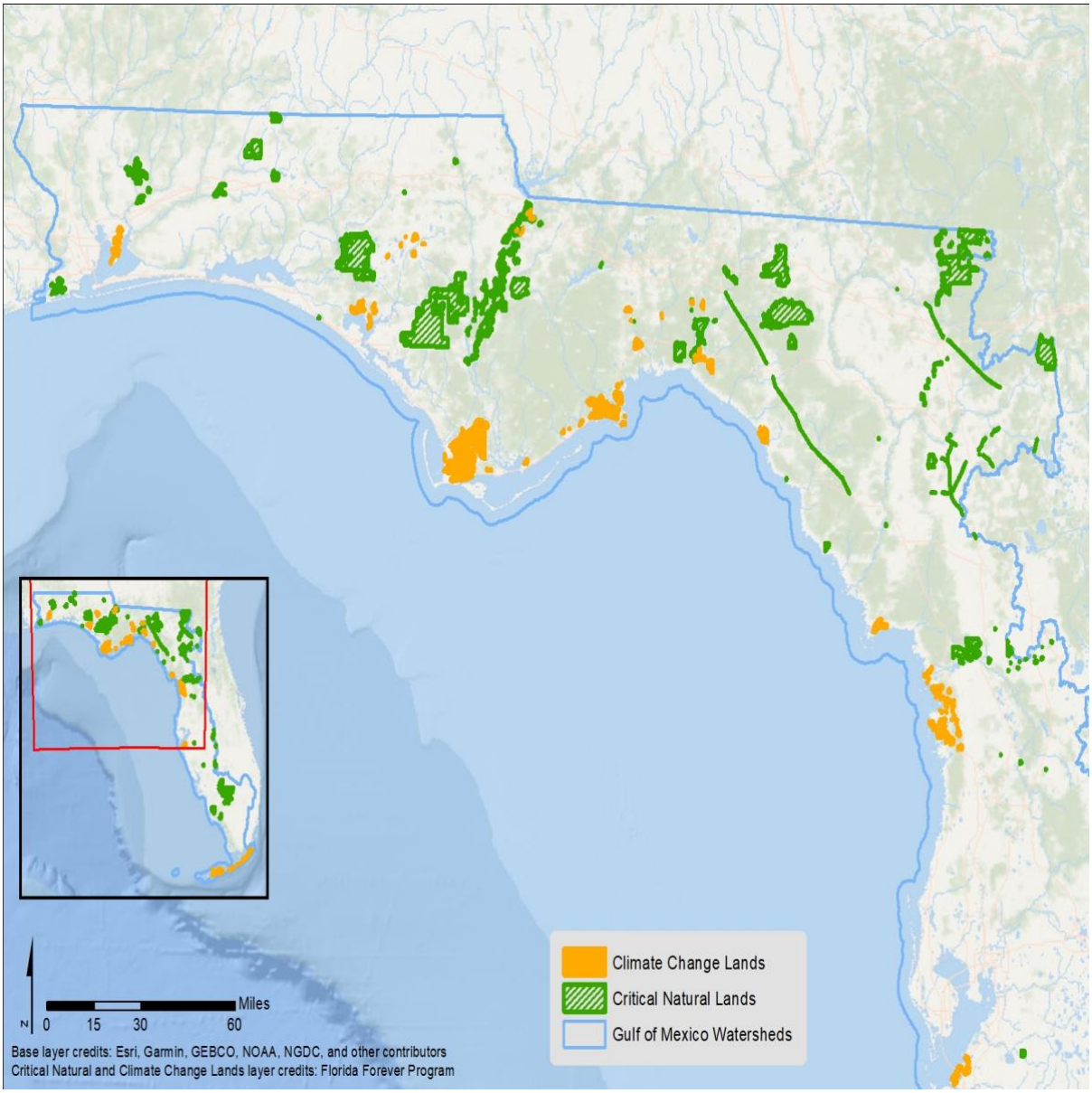

Figure 2 : Map illustrating a closer view of the northern extent of the Florida Strategic Gulf Coast Land Acquisition Program and potential land acquisitions for northern Florida and the Panhandle.

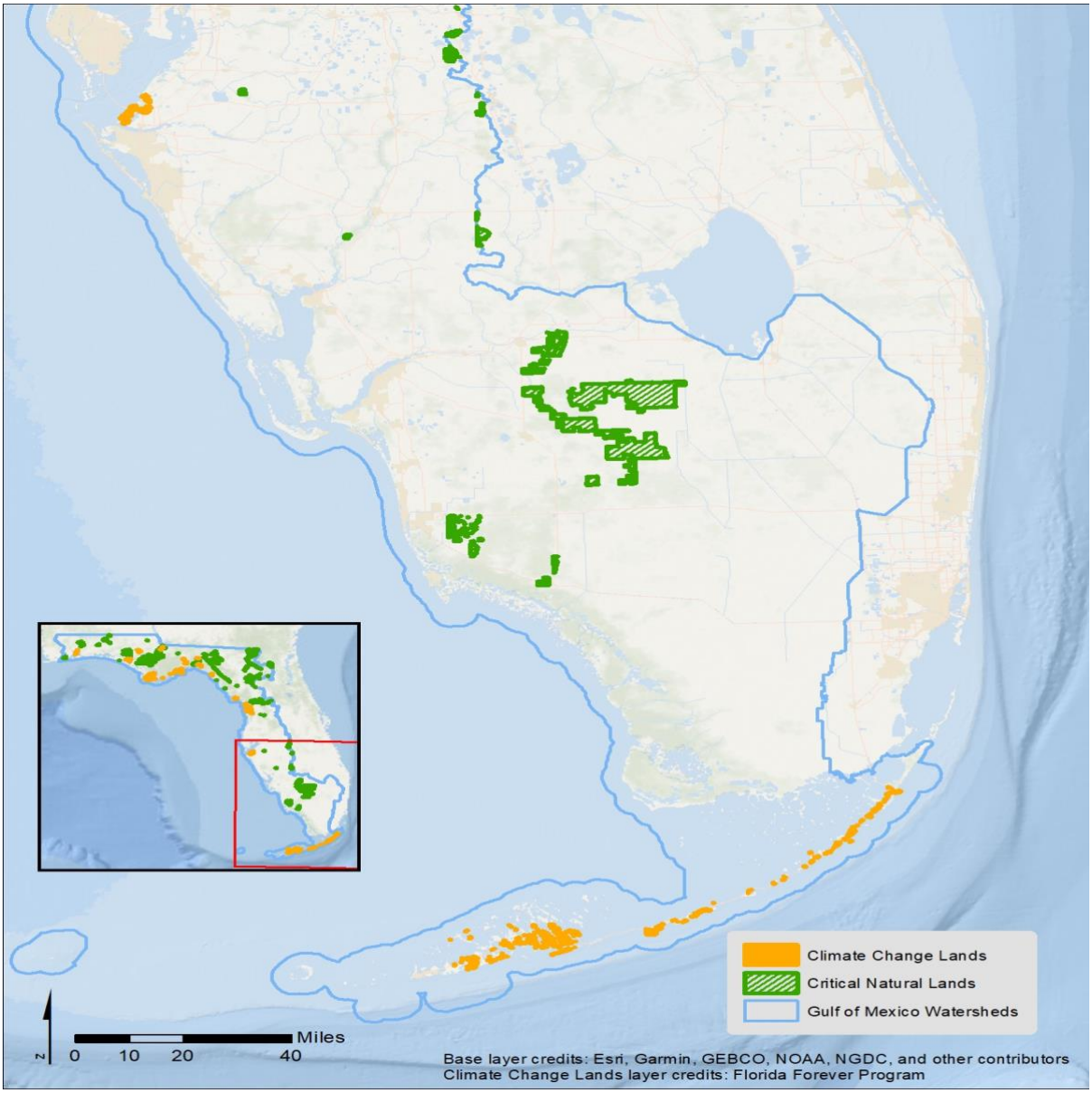

Figure 3 : Map illustrating a closer view of the southern extent of the Florida Strategic Gulf Coast Land Acquisition Program and potential land acquisitions for southern Florida and the Keys.

FPL 3b Internal Staff Review of Proposal Submitted 4/24/2020

Project/Program	Florida Strategic Gulf Coast Land Acquisition Program		
Primary Reviewer	Heather Young	Sponsor	Florida
EC Reviewer	Heather Young	Co-Sponsor	

1. Is/Are the selected Priority Criteria supported by information in the proposal?	Yes
Notes	

2. Does the proposal meet the RESTORE Act geographic eligibility requirement?	Yes
Notes	

3. Are the Comprehensive Plan primary goal and primary objective supported by information in the proposal?	Yes
Notes	

4. Planning Framework: If the proposal is designed to align with the Planning Framework, does the proposal support the selected priority approaches, priority techniques, and/or geographic area?	Yes
Notes	

5. Does the proposal align with the applicable RESTORE Council definition of project or program?	Yes
Notes	

6. Does the budget narrative adequately describe the costs associated with the proposed activity?	More information needed
Notes	There is some inconsistency throughout the proposal regarding Category 1 Planning versus Category 1 Implementation and Category 2 Implementation funding. The "FPL Category" indicates "Cat1: Planning / Cat2: Implementation"; however the narrative states (2nd paragraph under "Introduction and Overview") that only implementation funds are needed, and no funds are budgeted for planning. Council staff recommend that the sponsor include language indicating that Cat1 Planning funds will be used for program management, data management, and monitoring and adaptive management. Council staff recognizes that an effort is being made to complete environmental

	compliance requirements to move funding to Category 1 Implementation as discussed in the Environmental Compliance section below, which should help in the resolution of inconsistencies.		
7. Are there any recommended revisions to the selected leveraged funding categories?			No
Notes			
8. Have three external BAS reviews?			More information needed
Notes	Please see the external BAS review comments, and external reviews summary attached with these review comments.		
9. Have appropriate metrics been proposed to support all primary and secondary goals?			More information needed
Notes	The primary goal is supported by the proposed metrics. However, because bringing land under improved management has been incorporated into the descriptions of RESTORE Council metrics HC001 and HC003 (i.e., "acres protected under easement" and "acres acquired in fee"), Council staff suggest that metric "HM006 - Acres under improved management" is redundant and can be removed.		
10. Environmental compliance: If FPL Category 1 has been selected for the implementation component of the project or program, does the proposal include environmental compliance documentation that fully supports the selection of Category 1?			N/A
Notes	The sponsor is seeking funding approval (FPL Category 1) for the planning components of this program. The implementation component is listed as FPL Category 2. The Council can use its planning Categorical Exclusion to address NEPA for approval of planning funds. Subsequent FPL amendment(s) will be needed to approve implementation funding for this program. At that time, the sponsor would need to provide evidence of compliance with all environmental laws applicable to funding approval for the given project(s).		
11. Geospatial Compliance: Have the appropriate geospatial files and associated metadata been submitted along with a map of the proposed project/program area?			Yes
Notes			

FPL 3b BAS Review Summary - Florida Strategic Gulf Coast Land Acquisition Program

May, 2020

The external Best Available Science reviews for the *Florida Strategic Gulf Coast Land Acquisition Program* proposal are largely positive. Reviewers agree that the proposal has been justified using peer-reviewed and publicly available information that directly pertains to the Gulf Coast Region (all reviewers), noting that the peer-reviewed and publicly-available data is well-integrated (Reviewer 2). All reviewers also feel that the scientific basis of this project is justified using science that maximizes the quality, objectivity, and integrity of information.

The program has clearly defined goals and objectives, and measures of success that align with the primary program goals are identified (all reviewers). Proposed methods follow the well-established Florida Forever evaluation criteria and process (Reviewer 1), and the proposal includes a clear discussion of this approach (Reviewer 2). Reviewer 3 suggests that further emphasis be placed on Florida Forever's use of science-based processes for choice of lands. Reviewer 3 also suggests clarifying language describing sea level rise, storm surge, and waves throughout the proposal.

All Reviewers agree that the proposal is supported by recent, relevant, and accurately-cited literature. Reviewer 3 does suggest including the following peer-reviewed citation suggestions in other elements of the proposal: Michael Ross's papers on sea level rise and vegetated habitats; Keqi Zhang's papers on storm surge and vegetated habitats; and Lafever et al. 2007 for wildlife-dependent land resiliency against sea level rise/storms in FL. Reviewer 3 also indicates that the key benefit of natural habitat restoration is long-term resiliency to sea level rise, suggesting that statements on the ecosystem service of storm surge and the ability of these natural systems to reduce it should be hedged or reduced, offering Feagin et al. 2010 as a cited reference for this suggestion.

Reviewers 1 and 3 agreed that the project/program identifies the likely environmental benefits of the proposed activity. Reviewer 3 suggests including additional discussion to justify land acquisition as a preferred method to achieve the proposed benefits.

Reviewer 1 notes that the proposal identifies an adaptive management strategy that will be proposed as projects are implemented. However, Reviewers 2 and 3 felt that more information was needed to determine if the program has identified a monitoring and data management strategy that will support measures of success. Specifically, Reviewer 2 suggests including additional environmental metrics and an explanation of how land acquired fits into assessment of success of resiliency efforts. Reviewer 3 suggests bolstering the discussion of adaptive management as well as removing or clarifying how the metric: acres under improved management, is directly related or achievable by this proposal, since the proposal clearly states that management is not funded by this proposal.

The proposal is based on science that clearly documents and communicates risks and uncertainties in the scientific basis for the program (all reviewers). While Reviewers 1 and 2 agree that the proposal evaluates uncertainties and risks in achieving its objectives over time,

Reviewer 3 felt that this discussion should include more of a focus on intrinsic and direct risks such as the inflation of real estate prices and land loss. The proposal reflects good thinking about vulnerability of the potential program to long-term environmental risks and, generally, to short-term implementation risks and uncertainties (all reviewers). Reviewer 1 points out that while several proposed mitigation strategies are discussed, there is no mitigation plan, per se. It should be noted, however, that detailed mitigation plans are not required at the FPL proposal stage.

The program sponsor has strong demonstrated experience in implementing activities similar to the one being proposed (All reviewers). In evaluating past successes and failures of similar efforts, the proposal references Florida's previous experience with acquiring and managing land (all reviewers), however Reviewer 1 notes that a more detailed evaluation of successes and failures from the FF program could be incorporated to guide the proposed procedures.

In summary comments, Reviewer 3 notes, "Overall, I found this proposal to be very strong. Clear, direct, well-documented in prior experiences, processes, and science."

FDEP Summary Response to FPL 3b BAS Review Comments (May 2020) on Florida Strategic Gulf Coast Land Acquisition Program Proposal

Florida Department of Environmental Protection (FDEP) was pleased to receive largely positive external Best Available Science (BAS) reviews for this Florida Strategic Gulf Coast Land Acquisition Program proposal. Specifically, Reviewer 3 noted that the proposal was "…very strong… Clear, direct, well-documented…" The BAS reviewers noted where additional clarification could be added to strengthen the proposal, in particular with regard to the science-based processes for selection of program activities, clarification of benefits and risks, and justification regarding the proposed approach.

Methods and science-based process. **Reviewers 1 and 2 noted that the proposed methods are clearly described and follow the well-established Florida Forever evaluation process. Reviewer 3 suggested that further emphasis be placed on Florida Forever's use of science-based processes for choice of lands**. As noted in the proposal, Florida Forever utilizes a science-based process in determining which lands to protect. Specifically, the Acquisition and Restoration Council (ARC), which includes scientific representatives, is charged with ranking parcels; the ARC utilizes a science-based evaluation process for decision-making when developing the priority list for acquisition. Land parcels undergo a thorough scientific review and comprehensive natural resource analysis and scoring process using Florida Natural Areas Inventory (FNAI) database information, a series of geographic data layers, and several project ranking criteria (e.g., percent inundated at 1-meter sea level rise, restoration priority, etc.). No changes were made to the proposal; the Reviewer is referred to the FNAI 2018a reference included in the proposal for additional details on Florida Forever's science-based processes.

Clarifying sea level rise, storm surge, and waves and associated literature cited. **Reviewer 3 suggested adding clarifying language describing sea level rise, storm surge, and waves throughout the proposal, in particular with regard to the benefits of natural habitat restoration being primarily for long-term resiliency to sea level rise (rather than storm surge).** We concur with this review comment, and have de-emphasized the benefits of natural habitat conservation to storm surge. Further, **all Reviewers agreed that the proposal was well supported by recent, relevant, and accurately cited literature, but Reviewer 3 suggested a few additional peer-reviewed citations regarding sea level rise and the benefits of natural habitats to resiliency**. In response, the proposal has been revised to add text clarifying the impacts of sea level rise, referencing the additional literature sources recommended by Reviewer 3 (LaFever et al. 2007, Ross et al. 1994); text noting that coastal vegetation attenuates short-period wave energy but may be less effective in reducing impacts of storm surge (Feagin et al. 2010); and, text clarifying the benefits of natural communities for sea level rise and in some cases, storm surge (Zhang et al. 2012).

Justification of land acquisition. **Reviewers 1 and 3 agreed that the proposal identifies the likely environmental benefits of the program. Reviewer 3 suggested including additional discussion to justify land acquisition as a preferred method to achieve the proposed benefits**. In response, we have added a sentence to clarify the importance of land acquisition as a preferred method to achieve habitat restoration and conservation, including the sustained environmental benefits that result from the protection of lands in perpetuity.

Monitoring and adaptive management. **The Reviewers felt that more information was needed on a monitoring and adaptive management strategy that will support measures of success**. No change was

made to the proposal, as detailed data management, monitoring, and adaptive management plans will be developed at the time projects or program activities are selected.

Metrics. **Reviewer 3 suggested removing or clarifying the metric: HM006 - acres under improved management**. In response to both BAS and Council staff comments regarding this metric, we have removed the acres under improved management metric from the proposal. **Reviewer 2 suggested including additional environmental metrics and an explanation of how land acquired fits into assessment of success of resiliency efforts**. Additional metrics may be identified at the time individual projects or program activities are selected for implementation under this program.

Risks, uncertainties, and mitigation. **Reviewers 1 and 2 agreed that the proposal evaluates uncertainties and risks in achieving its objectives over time, but Reviewer 3 suggested adding more on intrinsic and direct risks**. We have added text on additional direct risks and uncertainties including inflation of land value and land loss due to rising sea level or subsidence. As noted in the proposal, inflation risks can be mitigated through thoughtful discussion with landowners, quality appraisals (which are required for all state land acquisitions), and due diligence. We also added text noting that Land Management Plans would be developed and updated to address risks such as land loss. Further, the number of parcels and the specific parcels acquired will depend on the Florida Forever priority list and will be scaled to the program budget. Finally, **Reviewer 1 noted that no mitigation plan was discussed**. No change was made to the proposal as mitigation plans are not required at the FPL proposal stage. Florida will consider a mitigation plan when projects or program activities are selected.

While not specifically noted for this proposal, comments received from a BAS reviewer on a separate proposal (Florida Gulf Coast Resiliency Program) suggested addressing socioeconomic risks associated with the program. We evaluated socioeconomic risks associated with land acquisition and added a summary of potential long-term socioeconomic risks; however, the risks identified (reduced economic development, lost property tax revenue) are expected to be offset by the long-term socioeconomic and environmental benefits of the program. Further, Florida's Payment in Lieu of Taxes (PILT) program provides for payments to counties with low populations where land is acquired for conservation to help offset the lost tax revenue.

Florida's experience in implementing similar activities. **The reviewers noted that the proposal demonstrated the strong past experiences Florida has in implementing land acquisition and protection activities similar to those being proposed. Reviewer 1 noted that a more detailed evaluation of successes and failures from the Florida Forever program could be incorporated to guide the proposed procedures**. No change was made to the proposal in response to this comment. An evaluation of the successes and failures of the Florida Forever program is outside the scope of the development of this proposal. However, the experience and knowledge of Florida Forever practitioners in mitigating risks and how to successfully acquire lands for protection has been incorporated into the proposal and will be leveraged during implementation of this proposed program.

Gulf Coast Ecosystem Restoration Council

FPL 3b Internal Best Available Science Review Panel Summary

July 2020

Introduction

On Tuesday, June 30, and Wednesday July 1, 2020 the RESTORE Council convened the Funded Priorities List (FPL) 3b Internal Best Available Science (BAS) Review Panel. The purpose of this internal panel was to use Council member-agency expertise to address external BAS review comments provided for FPL 3b submitted project/program proposals, and potentially identify project/program synergies not identified prior to proposal submission. The ultimate goal of the panel was to provide Council members with substantive best available science content to inform their decision-making.

The internal panel was convened via webinar with representatives from each of the Council's eleven member agencies present. Each BAS Panel member was provided the following:

1) Full FPL 3b proposals
2) 3 external BAS reviews for each proposal
3) Summary of external BAS reviews for each proposal
4) Proposal Sponsor's response to the BAS reviews summary
5) Any proposed revisions to the proposal

Proposal sponsors provided a brief synopsis of their proposal to the panel, a summary of comments made in external reviews, and discussed their proposed response to the external reviews. Council staff then solicited feedback from the panel on the proposal sponsor's presentation of comments and responses to those comments, and any additional BAS concerns. Council staff also solicited feedback on any existing or future synergies with other Gulf restoration activities. The proceedings of the meeting for this proposal are summarized below.

Sponsor: Florida

Florida Strategic Gulf Coast Land Acquisition Program Proposal

Feedback from the panel on the proposal sponsor's presentation of comments and responses to those comments, and any additional BAS concerns:

Site selection: Further emphasis should be placed on Florida Forever's use of science-based processes for choice of lands.

- The BAS panel agrees that Florida has appropriately addressed this comment.

RESTORE Council FPL 3b Internal Best Available Science Panel Summary

Program benefits: Clarify language, in particular regarding benefits to natural habitat restoration being primarily for long-term resiliency to sea level rise (rather than storm surge), and add peer-reviewed citations on sea-level rise.

- The BAS panel agrees that Florida has appropriately addressed this comment.

Risks, uncertainties, and mitigation: The proposal evaluates uncertainties and risks in achieving its objectives over time, but adding more on intrinsic and direct risks, as well as a mitigation plan, is suggested.

- The BAS panel agrees that Florida has appropriately addressed this comment.

Past experience: A more detailed evaluation of successes and failures from the Florida Forever program could be incorporated to guide the proposed procedures.

- The BAS panel agrees that Florida has appropriately addressed this comment.

Justification: Include additional discussion to justify land acquisition as a preferred method to achieve the proposed benefits.

- The BAS panel agrees that Florida has appropriately addressed this comment.

Monitoring and adaptive management: More information is needed on a monitoring and adaptive management strategy that will support measures of success.

- The BAS panel agrees that Florida has appropriately addressed this comment.

Metrics: Remove or clarify the acres under improved management metric or add additional environmental metrics.

- The BAS panel agrees that Florida has appropriately addressed this comment.

Other: What sort of coordination is planned with Federal tribes?

- Florida response: The Florida Forever process includes opportunity for engagement through the nomination of projects and publicly noticed meetings that encourage public comment. During the Florida Forever project evaluation process an analysis of cultural resources is conducted.

Panel comments on existing or future synergies with proposed activity:

The proposed program has potential for synergy with the proposed Perdido Water Quality Improvement and Vulnerability Assessment program.

RESTORE Council FPL 3b Internal Best Available Science Panel Summary

SCIENCE EVALUATION

Bucket 2: Comprehensive Plan Component

Proposal Title: Florida Strategic Gulf Coast Land Acquisition Program
Location (If Applicable): Florida
Council Member Bureau or Agency: State of Florida Department of Environmental Protection
Type of Funding Requested: Implementation

Reviewed by: Reviewer 1
Date of Review: 4/29/20

Best Available Science:

These 4 factors/elements help frame the reviewer's answers to A, B and C found in next section:

Question 1.	
Have the proposal objectives, including proposed methods, been justified using peer reviewed and/or publicly available information?	Yes
Comments:	
Click here to enter text.	

Question 2.	
If information supporting the proposal does not directly pertain to the Gulf Coast region, are the proposal's methods reasonably supported and adaptable to that geographic area?	Yes
Comments:	
Click here to enter text.	

Question 3.	
Are the literature sources used to support the proposal accurately and completely cited? Are the literature sources represented in a fair and unbiased manner?	Yes
Comments:	
Click here to enter text.	

Question 4.	
Does the proposal evaluate uncertainties and risks in achieving its objectives over time? (e.g., is there an uncertainty or risk in the near- and/or long-term that the project/program will be obsolete or not function as planned?)	Yes
Comments:	
Click here to enter text.	

Based on the answers to the previous 4 questions, and *giving deference to the sponsor to provide within reason the use of best available science,* the following three questions can be answered:

Question A	
Has the applicant provided reasonable justification that the proposal is based on science that uses peer- reviewed and publicly available data?	Yes
Comments:	
Click here to enter text.	

Question B	
Has the applicant provided reasonable justification that the proposal is based on science that maximizes the quality, objectivity, and integrity of information (including, as applicable, statistical information)?	Yes
Comments:	
Click here to enter text.	

Question C	
Has the applicant provided reasonable justification that the proposal is based on science that clearly documents and communicates risks and uncertainties in the scientific basis for such projects/programs?	Yes
Comments:	
Click here to enter text.	

Science Context Evaluation:

Question A	
Has the project/program sponsor or project partners demonstrated experience in implementing a project/program similar to the one being proposed?	Yes
Comments:	
The FDEP is partnering with the Florida Forever (FF) program. FF has successfully performed the proposed project activities for decades.	

Question B	
Does the project/program have clearly defined goals objectives?	Yes
Comments:	
Click here to enter text.	

Question C	
Has the proposal provided a clear description of the methods proposed, and appropriate justification for why the method is being selected (e.g., scientifically sound; cost-effectiveness)?	Yes
Comments:	
Methods will follow the well-established and sophisticated FF evaluation criteria and process.	

Question D	
Does the project/program identify the likely environmental benefits of the proposed activity? Where applicable, does the application discuss those benefits in reference to one or more underlying environmental stressors identified by best available science and/or regional plans?	Yes
Comments:	
Click here to enter text.	

Question E	
Does the project/program have measures of success (i.e., metrics) that align with the primary Comprehensive Plan goal(s)/objectives? (Captures the statistical information requirement as defined by RESTORE Act)	Yes
Comments:	
Click here to enter text.	

Question F	
Does the proposal discuss the project/program's vulnerability to potential long-term environmental risks (i.e., climate, pollution, changing land use)? (Captures risk measures as defined under best available science by the RESTORE Act)	Yes
Comments:	
Click here to enter text.	

Question G	
Does the project/program consider other applicable short-term implementation risks and scientific uncertainties? Such risks may include the potential for unanticipated adverse environmental and/or socio-economic impacts from project implementation. Is there a mitigation plan in place to address these risks? Any relevant scientific uncertainties and/or data gaps should also be discussed. (Captures risk measures as defined under best available science by the RESTORE Act)	Need more information
Comments:	
Various short-term risks associated with adverse environmental conditions and economic issues that could affect land acquisition were presented. There are a number of proposed strategies to mitigate short-term risks, but no mitigation plan per se.	

Question H	
Does the project/program consider recent and/or relevant information in discussing the elements above?	Yes
Comments:	
The public engagement, outreach, and education component could help mitigate some of the above risks.	

Question I	
Has the project/program evaluated past successes and failures of similar efforts? (Captures the communication of risks and uncertainties in the scientific basis for such projects as defined by the RESTORE Act)	Need more information
Comments:	
The achievements of the FF program were presented but not evaluated in a manner where successes and failures could be used to guide proposed procedures.	

Question J	
Has the project/program identified a monitoring and data management strategy that will support project measures of success (i.e., metrics). If so, is appropriate best available science justification provided? If applicable, how is adaptive management informed by the performance criteria? (Captures statistical information requirement a defined by the RESTORE Act)	Yes
Comments:	
Adaptive management proposed as projects are implemented (p.13).	

Please summarize any additional information needed below:
Click here to enter text.

SCIENCE EVALUATION

Bucket 2: Comprehensive Plan Component

Proposal Title: Florida Strategic Gulf Coast Land Acquisition Program
Location (If Applicable): Florida
Council Member Bureau or Agency: State of Florida Department of Environmental Protection
Type of Funding Requested: Implementation

Reviewed by: Reviewer 2
Date of Review: 05/08/2020

Best Available Science:

These 4 factors/elements help frame the reviewer's answers to A, B and C found in next section:

Question 1.	
Have the proposal objectives, including proposed methods, been justified using peer reviewed and/or publicly available information?	Yes
Comments:	
Having the benefit of reviewing the Florida Gulf Coast Resiliency Program, it is clear how this Land Acquisition Program fits. There is a common set of goals and objectives between the two proposals that are clear and that are based on a strong set of peer-reviewed and publicaly available information.	

Question 2.	
If information supporting the proposal does not directly pertain to the Gulf Coast region, are the proposal's methods reasonably supported and adaptable to that geographic area?	Yes
Comments:	
The proposal identifies both Gulf Coast-specific information and information that pertains more generally to global climate change. That broader-scale information has been integrated into the proposal in a way that makes it applicable to the work on Florida's Gulf Coast.	

Question 3.	
Are the literature sources used to support the proposal accurately and completely cited? Are the literature sources represented in a fair and unbiased manner?	Yes
Comments:	
Click here to enter text.	

Question 4.	
Does the proposal evaluate uncertainties and risks in achieving its objectives over time? (e.g., is there an uncertainty or risk in the near- and/or long-term that the project/program will be obsolete or not function as planned?)	Yes
Comments:	
Good discussion and treatment of near-term and long-term risks and uncertainties and how this project can work to reduce that uncertainty. Also a good discussion of uncertainties that are beyond the control of this project or the State of Florida.	

Based on the answers to the previous 4 questions, and *giving deference to the sponsor to provide within reason the use of best available science,* the following three questions can be answered:

Question A	
Has the applicant provided reasonable justification that the proposal is based on science that uses peer- reviewed and publicly available data?	Yes
Comments:	
Good integration and citation of peer-reviewed literature amd publicly-available government reports to build the case.	

Question B	
Has the applicant provided reasonable justification that the proposal is based on science that maximizes the quality, objectivity, and integrity of information (including, as applicable, statistical information)?	Yes
Comments:	
Click here to enter text.	

Question C	
Has the applicant provided reasonable justification that the proposal is based on science that clearly documents and communicates risks and uncertainties in the scientific basis for such projects/programs?	Yes
Comments:	
As noted earlier and as discussed in my review of the Florida Gulf Coast Resiliencey Program proposal, the proposal authors have done a good job of identifying near-term and long-term risks and uncertainties.	

Science Context Evaluation:

Question A	
Has the project/program sponsor or project partners demonstrated experience in implementing a project/program similar to the one being proposed?	Yes
Comments:	
Yes, proposal is clear about Florida's previous experience with acquiring land and implementing new land management.	

Question B	
Does the project/program have clearly defined goals objectives?	Yes
Comments:	
Click here to enter text.	

Question C	
Has the proposal provided a clear description of the methods proposed, and appropriate justification for why the method is being selected (e.g., scientifically sound; cost-effectiveness)?	Yes
Comments:	
Good discussion of focus on willing sellers, fair market value appraisals, negotiating with owners, and using a more collaborative approach to acquisition as opposed to large-scale eminent domain.	

Question D	
Does the project/program identify the likely environmental benefits of the proposed activity? Where applicable, does the application discuss those benefits in reference to one or more underlying environmental stressors identified by best available science and/or regional plans?	Need more information
Comments:	
Same issue as Florida Gulf Coast Resiliency Program – metrics related to successful acquisition and implementation of management plans, but not discussion of specific environmental metrics that will be evaluated to learn, change management, and/or determine success.	

Question E	
Does the project/program have measures of success (i.e., metrics) that align with the primary Comprehensive Plan goal(s)/objectives? (Captures the statistical information requirement as defined by RESTORE Act)	Yes
Comments:	
This specific proposal is focused on the land acquisition piece of the Gulf Coast Resiliency Program so it is on-point with those aspects of the RESTORE Act and the Comprehensive Plan.	

Question F	
Does the proposal discuss the project/program's vulnerability to potential long-term environmental risks (i.e., climate, pollution, changing land use)? (Captures risk measures as defined under best available science by the RESTORE Act)	Yes
Comments:	
Proposal reflects good thinking about long-term environmental risks and how to mitigate those that can be controlled. Also references those uncertainties that cannot be controlled by this work or by the State of Florida.	

Question G	
Does the project/program consider other applicable short-term implementation risks and scientific uncertainties? Such risks may include the potential for unanticipated adverse environmental and/or socio-economic impacts from project implementation. Is there a mitigation plan in place to address these risks? Any relevant scientific uncertainties and/or data gaps should also be discussed. (Captures risk measures as defined under best available science by the RESTORE Act)	Yes
Comments:	
As noted in the proposal, given Florida's previous experience with land acquisition and management there is good awareness of short-term implementation risks and uncertainties and the project sponsors are prepared to deal with those risks (for example, changes in land costs, locations, etc.).	

Question H	
Does the project/program consider recent and/or relevant information in discussing the elements above?	Yes
Comments:	
Click here to enter text.	

Question I	
Has the project/program evaluated past successes and failures of similar efforts? (Captures the communication of risks and uncertainties in the scientific basis for such projects as defined by the RESTORE Act)	Yes
Comments:	
Good reference to Florida's previous experience with acquiring and managing land.	

Question J	
Has the project/program identified a monitoring and data management strategy that will support project measures of success (i.e., metrics). If so, is appropriate best available science justification provided? If applicable, how is adaptive management informed by the performance criteria? (Captures statistical information requirement a defined by the RESTORE Act)	Need more information
Comments:	
Clear criteria on metrics like # of acres, miles of shoreline, and management plans. But, like the Gulf Coast Resiliency Program, not metrics for environmental components. This proposal is focused on the land acquisition piece of the Resiliency Program so that is likely adequate for this proposal. But, an explanation of why the land is being acquired and how it fits into assessing the success of resiliency efforts would be beneficial.	

Please summarize any additional information needed below:
Click here to enter text.

SCIENCE EVALUATION

Bucket 2: Comprehensive Plan Component

Proposal Title: Florida Strategic Gulf Coast Land Acquisition Program
Location (If Applicable): Florida
Council Member Bureau or Agency: State of Florida Department of Environmental Protection
Type of Funding Requested: Implementation

Reviewed by: Reviewer 3
Date of Review: May 11, 2020

Best Available Science:

These 4 factors/elements help frame the reviewer's answers to A, B and C found in next section:

Question 1.	
Have the proposal objectives, including proposed methods, been justified using peer reviewed and/or publicly available information?	Yes
Comments:	
Yes, not much to complain about in this respect.	

Question 2.	
If information supporting the proposal does not directly pertain to the Gulf Coast region, are the proposal's methods reasonably supported and adaptable to that geographic area?	Yes
Comments:	
The information supporting the proposal was nearly all Florida-specific, and so commendable.	

Question 3.	
Are the literature sources used to support the proposal accurately and completely cited? Are the literature sources represented in a fair and unbiased manner?	Yes
Comments:	
"Mitigating Climate Change", page 10 - I suggest reducing and hedging among all statements that wetlands reduce the impacts of storm surges. As an expert in this area, I believe that the literature touting this is weak. You just do not need to sell this idea for resiliency. 1. There are better ways to reduce storm surge that natural habitats – if that is the goal, we should just build a wall. The economic risk calculus will always go in that direction. 2. The benefit is the long term resiliency to sea level rise. Natural lands build elevation in response, whereas concrete does not. 3. There is some mixing among sea level rise and storm surges and waves in this proposal. Oyster reefs can reduce wave energy as can intertidal wetlands and mangroves. But storm surges, not very much really. 4. Just reduce the statements on storm surges. See Feagin et al. 2010 about how an emphasis like this can result in perverse economic incentives negatively against natural systems. 5. Sell it based on the other ecosystem services like you have – carbon, coastal squeeze abatement, water filtration/ natural downstream running flood abatement, etc. These are not scientifically-controversial. Some missing key peer-reviewed literature on this subject for Florida would be: Michael Ross's papers on sea level rise and vegetated habitats; Keqi Zhang's papers on storm surge and vegetated habitats. Also, for wildlife-dependent land resiliency against sea level rise/storms in FL, Lafever et al. 2007. Same thing in the "Climate change" section, page 12.	

Question 4.

Does the proposal evaluate uncertainties and risks in achieving its objectives over time? (e.g., is there an uncertainty or risk in the near- and/or long-term that the project/program will be obsolete or not function as planned?)	Need more information

Comments:

While there is much discussion about the risks to the potentially-acquired lands in terms of fire, invasive species, etc. – and this is all great information – these are not actually risks that are intrinsic to the project implementation. They are derivative or indirect risks.

The focuse needs to increase and we need more more description of the intrinsic and direct risks. The only one discussed is the willingness of land owners to sell.

One related risk is the inflation of real estate prices. The FF program seems great and quite large and successful. They are already operating a large budget and know how to do this work. There is likely a known queue of potential purchases, that already exists for potentially-purchasable properties. If all of a sudden, there is an extra $20 million available, and land owners know this, then there may be price inflation. Please address how this will not happen or what are the ways to remediate it.

Another is land loss. Land could be purchased under the State of Florida ownership, but then it converts to water. I assume this would remain State of Florida legally. But, there could be differences in public access rights and usage of the tract. The State can probably fence in an acquired tract that is land, but when it becomes water it will fall under different laws I am fairly sure. Same with things like oil impacts, etc.

Based on the answers to the previous 4 questions, and *giving deference to the sponsor to provide within reason the use of best available science,* the following three questions can be answered:

Question A

Has the applicant provided reasonable justification that the proposal is based on science that uses peer- reviewed and publicly available data?	Yes

Comments:

This is a good proposal, scientifically-based and well-written.

Question B	
Has the applicant provided reasonable justification that the proposal is based on science that maximizes the quality, objectivity, and integrity of information (including, as applicable, statistical information)?	Yes
Comments:	
This is a good proposal, scientifically-based and well-written.	

Question C	
Has the applicant provided reasonable justification that the proposal is based on science that clearly documents and communicates risks and uncertainties in the scientific basis for such projects/programs?	Yes
Comments:	
The intrinsic and direct risks to the proposed implementation process of land acquisition could be better defined. See comments above under Question 4.	

Science Context Evaluation:

Question A	
Has the project/program sponsor or project partners demonstrated experience in implementing a project/program	Yes

similar to the one being proposed?	
Comments:	
Experience is strong here.	

Question B	
Does the project/program have clearly defined goals objectives?	Yes
Comments:	
The goals are clear.	

Question C	
Has the proposal provided a clear description of the methods proposed, and appropriate justification for why the method is being selected (e.g., scientifically sound; cost-effectiveness)?	Yes
Comments:	
There could be just a tiny bit more up at the top stating that land acquisition is a preferred or "best" method for addressing the needs. Land acquisition and subsequent management is probably best for endangered species or rare habitats. Otherwise, things like conservation easements, private landowner management incentive programs or subsidization of certain activities etc. could be better justified use of the money. Also, land acquisition uniquely captures public rights for use/recreation. Also, it is probably best for dealing with mitigating climate impacts as the spatial locations of habitats migrate and change over time.	

Question D	
Does the project/program identify the likely environmental benefits of the proposed activity? Where applicable, does the application discuss those benefits in reference to one or more underlying environmental stressors identified by best available science and/or regional plans?	Yes

Comments:
Yes, the ecosystem services of the lands are well-described.

Question E	
Does the project/program have measures of success (i.e., metrics) that align with the primary Comprehensive Plan goal(s)/objectives? (Captures the statistical information requirement as defined by RESTORE Act)	Yes
Comments:	
Metrics are listed.	

Question F	
Does the proposal discuss the project/program's vulnerability to potential long-term environmental risks (i.e., climate, pollution, changing land use)? (Captures risk measures as defined under best available science by the RESTORE Act)	Yes
Comments:	
Yes, this is all in the proposal.	

Question G	
Does the project/program consider other applicable short-term implementation risks and scientific uncertainties? Such risks may include the potential for unanticipated adverse environmental and/or socio-economic impacts from project implementation. Is there a mitigation plan in place to address these risks? Any relevant scientific uncertainties and/or data gaps should also be discussed. (Captures risk measures as defined under best available science by the RESTORE Act)	Yes
Comments:	
Yes, the primary one discussed is landowner willingness to sell the land. See Question 4 above for more comments about other possible intrinsic/direct short-term risks, such as real estate price inflation, etc.	

Question H	
Does the project/program consider recent and/or relevant information in discussing the elements above?	Yes
Comments:	
The information is recent.	

Question I	
Has the project/program evaluated past successes and failures of similar efforts? (Captures the communication of risks and uncertainties in the scientific basis for such projects as defined by the RESTORE Act)	Yes
Comments:	
Yes, since the project is largely based on the FF program that already exists, it should be successful at the same hit rate.	

Question J	
Has the project/program identified a monitoring and data management strategy that will support project measures of success (i.e., metrics). If so, is appropriate best available science justification provided? If applicable, how is adaptive management informed by the performance criteria? (Captures statistical information requirement a defined by the RESTORE Act)	Need more information

Comments:

The Monitoring and Adaptive Management section was weak, as compared with other portions of the proposal. It simply states that the plan will follow the NRDA MAM manual, which can be a confusing document on its own. The metrics appear to be: acres under easement and acres under improved management. The first metric seems clear. The second is not directly related or achievable by this proposal, since the proposal clearly states that management is not funded by this proposal. I suggest to remove this second one. If you need 2, come up with another one. Perhaps, ecosystem/habitat diversity of lands acquired, or geographic diversity of lands acquired, etc? That would be valuable to ensure that the citizens of Florida get a somewhat even benefit that is not overly concentrated. It would also ensure no boondoggles going on in the program (money grabs or favors to specific land owners).

There is little discussion of adaptive management here. Need more.

Please summarize any additional information needed below:

Overall, I found this proposal to be very strong. Clear, direct, well-documented in prior experiences, processes, and science. Potential revisions could address:

1. Better discussion of short-term risks, that are direct to property acquisition processes. Namely real estate price inflation.
2. Hedging sentences on storm-surge abatement properties of these ecosystems.
3. Little more justification on why land acquisition is the best method to achieve the benefits, ie how are the benefits unique, as opposed to other possible methods?
4. Few more sentences on the adaptive management angle. Also the metric based on management for the MAM section cannot be directly captured by this proposal.
5. A bit more could be added on the FF decision-making process, ie how it negates or reduces potential insider boondoggle purchases. In other words, add a little more emphasis on how FF uses a science based process for choice of lands.