2030 Strategic Conservation Plan

A Data-Driven Approach to Land Protection for People and Nature

BIG WATERS
LAND TRUST

Serving the Counties of Manatee, Sarasota, Charlotte, Lee, Collier, and parts of Hillsborough, Hardee, DeSoto & Highlands

With

SHAFER consulting

March 2025

Acknowledgements: Big Waters Land Trusts is grateful to the Land Trust Alliance and Pat Neal for underwriting this plan**.**

Suggested Citation: Amos, L. and J. Shafer. 2025. 2030 Strategic Conservation Plan: A Data-Driven Approach to Land Protection for People and Nature. Prepared for Big Waters Land Trust by Shafer Consulting, Sarasota, Florida. 84 pp.

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Executive Summary

"The health of our waters depends upon how well we live on the land." - Luna Leopold

We are Big Waters Land Trust, a regional land conservancy. Our mission is to protect the land and water in Southwest Florida for the benefit of people and nature. In our first twenty years, we protected over 20,000 acres across Manatee, Sarasota, Charlotte, Lee, and Collier Counties. And yet, we need to quicken the pace of land conservation.

Our work saving land has never been more important and urgent since our region's human population has more than tripled since 1980. Growth projections show another 8% by 2030, with Manatee County in the lead at 2% growth per year (FEDR 2024). Between real estate development and phosphate mining, our region's remaining open lands are among the most threatened in the nation. Landscape-scale action is needed and urgent if we are to save the last remaining large land tracts, wildlife corridors, and pockets of urban green space before they are gone. Our 2030 Strategic Conservation Plan prioritizes saving these critical places.

Our strategy is data-driven and prioritized by our six conservation values: Clean Water, Imperiled Species, Coastal Resiliency, Sustainable Agriculture, Access for All, and Carbon Sequestration. We use ecological and social science research, geospatial data, and data analysis using Geographic Information Systems (GIS) to inform our landscape scale, rather than piecemeal, approach. The result is our Strategic Conservation Plan, which identifies areas within our community that have the greatest potential to benefit our Conservation Values. These areas we call Focus Areas. By strategically identifying and then concentrating our efforts in these areas, we will maximize our chances of success and therefore maximize our donors' return on investment in our mission.

We will be transparent in our progress; we will create SMART goals (specific, measurable, achievable, relevant, and time-bound) and publish yearly our progress against these metrics. These goals and metrics are meaningful to people and nature and will provide clarity and focus to our board, staff, donors, and partners. At the same time, much of our Strategic Conservation Plan is proprietary and private, namely analyses of partners and funding, as well as the programming, marketing, and fundraising plans. Therefore, this document includes only those parts of the plan that are public: Conservation Values, Focus Areas, Goals, and Metrics.

Big Waters Land Trust is proud to present this bold Strategic Conservation Plan, and we are excited to work together with anyone and all to save these important lands before they are gone forever. We are in a race against time, but with this plan as a guide, we can achieve our vision of a future where our human and natural worlds flourish together. Join Us!

Background

Our Work in Southwest Florida

Southwest Florida's interconnected physical, political, and cultural geography underscores the urgency and complexity of its conservation challenges, making strategic planning and partnerships vital for the region's long-term sustainability.

Through strategic collaborations with individuals, organizations, and government entities, we strive to ensure all people have access to clean water, fresh air, nutritious food, abundant wildlife, and beautiful natural areas that provide physical and mental well-being. Our work bolsters resilience to storms and floods, enriches lives, and safeguards Southwest Florida for future generations.

The Big Waters Land Trust service area encompasses the entirety of Manatee, Sarasota, Charlotte, Lee, and Collier counties, as well as parts of Hillsborough, Hardee, DeSoto, and Highlands Counties. The diverse geography is characterized by a blend of natural ecosystems, agricultural lands, rapidly urbanizing areas, and culturally significant communities, all of which influence regional conservation priorities. Critical watersheds, including the Manatee, Myakka, Peace, and Caloosahatchee Rivers, connect inland ecosystems to coastal estuaries of the Gulf of Mexico. Coastal wetlands, mangroves, seagrass beds, and upland habitats like pine flatwoods and oak scrub sustain biodiversity, while rivers and their floodplains provide crucial freshwater supplies, enhance flood control, and support wildlife. In sum, Big Waters Land Trust works across an incredible landscape.

Rapid urbanization in coastal cities like Bradenton, Sarasota, Fort Myers, and Naples affects both coastal and inland areas, where urban sprawl threatens natural and agricultural lands. Agricultural producers are challenged by economic and market conditions and are under tremendous pressure to sell their land for development or phosphate mining. Our communities are threatened by intense hurricanes, storm surges, flooding, rising sea levels, depletion of potable water supplies, and saltwater intrusion. Collaboration across urban, suburban, and rural areas is essential to address these challenges.

Our area is governed by county and city commissions, two water management districts, and state and federal conservation agencies. Large-scale conservation programs such as Florida Forever and local initiatives like county land acquisition programs reflect political and governmental efforts to protect the region's natural resources. We work with many of these entities as essential and trusted partners to save land, emphasizing green spaces and recreational access in underserved urban areas, as well as natural habitat and wildlife corridors in rural areas.

Culturally, Southwest Florida's identity is intertwined with its environment. Its economy depends on agriculture, fishing, and tourism. Iconic features like Myakka River State Park and Sanibel Island draw millions of visitors annually. The region's different communities and agricultural traditions contribute to a strong conservation ethic.

Big Waters Land Trust uses the full range of protection tools and strategies to conserve a diversity of land to meet the range of landowners' needs and protect specific conservation values. Saving land has become more complex with time, as the easier projects have already been protected. The land left to conserve often involves complex negotiations with complicated family dynamics, challenging landowner

goals and expectations, competing land uses, conflicting neighborhood uses, and resources that do not neatly match existing funding programs.

Our Plan for Land Conservation

Our plan is calibrated to our ecological, cultural, and economic Conservation Values, with a robust set of metrics to measure progress towards our goals. By focusing on these values, the plan identifies opportunities to safeguard water quality, preserve biodiversity, mitigate climate change, enhance access to green spaces, and protect working landscapes that sustain local economies.

Key elements of our plan include a land conservation strategy that identifies nine high-priority geographic Focus Areas for land conservation, with a detailed analysis of parcel and landowner partnership opportunities. A partner and funding analysis guides collaboration and resource allocation. Additionally, the plan incorporates fundraising and marketing elements to align goals with long-term capacity and organizational sustainability. Finally, land stewardship and outreach components address key conservation measures and messaging that complement land conservation strategies. The appendices provide a detailed methodology, metadata, and summary tables for the analyses, as well as helpful regional resources. Only the basic elements of the conservation strategy are published. The remaining portions of the plan are confidential.

By strategically targeting conservation opportunities, this plan not only addresses current environmental challenges but also builds a framework for future resilience in Southwest Florida's landscapes and communities. It provides a roadmap for fostering partnerships and securing resources for targeted land conservation that will protect Southwest Florida's natural heritage by balancing growth with the urgent need to protect the region's environmental and community assets.

Conservation Values

Big Waters Land Trust's conservation work is guided by six Conservation Values: clean water, imperiled species, coastal resiliency, sustainable agriculture, access for all, and carbon sequestration. Through strategic land acquisition, land stewardship, and community outreach, Big Waters Land Trust will advance all of these conservation values.

Clean Water

Clean water is essential for life. In southwest Florida, surface water reservoirs provide drinking water for thousands, while coastal communities rely on clean waterways for fishing, recreation, and economic livelihoods. The health of these water sources depends upon the health of the landscapes around them. Protecting and enhancing forests, wetlands, and natural buffers is the most effective way to ensure safe drinking water and clean coastal waters.

When land is cleared or developed, pollutants like eroded soil, fertilizers, and chemicals flow into rivers, coastal waters, and drinking water reservoirs, degrading water quality. By conserving lands that serve as natural water filters and storage areas, we can protect drinking water at its source and keep our rivers, bays, and beaches clean. Furthermore, we can enhance degraded landscapes with practices such as wetland restoration, forest re-establishment, or implementation of agricultural Best Management Practices. Such enhancements increase the land's capacity to deliver clean-water benefits.

Imperiled Species

The loss of natural habitat is the greatest threat to biodiversity. As forests, wetlands, and grasslands are cleared or degraded, countless species lose places they need to survive. Many are already at risk of extinction; in fact, Florida's State Wildlife Action Plan identifies 690 Species of Greatest Conservation Need. Protecting, enhancing, and restoring land is essential to support biodiversity and ensure that imperiled species have a future.

While every acre conserved may provide shelter, food, and breeding areas, Big Waters Land Trust's strategy focuses on landscape-scale conservation through the Florida Wildlife Corridor. Large, connected landscapes are functional landscapes. They support natural processes like storage of rainfall and floodwaters, and they permit the implementation of rejuvenating prescribed fires. Within the context of wildlife habitat, connected landscapes mean that wildlife can move through the landscape, enabling them to locate genetically unrelated breeding partners, to gather scattered resources to complete complex life cycles, to flee localized disasters, and to respond to changing climatic conditions. Within the Florida Wildlife Corridor, Big Waters Land Trust also enhances and restores degraded lands, in order to optimize wildlife habitat. Practices such as prescribed fire and reforestation transform degraded landscapes into quality wildlife habitat. Within the corridor, additional emphasis is placed on preserving and restoring imperiled habitat patches for rare species such as Florida scrub jay. Outside of the corridor, coastal marshes, mangroves, and tidal creeks are emphasized, in order to provide habitat for species that are not benefitted by the corridor, which is an inland feature.

Coastal Resiliency

Coastal lands are our first line of defense against rising seas and intensifying storms. As sea levels rise, coastal marshes—vital ecosystems that buffer storm surges, filter pollutants, and provide wildlife habitat—must migrate inland to survive. However, if development blocks their movement, then this habitat is lost, increasing flooding and storm damage. Protecting and restoring coastal marsh migration corridors is essential to ensuring these natural defenses remain intact.

When hurricanes and storms strike, conserved coastal lands absorb storm surges, reduce erosion, and lessen the impact on communities. Wetlands and natural floodplains act as sponges, soaking up excess water and protecting homes and infrastructure. Without these buffers, storm damage increases, leading to costly rebuilding efforts and greater risks to human life.

By conserving coastal marshes, we safeguard biodiversity, fisheries, and recreational opportunities that drive local economies. Coastal marshes are home to species of conservation concern, such as the Pine Island rice rat (*Oryzomys palustris* ssp. p*lanirostris*) and the ornate diamondback terrapin *(Malaclemys terrapin macrospilota*). Healthy coastal ecosystems also support commercial and recreational fishing, provide nursery grounds for marine life, and offer spaces for recreation. Investing in coastal land protection is an investment in safety, resilience, and sustainability.

Sustainable Agriculture

Farmland is more than just open space—it is the foundation of our food system, rural economies, and the Florida Wildlife Corridor. Yet, every year, millions of acres of agricultural land are lost to development, threatening our ability to produce food locally, which helps Floridians have food in times of transportation disruptions like storms, and keeps the price of food down due to less transportation costs. Protecting working farmland also ensures that future generations can continue to grow healthy food, honor cultural heritage, and create new opportunities for future employment and economic development.

Sustainable agriculture depends on healthy soils, clean water, and intact ecosystems. Conserving farmland helps preserve these critical resources, supports regenerative practices, and reduces pressure to expand farming into forests and wetlands. During hurricanes, ranchlands and farmlands keep the entire community safe by storing tremendous amounts of floodwater. Agricultural lands also act as carbon sinks, helping to mitigate climate change. Enhancing farmland with agricultural Best Management Practices, or BMPs, is a common-sense approach to sustainability. BMPs can increase the productivity of the land, while reducing costs and mitigating the long-term degradation of soil and water quality. Furthermore, BMPs may also increase natural resource values, including clean water and wildlife habitat, while maintaining a similar level of productivity. Big Waters Land Trust actively promotes the use of BMPs on agricultural lands and advocates for funding programs that will support farmers by paying for BMP implementation.

Access for All

Access to open spaces is essential for physical health, mental well-being, and community connection. Yet, as development spreads, natural areas are disappearing, limiting opportunities for people to experience nature, exercise, and find respite from daily life. Protecting land ensures that everyone—regardless of background or location—has access to parks, trails, and wild spaces.

Conserved lands provide places for hiking, biking, fishing, and gathering with family and friends. They also serve as outdoor classrooms, offering children and adults the chance to connect with nature, learn about the environment, and develop a lifelong appreciation for conservation.

Beyond land protection, access to existing open spaces can be further increased by adding amenities such as shade, sidewalks, benches, bus stops, and bike racks. Such enhancements can create friendly and usable spaces out of even the harshest urban conditions.

In addition to recreation, open spaces provide clean air and water, buffer communities from storm surge and flooding, and bolster, support, or even drive local economies through tourism and outdoor recreation business.

Carbon Sequestration

In the fight against climate change, nature offers one of the most effective solutions: carbon storage. Forests, wetlands, grasslands, and farmlands act as carbon sinks, absorbing and storing vast amounts of carbon dioxide from the atmosphere. Protecting, enhancing, and restoring these landscapes is essential to stabilizing our climate, safeguarding biodiversity, and securing a livable future.

When land is developed or degraded, stored carbon is released, accelerating climate change. By conserving intact ecosystems and enhancing degraded lands, we can prevent emissions while enhancing the ability of nature to capture carbon. Activities such as reforestation, wetland hydrological restoration, and agricultural Best Management Practices can significantly increase carbon storage. Studies show that common-sense, natural climate solutions could provide over a third of the emissions reductions needed to meet global climate targets.

Goals and Metrics

Our overarching, six-part goal encapsulates our six Conservation Values by completing the goal statement "to protect, enhance, and restore lands that…":

Thus, our goal is to protect, enhance, and restore lands that:

1. Ensure clean drinking water supply;
2. Support native wildlife species and biodiversity;
3. Increase community resilience to natural disasters;
4. Practice sustainable agriculture[1];
5. Increase access to open spaces for all people; and
6. Store carbon naturally.

Progress toward these goals is measured by specific metrics. Within Project Implementation Plans and Annual Work Plans, Big Waters Land Trust will create specific objectives, and select specific metrics to measure success from a list of approved metrics found in this Plan. These objectives and metrics will be published along with progress toward completion.

Our Conservation Values, Goals, and Metrics are shown in the table below. Conservation Values are listed in the order of Big Waters Land Trust's strategic emphasis, with clean water as the most important value, and carbon sequestration the least important. While Big Waters Land Trust will address all Conservation Values, this strategic emphasis provides focus and clarity to our work.

Conservation Values	Protect, enhance and restore lands that:	Metrics
Clean Water	Ensure clean drinking water supply	*Acres enhanced *% of watershed enhanced *Acres conserved *%of watershed conserved

[1] The term sustainable agriculture (U.S. Code Title 7, Section 3103) means an integrated system of plant and animal production practices having a site-specific application that will over the long-term:

- Satisfy human food and fiber needs.
- Enhance environmental quality and the natural resource base upon which the agriculture economy depends.
- Make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls.
- Sustain the economic viability of farm operations.
- Enhance the quality of life for farmers and society as a whole

Conservation Values	Protect, enhance and restore lands that:	Metrics
Imperiled Species	Support native wildlife species and biodiversity	*Acres of habitat conserved *Miles of corridor created *Number of populations conserved, per target species *Acres enhanced *number of trees planted *number of all plants planted
Coastal Resiliency	Increase community resilience to natural disasters	*Acres conserved within high sea level rise (SLR) risk focus areas *Linear feet of shoreline conserved within high SLR risk focus areas
Sustainable Agriculture	Practice sustainable agriculture	*Acres conserved of sustainable agriculture (as defined by USDA) *Number of producers who conserve their land with BWLT *Acres enrolled in target Best Management Practices (BMPs) as a result of BWLT activity *Number of producers who enroll in target BMPs as a result of BWLT activity *Number of Historically Underserved (HU)** producers who conserve their land with Land Trust *Number of HU** producers who enroll in target BMPs as a result of BWLT activity
Access for all	Increase access to open spaces	*Number of parks created or enhanced within high-priority park need census blocks *Linear feet of trail/path/sidewalk created or enhanced within high-priority park need census blocks *Number of trees planted within low tree equity score census blocks
Carbon Sequestration	Store carbon naturally	*Acres conserved in high carbon focus areas *Metric tons of CO2 equivalent conserved (using published estimated values) *Metric tons CO2 emissions avoided

Focus Areas Overview

Big Waters Land Trust directs its conservation efforts toward Focus Areas, which are geographic regions with high concentrations of conservation values and significant development risk. Using our six conservation values—Clean Water, Imperiled Species, Coastal Resiliency, Sustainable Agriculture, Access for All, and Carbon Sequestration—we identified locations where conservation action will have the greatest long-term impact.

Focus Areas serve multiple purposes:

- Strategic Conservation Planning – They help us prioritize landscapes where protecting, restoring, or enhancing land will achieve multiple conservation goals.
- Goal Setting and Measuring Progress – We can define specific conservation objectives within each Focus Area, such as protecting a percentage of land over a set timeframe, and track progress against these goals.
- Community Engagement and Outreach – Focus Areas provide a clear framework for communicating with the public, funders, elected officials, and conservation partners about our work.

While our work prioritizes Focus Areas, we remain open to conservation opportunities outside of these areas, responding to landowner interest and unique conservation opportunities on a case-by-case basis.

Thus, clear Focus Areas direct our work, increase transparency, and clarify for all stakeholders—staff, board, donors, elected officials, and community—where resources will have the largest impact for people and nature.

Detailed Analysis

Our Focus Areas are grounded in ecological and social science research, geospatial data, and GIS analysis (See Appendix 1 for metadata and methodology). The selection process began with a GIS decision model that integrated 12 core data layers to map our conservation values across the seven-county region at the HUC12 sub-watershed level[2]. This analysis identified 24 priority sub-watersheds with the highest relative resource values and risk of development. These selected areas were then grouped into nine Focus Areas representing recognizable geographies and communities. To further refine our conservation strategy, we conducted a parcel-level analysis within each Focus Area, identifying specific properties that present conservation opportunities. These parcels were evaluated for common landownership, potential partnerships, and alignment with our conservation tools and mission.

[2] HUC stands for Hydrologic Unit Code, and HUCs are a nationwide standard that assigns a boundary, name, and number to every watershed in the country. HUC12 sub-watersheds are a common type of watershed boundary for conservation planning. While the size of HUC12s varies with topography, hydrology, and land use patterns, the HUC12 sub-watersheds within Big Waters Land Trust's service area average about 30 square miles.

Balanced Approach

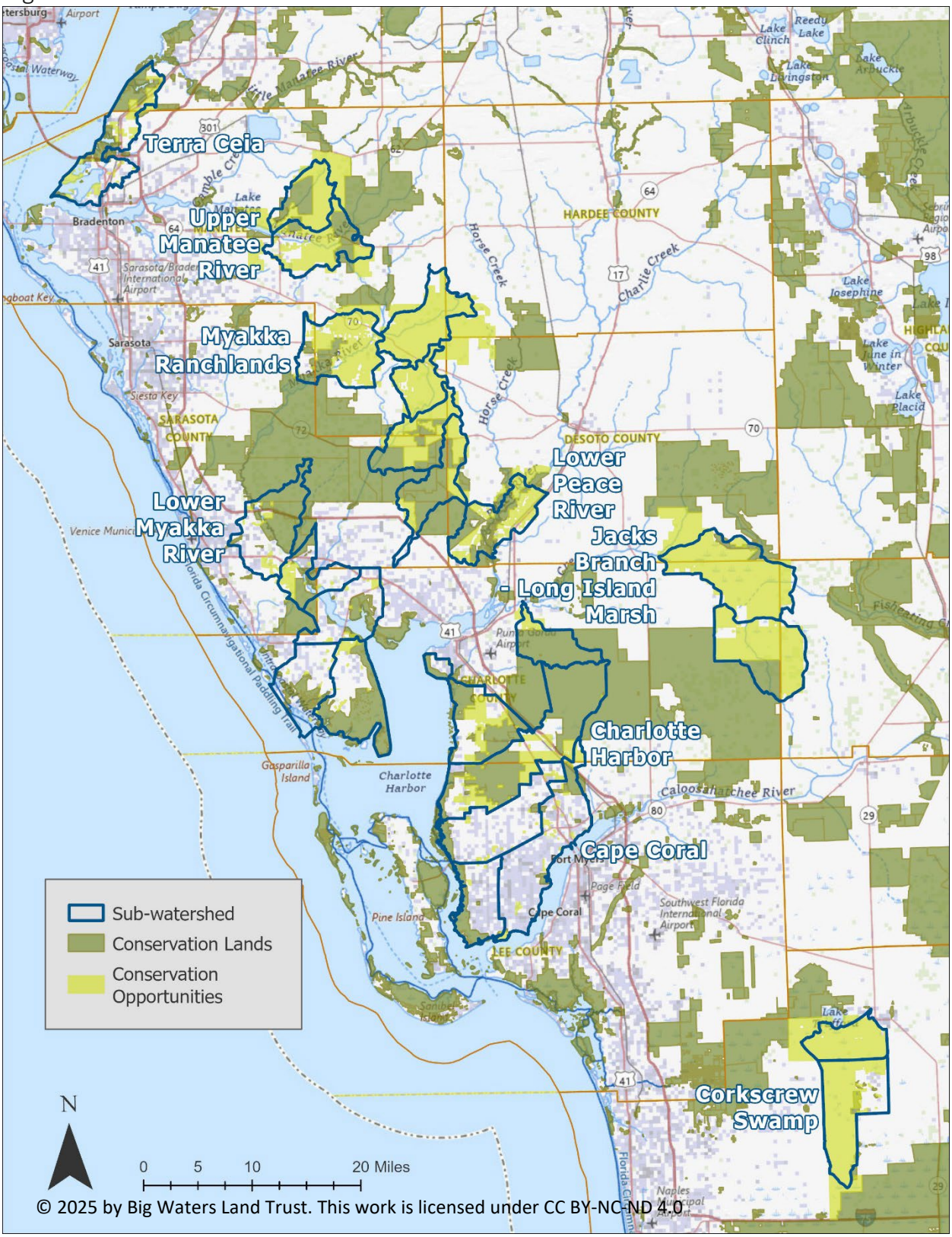
This Plan balances broad-scale conservation planning with fine-scale project implementation. The Focus Areas provide a strategic framework for communicating and measuring progress towards our Conservation Values, while the HUC12 and parcel analyses support on-the-ground execution.

While some conservation plans focus on identifying the most critical individual parcels, this approach often overlooks key factors, such as landowner interest, partnerships, and funding opportunities. Conservation success depends not only on ecological importance but also on community engagement and landowner willingness. Thus, for plan execution, staff will utilize the HUC12 and parcel analyses for community-scale project planning that optimizes landowner partnerships, funding, and our Conservation Values. These fine-scale aspects of our conservation plan, including parcel-level data, are not published to respect landowner privacy and confidential information.

This balance of broad- and fine-scale approaches allows for clearer messaging while maintaining the scientific integrity of our planning. The table below summarizes the nine Focus Areas, their associated HUC12 sub-watersheds, and their primary conservation values.

Focus Area	Number of HUC12 watersheds within Focus Area	Primary Conservation Value(s)
Terra Ceia	1	Coastal Marshes Carbon Sequestration
Upper Manatee River	2	Habitat/connectivity Drinking Water/clean water Sustainable Ag
Myakka Ranchlands	5	Habitat/connectivity Drinking Water/clean water Sustainable Ag
Lower Myakka River	3	Coastal Marshes Carbon Sequestration
Lower Peace River	1	Coastal Marshes Drinking Water/clean water Carbon Sequestration
Charlotte Harbor	5	Coastal Marshes Carbon Sequestration Habitat/connectivity
Jacks Branch-Long Island Marsh	2	Habitat/connectivity Drinking Water/clean water Sustainable Ag
Cape Coral	3	Access for all
Corkscrew Swamp	2	Habitat/connectivity Carbon Sequestration
Total	**24**	

Big Waters Land Trust Focus Areas



Focus Areas by Conservation Value

Big Waters Land Trust's portfolio of Focus Areas is carefully crafted to address each organizational Conservation Value. This section summarizes how each Conservation Value is served by strategically selected Focus Areas. Following this section are detailed profiles for each Focus Area. This way, whether the reader is interested in a certain Conservation Value, or a certain geographic area, they can understand where we are working and most importantly, why.

Clean Water

Big Waters Land Trust's strategic response to water quality concerns is a science-based water conservation strategy, designed to preserve 70% or more of the headwater sources of surface-drinking-water supplies[3]. Big Waters Land Trust targets three focus areas to preserve the most important sources of surface drinking water in SW Florida: Myakka Ranchlands, Jacks Branch-Long Island Marsh, and Upper Manatee River.

In addition to drinking water, Big Waters Land Trust is strategically focused on preserving clean water within first-order tidal creeks that provide essential habitat for juvenile tarpon and snook. While water quality within the wider estuary is driven by factors beyond the scope of this conservation plan – namely, wastewater treatment and regional development patterns – land preservation surrounding tidal creeks may significantly preserve these areas as refugia and nursery habitat. Big Waters Land Trust selects the focus areas of Cape Coral, Charlotte Harbor, and Terra Ceia to help preserve tidal creeks.

Imperiled Species

Big Waters Land Trust's response to biodiversity losses is a strategic focus on preserving, restoring and enhancing large landscapes within the Florida Wildlife Corridor, with an emphasis on lands containing intact natural habitats that support rare and endemic species, such as Florida scrub jay.

Big Waters Land Trust targets focus areas that will conserve both terrestrial and coastal/aquatic biodiversity. Three focus areas emphasize terrestrial biodiversity, with a combination of panther corridors and imperiled habitats: Upper Manatee River, Jacks Branch-Long Island Marsh, and Corkscrew Swamp. Balancing these upland areas, four coastal focus areas are selected to preserve the Charlotte Harbor National Estuary: Charlotte Harbor, Lower Myakka, Lower Peace River, and Cape Coral. These provide coastal marsh migration corridors and areas for estuary expansion during sea level rise. They also support rich biodiversity and buffer federally designated Critical Habitat for three federally listed species: Florida manatee (*Trichechus manatus latirostris*), smalltooth sawfish (*Pristis pectinata*), and Florida bonneted bat (*Eumops floridanus*).

Coastal Resiliency

Big Waters Land Trust is strategically focused on mitigating the threats of coastal storm surge, flooding, and sea level rise, through conservation of coastal marsh migration corridors. The coastal focus areas of Terra Ceia, Lower Myakka River, and Charlotte Harbor are selected both for their risk-profile and

[3] Open Space Institute. 2024. Protecting Forests for Clean Water: Findings from a 10-year initiative to promote best practices across the land and conservation field. 21 pp. https://www.openspaceinstitute.org/research/protecting-forests-clean-water

adaptive capacity. Here, GIS analysis shows concentrations of uplands adjacent to low-lying coastal marshes. Conserving these vulnerable, low-lying areas, along with adjacent upland areas, will allow marshes and mangroves to protect their inland areas from storm surge, as well as permit marshes to migrate upslope as sea levels rise.

Sustainable Agriculture

Big Waters Land Trust's private landowner partners are vital stewards of Florida's heritage, economy, wildlife, and clean water. Big Waters Land Trust supports farmers within the focus areas of Myakka Ranchlands, Upper Manatee River, and Corkscrew Swamp, where large tracts of pastureland, row crops, and citrus are common. These farms balance productive agricultural use with important wetlands, grasslands, and forests that sustain water quality and support wildlife.

Access for All

Big Waters Land Trust's approach to increasing open space access is to focus on communities where access to public parks and canopy shade is most needed, relative to demographic factors like population size. Strategically, Big Waters Land Trust elevates Cape Coral as a focus area, where investments in additional parks and shade are most likely to reach the greatest number of people.

Carbon Sequestration

Big Waters Land Trust has selected four focus areas for their co-occurrence of high carbon storage and other conservation values: Lower Peace River, Lower Myakka River, Charlotte Harbor, and Corkscrew Swamp. Within the Big Waters Land Trust service area, carbon sequestration and storage generally increase southward, driven by increasing coverage of wetland soils - which hold more carbon than sandy uplands - and increasing acreage of hardwood and cypress trees - which hold more carbon than pine forests. In addition, coastal focus areas such as Terra Ceia and Charlotte Harbor contain mangroves, seagrasses, and salt marshes that are known to store more carbon than uplands. These focus areas were selected in part for their carbon storage potential.

Focus Area Detailed Profiles

Terra Ceia

The Terra Ceia Focus Area consists of the Cockroach Bay-Terra Ceia Bay frontal sub-watershed in Manatee and Hillsborough Counties. This area drains into Terra Ceia and Cockroach Bay, which are part of Tampa Bay, a National Estuary. These bays support extensive seagrass beds, mangrove forests, and salt marshes that serve as critical nurseries for fish, shellfish, and other wildlife.

This focus area was specifically created in order to enhance coastal resilience. Its upland areas adjacent to coastal wetlands provide opportunities for coastal marshes to migrate upslope in response to rising sea levels, sustaining habitats in the face of climate change. Furthermore, such areas are vulnerable to storm surge and their conservation will reduce total property damage.

Additionally, the area's natural habitats have notable carbon sequestration potential, as mangroves and salt marshes store significant amounts of carbon, helping to mitigate climate change. These habitats also provide flood protection to nearby communities by buffering storm surges and absorbing excess water during heavy rainfall events. Finally, conserving first-order (headwater) tidal creeks within this watershed will preserve essential habitat for juvenile tarpon and snook.

The opportunity parcels identified in the Terra Ceia focus area span 5,617 acres of privately-owned land, divided among 39 landowners. As development pressures increase in the region, conservation efforts in this area are essential to preserve its ecological integrity, safeguard water quality, and enhance resilience to environmental challenges.

Terra Ceia Focus Area

Terra Ceia Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Cockroach Bay-Terra Ceia Bay Frontal
Water Quality	% Natural Land Cover	40.1
	% Headwater Streams	42.3
	Index of Importance to Surface Drinking Water Supply	0.0
Habitat Value	% Biodiversity	7.0
	% Wildlife Corridor	0.0
	% Scrub Jay Habitat	0.1
Sustainable Agriculture	% Agricultural Lands	11.6
	% Citrus BMP Enrolled	1.30
Access For All	Index of Low Tree Equity	4.5
	Index of Park Access Need	0.0
Coastal Resilience	% Coastal Marsh Migration Area	11.3
Carbon Sequestration	Index of Total Potential Carbon Storage	13.0
Risk of Development	% Projected Developed Area	54.5

Terra Ceia Selected Parcels Summary

Total acres of selected parcels	5617
Number of selected parcels	60
Average parcel acreage	91
Max parcel acreage	724
Number of homestead parcels (% of total)	1 (2%)
Total acres homestead parcels	29
Total just value of selected parcels	$101,580,292
Just value per acre	$18,084

Terra Ceia Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	0	0.0%
Residential property (multi-family, retirement homes)	0	0.0%
Non-homestead agricultural and other use-valued property	3696	65.8%
Vacant and miscellaneous residential	253	4.5%
Non-agricultural acreage and other undeveloped parcels	1639	29.2%
Homestead Agricultural	29	0.5%

Terra Ceia Selected Parcels Landowner Summary

Number of unique landowners	39
Number of homestead landowners (% of total)	1 (3%)
Number of Florida-based landowners (% of total)	33 (84%)
Average acres owned	144
Max acres owned	970
Max number of parcels owned	6

Upper Manatee River

The Upper Manatee River Focus Area encompasses the Corbit Branch and Gilley Creek sub-watersheds in Manatee County. These sub-watersheds form critical headwaters to the Lake Manatee Reservoir, a key freshwater system that provides drinking water to the surrounding region and supports diverse aquatic and riparian ecosystems downstream.

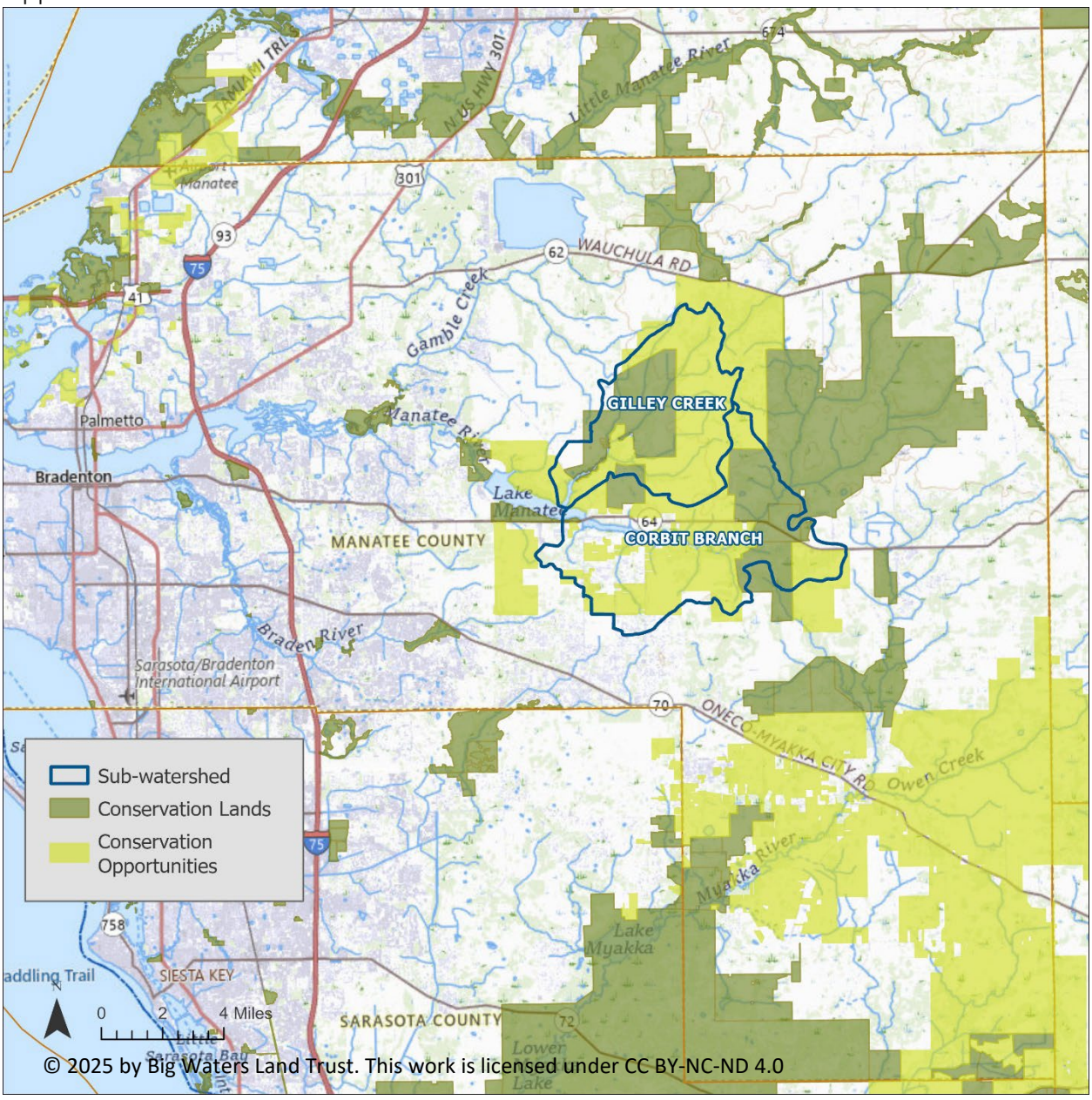
This focus area is notable for its extensive agricultural lands, which form a mosaic of pastures and citrus groves surrounding natural wetlands, scrub, and upland forests. Conserving lands in the Upper Manatee River Focus Area is crucial for protecting clean drinking water, and preservation and land management strategies may reduce nutrient runoff and maintain hydrologic balance. Intact wetlands within this area provide essential flood protection and groundwater recharge, helping to sustain the flow of the Manatee River and downstream estuarine systems.

The area is also notable as a (currently) undeveloped corridor connecting Edward Chance Preserve and Duette Preserve. Within this corridor are critical scrub habitats that are essential to protecting the M4 sub-population of Florida scrub jay (*Aphelocoma coerulescens*), located in eastern Manatee County. Modeling shows that this population is at risk of extirpation over the 100-year time frame unless additional scrub habitats are preserved and managed appropriately. Furthermore, of all the scrub jay populations within Big Waters Land Trust's service area, the M4 sub-population is the largest and has the greatest chance of long-term survival. Big Waters Land Trust's efforts in scrub jay protection may be best invested here. Florida scrub jay serves as an umbrella species for other biodiversity, including gopher tortoise. Of all the sub-watersheds studied by our GIS model, the Gilley Creek sub-watershed contains one of the highest estimates of biodiversity.

The Upper Manatee River Focus Area also faces a high risk of development, with increasing pressure to transition agricultural and natural lands to residential and urban uses. This risk underscores the urgency of conservation efforts to promote sustainable agriculture and protect habitat connectivity, water resources, and the region's rural character.

The Focus Area spans 31,868 acres of privately-owned land, divided among 44 landowners. By partnering with landowners in this area, conservation efforts aim to protect drinking water supplies, support sustainable agricultural, and enhance biodiversity, ensuring the resilience of the Manatee River watershed in the face of rapid development.

Upper Manatee River Focus Area



Upper Manatee River Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Corbit Branch	Gilley Creek
Water Quality	% Natural Land Cover	39.2	44.9
	% Headwater Streams	100.0	100.0
	Index of Importance to Surface Drinking Water Supply	99.0	99.0
Habitat Value	% Biodiversity	9.5	25.0
	% Wildlife Corridor	0.0	0.0
	% Scrub Jay Habitat	1.8	0.6
Sustainable Agriculture	% Agricultural Lands	53.0	54.4
	% Citrus BMP Enrolled	10.60	6.70
Access For All	Index of Low Tree Equity	0.0	0.0
	Index of Park Access Need	0.0	0.0
Coastal Resilience	% Coastal Marsh Migration Area	0.0	0.0
Carbon Sequestration	Index of Total Potential Carbon Storage	12.7	4.2
Risk of Development	% Projected Developed Area	73.8	67.9

Upper Manatee River Selected Parcels Summary

Total acres of selected parcels	31868
Number of selected parcels	94
Average parcel acreage	339
Max parcel acreage	2343
Number of homestead parcels (% of total)	8 (9%)
Total acres homestead parcels	266
Total just value of selected parcels	$199,276,846
Just value per acre	$6,253

Upper Manatee River Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	21	0.1%
Residential property (multi-family, retirement homes)	50	0.2%
Non-homestead agricultural and other use-valued property	30040	94.3%
Vacant and miscellaneous residential	0	0.0%
Non-agricultural acreage and other undeveloped parcels	1491	4.7%
Homestead Agricultural	266	0.8%

Upper Manatee River Selected Parcels Landowner Summary

Number of unique landowners	44
Number of homestead landowners (% of total)	8 (18%)
Number of Florida-based landowners (% of total)	43 (98%)
Average acres owned	724
Max acres owned	14599
Max number of parcels owned	37

Myakka Ranchlands

The Myakka Ranchlands Focus Area includes a cluster of five sub-watersheds in eastern Manatee and Sarasota Counties that reflect a diverse and ecologically significant landscape. This area supports high biodiversity, including Florida scrub jay habitats that are part of the M4 sub-population of scrub jays (see Upper Manatee River Focus Area description). Conservation efforts, including wildlife corridors and wetland restoration projects, aim to preserve the region's ecological integrity. The wet pastureland landscapes are notable for their crested caracara, sandhill cranes, and large flocks of wading birds. Importantly, the focus area expands the "Myakka Island" of conservation lands, which is currently about 130,000 acres in size. The Myakka Island is a critical core reserve of biodiversity located within the Florida Wildlife Corridor, and an Important Bird Landscape, as defined by National Audubon Society.

The Owen Creek and Tatum Sawgrass Swamp sub-watersheds feature a mix of forested and marshy wetlands, crucial for water filtration, flood water storage, and wetland biodiversity. They flow into the Myakka River, Myakka River State Park and ultimately Charlotte Harbor.

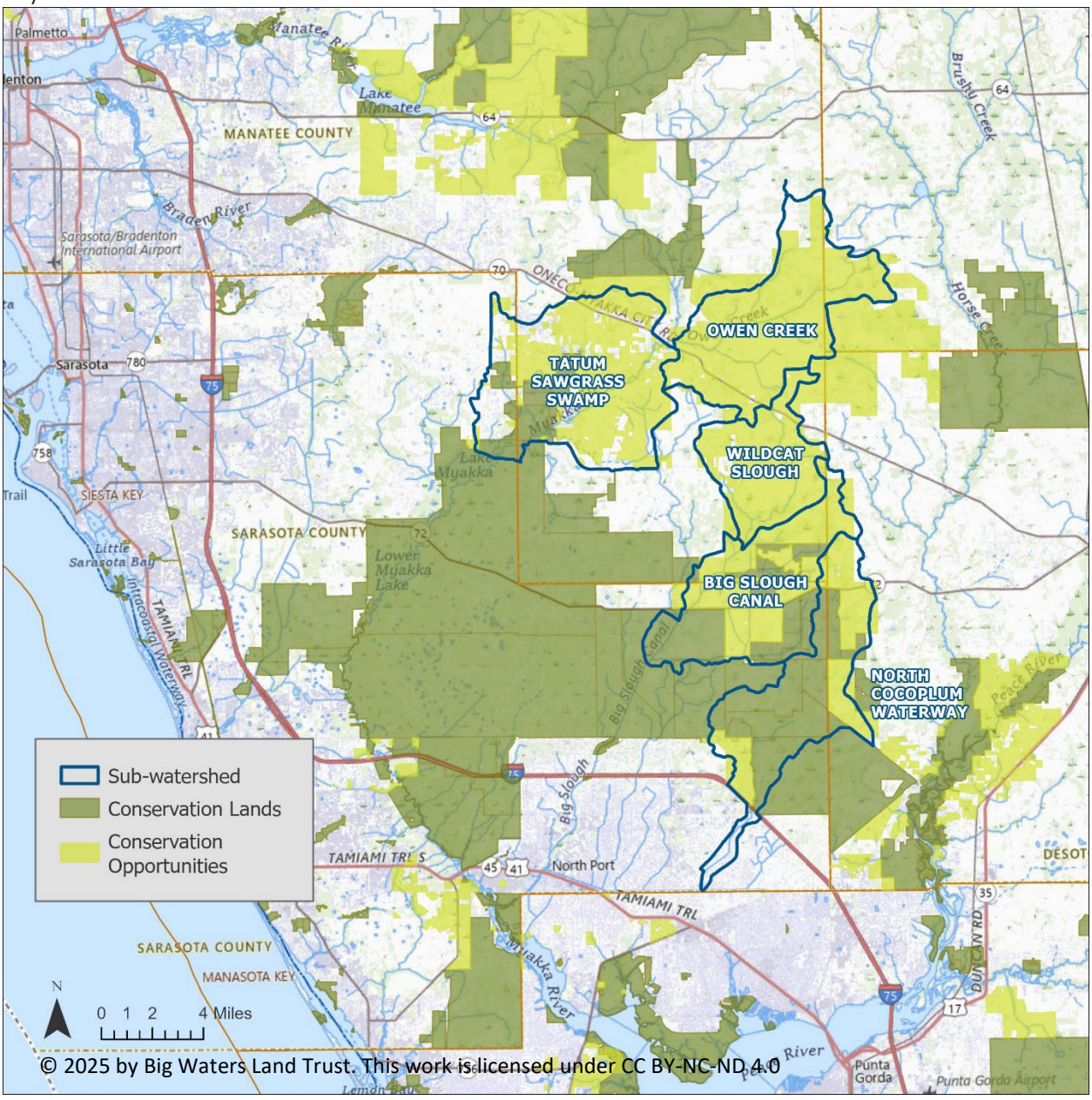
The North Cocoplum Waterway, Wildcat Slough, and Big Slough Canal sub-watersheds flow southward, largely bypassing the Myakka River on their way directly to Charlotte Harbor via North Port. All three sub-watersheds ultimately collect and drain through Myakkahatchee Creek, where North Port draws a portion of their drinking water.

Land use across this focus area is dominated by a mosaic of pastureland and cattle ranches, interspersed with remnant natural areas. Wildcat Slough, Owen Creek, and Tatum Sawgrass Swamp are at particular risk of development. The Owen Creek sub-watershed is calculated by our GIS model as the most at-risk of development of all 136 sub-watersheds studied.

Individual privately-owned parcels totaling almost 80,000 acres have been identified for potential partnership from 196 unique landowners.

Together, these HUC12 watersheds form a vital part of the Myakka River ecosystem, balancing agricultural productivity with the need to sustain biodiversity and flood storage in Florida's rapidly developing Gulf Coast region.

Myakka Ranchlands Focus Area



Myakka Ranchlands Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Big Slough Canal	Wildcat Slough	Owen Creek	Tatum Sawgrass Swamp	North Cocoplum Waterway
Water Quality	% Natural Land Cover	45.5	36.5	29.9	37.0	70.7
	% Headwater Streams	93.6	100.0	100.0	82.1	99.9
	Index of Importance to Surface Drinking Water Supply	87.8	86.7	0.0	0.0	82.7
Habitat Value	% Biodiversity	8.6	14.1	21.4	4.7	10.5
	% Wildlife Corridor	0.0	0.0	0.0	0.0	0.0
	% Scrub Jay Habitat	0.0	3.8	8.9	4.3	0.0
Sustainable Agriculture	% Agricultural Lands	53.2	60.3	68.6	50.8	23.4
	% Citrus BMP Enrolled	6.80	4.00	2.20	3.40	2.10
Access For All	Index of Low Tree Equity	0.0	0.0	0.0	0.0	0.0
	Index of Park Access Need	0.0	0.0	0.0	0.0	0.0
Coastal Resilience	% Coastal Marsh Migration Area	0.0	0.0	0.0	0.0	0.0
Carbon Sequestration	Index of Total Potential Carbon Storage	6.8	8.6	5.8	11.6	9.3
Risk of Development	% Projected Developed Area	38.3	87.0	100.0	72.3	30.6

Myakka Ranchlands Selected Parcels Summary

Total Acres	79663
Number of parcels	377
Average parcel acreage	211
Max parcel acreage	2472
Number of homestead parcels (% of total)	49 (13%)
Total acres homestead parcels	2828
Total just value	$637,866,221
Average just value	$8,007

Myakka Ranchlands Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condo, co-ops, and mobile homes)	521	0.7%
Residential property (multi-family, retirement homes)	226	0.3%
Non-homestead agricultural and other use-valued property	73846	92.7%
Vacant and miscellaneous residential	30	0.0%
Non-agricultural acreage and other undeveloped parcels	2569	3.2%
Homestead Agricultural	2471	3.1%

Myakka Ranchlands Selected Parcels Landowner Summary

Number of unique landowners	196
Number of homestead landowners (% of total)	49 (25%)
Number of Florida-based landowners (% of total)	185 (94%)
Average acres owned	406
Max acres owned	8928
Max number of parcels owned	22

Lower Myakka

The Lower Myakka River Focus Area includes three sub-watersheds: Curry Creek, Lower Myakka River, and Tippecanoe Bay, located in Sarasota and Charlotte Counties. These sub-watersheds contain the Myakka River, a designated Wild and Scenic River known for its ecological significance and scenic beauty. This lower reach of the river flows through Deer Prairie Creek Preserve and Myakka State Forest and into Charlotte Harbor, supporting a productive estuary.

The area is home to extensive wetlands and riparian habitats that provide critical ecosystem services such as flood protection and wildlife corridors along the riparian corridor of the Myakka River. The Myakka supports high biodiversity and is designated Critical Habitat for the federally threatened Florida manatee (*Trichechus manatus latirostris*). The Lower Myakka River sub-watershed contains the only natural warm-water winter refuge for manatees within Big Waters Land Trust's service area, Warm Mineral Springs Creek.

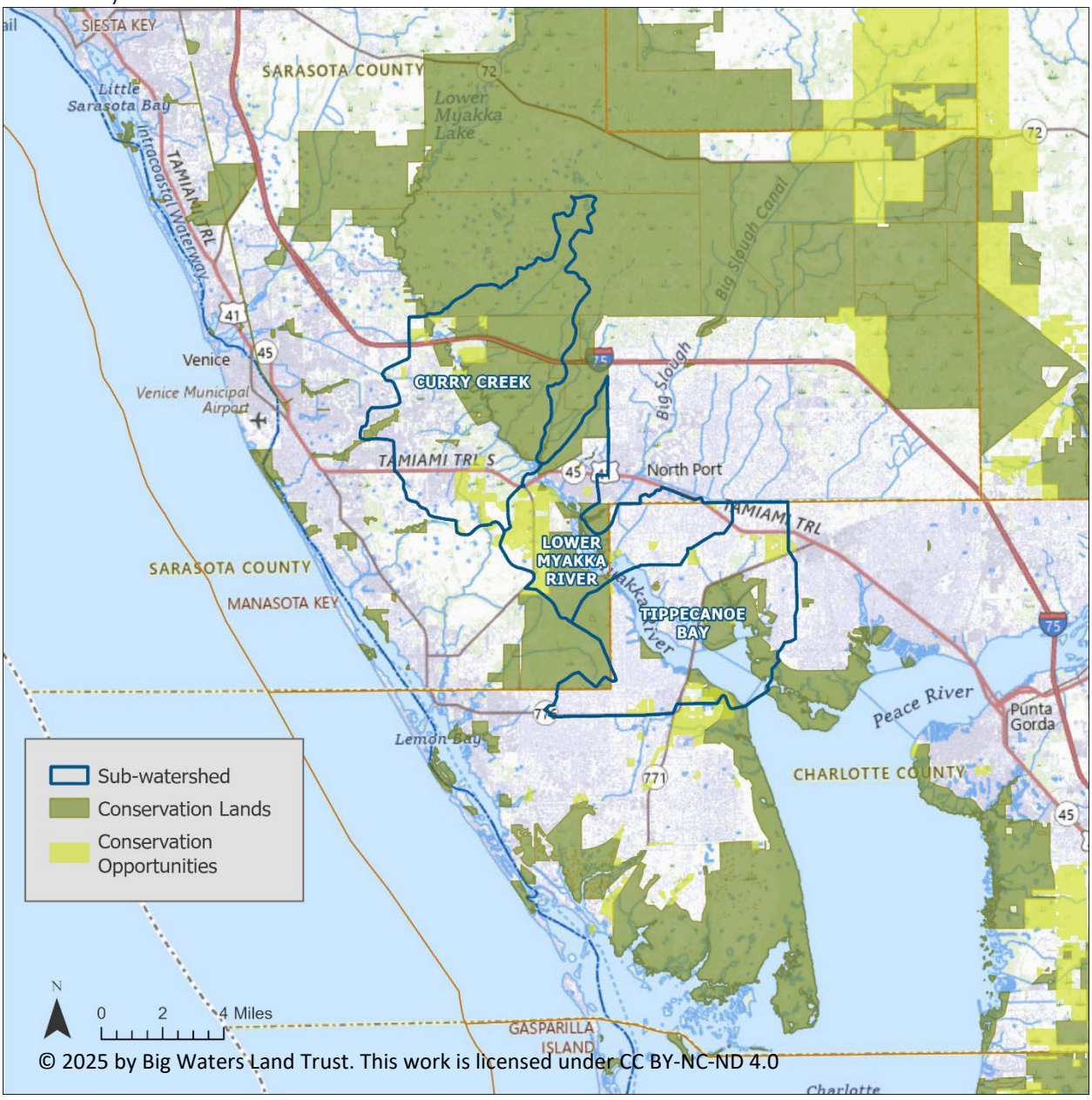
These lands also support coastal resilience by offering areas for marsh migration in response to rising sea levels, preserving habitat for aquatic and terrestrial species over the long term. The sub-watersheds of Lower Myakka River and Curry Creek have the highest concentration of marsh migration corridors within Big Waters Land Trust's service area, outside of certain sub-watersheds in the Everglades, and were strategically prioritized over Everglades conservation due to their high risk of development.

Charlotte Harbor is the largest and most intact coastal ecosystem within Big Waters Land Trust's service area. The Lower Myakka River Focus Area, along with Charlotte Harbor, Lower Peace River, and Cape Coral Focus Areas, surround and protect the harbor and its tributaries. Importantly, as sea levels rise the most productive part of the estuary – the turbidity maximum zone – will be pushed upstream in each of the rivers, where the river channel narrows. This means that over time, the footprint of the area will shrink, and the estuary will shrink and become less productive, unless adjacent land can be flooded, permitting the river channel to widen naturally and become the new parts of the estuary. In this way, it is crucial to preserve the lands along the mouths of the three rivers – Myakka, Peace, and Caloosahatchee.

The floodplains of the Lower Myakka River help mitigate the impacts of storms and protect downstream water quality. Conservation of first-order tidal creeks within this watershed will preserve essential habitat for juvenile tarpon and snook.

The Lower Myakka River Focus Area encompasses 5,032 acres of privately-owned land, divided among 32 landowners. Targeted conservation efforts here aim to safeguard vital wetland systems, protect the ecological integrity of the Wild and Scenic Myakka River, and enhance the region's resilience to future environmental challenges.

Lower Myakka Focus Area



Lower Myakka Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Curry Creek	Lower Myakka River	Tippecanoe Bay
Water Quality	% Natural Land Cover	67.1	51.5	28.8
	% Headwater Streams	81.7	73.9	52.8
	Index of Importance to Surface Drinking Water Supply	0.0	89.8	0.0
Habitat Value	% Biodiversity	17.4	22.3	8.4
	% Wildlife Corridor	0.0	0.0	0.0
	% Scrub Jay Habitat	0.0	3.1	5.2
Sustainable Agriculture	% Agricultural Lands	4.0	3.0	0.2
	% Citrus BMP Enrolled	0.00	0.00	0.00
Access For All	Index of Low Tree Equity	0.0	9.0	0.0
	Index of Park Access Need	2.0	6.0	0.0
Coastal Resilience	% Coastal Marsh Migration Area	17.8	25.1	8.7
Carbon Sequestration	Index of Total Potential Carbon Storage	5.1	4.1	4.8
Risk of Development	% Projected Developed Area	49.9	67.4	61.5

Lower Myakka Selected Parcels Summary

Total acres of selected parcels	5032
Number of selected parcels	63
Average parcel acreage	76
Max parcel acreage	379
Number of homestead parcels (% of total)	5 (8%)
Total acres homestead parcels	160
Total just value of selected parcels	$362,314,755
Just value per acre	$72,002

Lower Myakka Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	25	0.5%
Residential property (multi-family, retirement homes)	0	0.0%
Non-homestead agricultural and other use-valued property	1607	31.9%
Vacant and miscellaneous residential	26	0.5%
Non-agricultural acreage and other undeveloped parcels	3239	64.4%
Homestead Agricultural	135	2.7%

Lower Myakka Selected Parcels Landowner Summary

Number of unique landowners	32
Number of homestead landowners (% of total)	5 (16%)
Number of Florida-based landowners (% of total)	23 (72%)
Average acres owned	157
Max acres owned	2009
Max number of parcels owned	18

Lower Peace

The Lower Peace River Focus Area encompasses the Lettuce Lake sub-watershed in DeSoto County. This area is part of the lower reaches of the Peace River, a critical freshwater resource for the region that flows into Charlotte Harbor. The Peace River and its floodplains are vital for sustaining freshwater ecosystems, supporting biodiversity, and providing essential ecosystem services such as water filtration and flood mitigation. This Focus Area was created because the wetlands and forests in this region capture and store significant amounts of carbon, contributing to climate change mitigation efforts. The Lettuce Lake sub-watershed contains the third-highest concentration of carbon stores in the Big Waters Land Trust service area, behind the area around the Corkscrew Swamp focus area, and the Trout Creek-Catfish Creek Frontal sub-watershed (part of the Charlotte Harbor Focus Area).

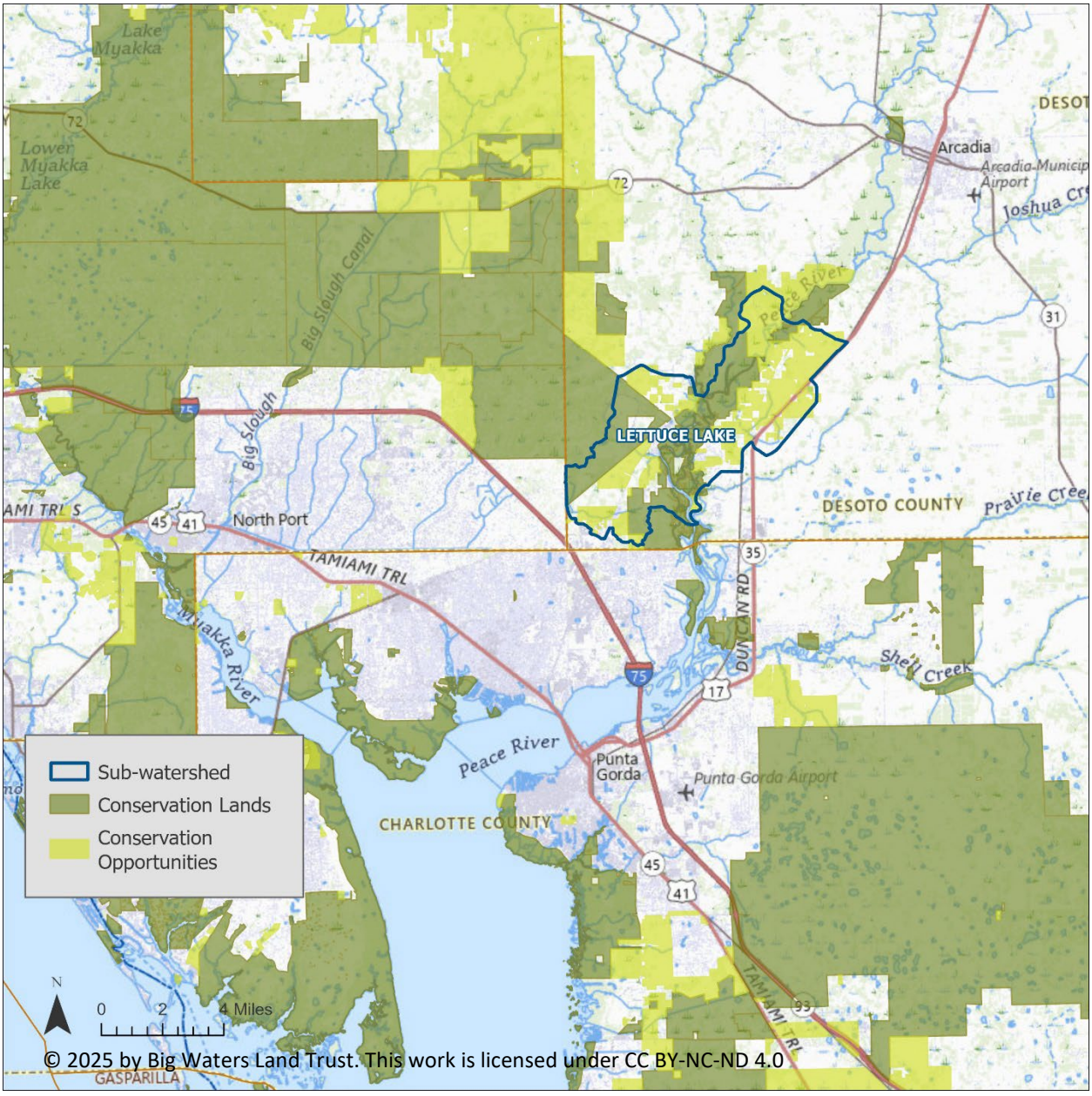
The Lower Peace River focus area is particularly notable as the location of RV Griffin Reserve and its reservoir storing water from the Peace River that supplies the Peace River Manasota Regional Water Supply Authority. However, land conservation within this sub-watershed will not contribute significantly to drinking water quality, due to the massive size of the Peace River watershed that precedes it.

Regarding wildlife habitat, this focus area is like the Lower Myakka River in that it provides important riparian habitat for wading birds, fish, and other wildlife, supporting the ecological diversity of the Charlotte Harbor watershed. Additionally, the Lower Peace River is designated Critical Habitat for the federally endangered Florida bonneted bat (*Eumops floridanus*). Finally, conserving first-order tidal creeks within this watershed will preserve essential habitat for juvenile tarpon and snook.

This focus area faces increasing pressure from development, which is expanding eastward and northward up Kings Highway and Highway 17, threatening natural habitats and hydrologic functions. Conservation efforts aim to protect these floodplains and wetlands that are so important to biodiversity and carbon storage.

The Focus Area includes 14,225 acres of privately-owned land, divided among 70 landowners. Strategic land preservation and restoration in this area offer an opportunity to enhance biodiversity, store carbon, and ensure the long-term health of the Peace River watershed.

Lower Peace Focus Area



Lower Peace Conservation Value Scores

Scores listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Lettuce Lake
Water Quality	% Natural Land Cover	53.3
	% Headwater Streams	66.8
	Index of Importance to Surface Drinking Water Supply	64.3
Habitat Value	% Biodiversity	15.0
	% Wildlife Corridor	0.0
	% Scrub Jay Habitat	0.6
Sustainable Agriculture	% Agricultural Lands	32.4
	% Citrus BMP Enrolled	6.70
Access For All	Index of Low Tree Equity	1.5
	Index of Park Access Need	0.0
Coastal Resilience	% Coastal Marsh Migration Area	8.1
Carbon Sequestration	Index of Total Potential Carbon Storage	25.5
Risk of Development	% Projected Developed Area	44.5

Lower Peace Selected Parcels Summary

Total acres of selected parcels	14225
Number of selected parcels	133
Average parcel acreage	90
Max parcel acreage	472
Number of homestead parcels (% of total)	11 (8%)
Total acres homestead parcels	350
Total just value of selected parcels	$97,788,636
Just value per acre	$6,874

Lower Peace Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	149	1.0%
Residential property (multi-family, retirement homes)	0	0.0%
Non-homestead agricultural and other use-valued property	11766	82.7%
Vacant and miscellaneous residential	0	0.0%
Non-agricultural acreage and other undeveloped parcels	2055	14.4%
Homestead Agricultural	255	1.8%

Lower Peace Selected Parcels Landowner Summary

Number of unique landowners	70
Number of homestead landowners (% of total)	11 (16%)
Number of Florida-based landowners (% of total)	61 (87%)
Average acres owned	203
Max acres owned	3226
Max number of parcels owned	14

Jacks Branch-Long Island Marsh

The Jacks Branch-Long Island Marsh Focus Area contains significant natural land cover and agricultural landscapes that help preserve connectivity between ecosystems and maintain essential ecosystem services. The open space in this area supports agricultural uses while also functioning as a wildlife corridor, offering habitat for a variety of species and maintaining ecological balance.

The Jacks Branch-Long Island Marsh Focus Area includes the Jacks Branch and Long Island Marsh sub-watersheds in eastern Charlotte County. These sub-watersheds were selected as focus areas due to their dual value as sources of public drinking water, and as designated priority-one segments of the Florida Wildlife Corridor.

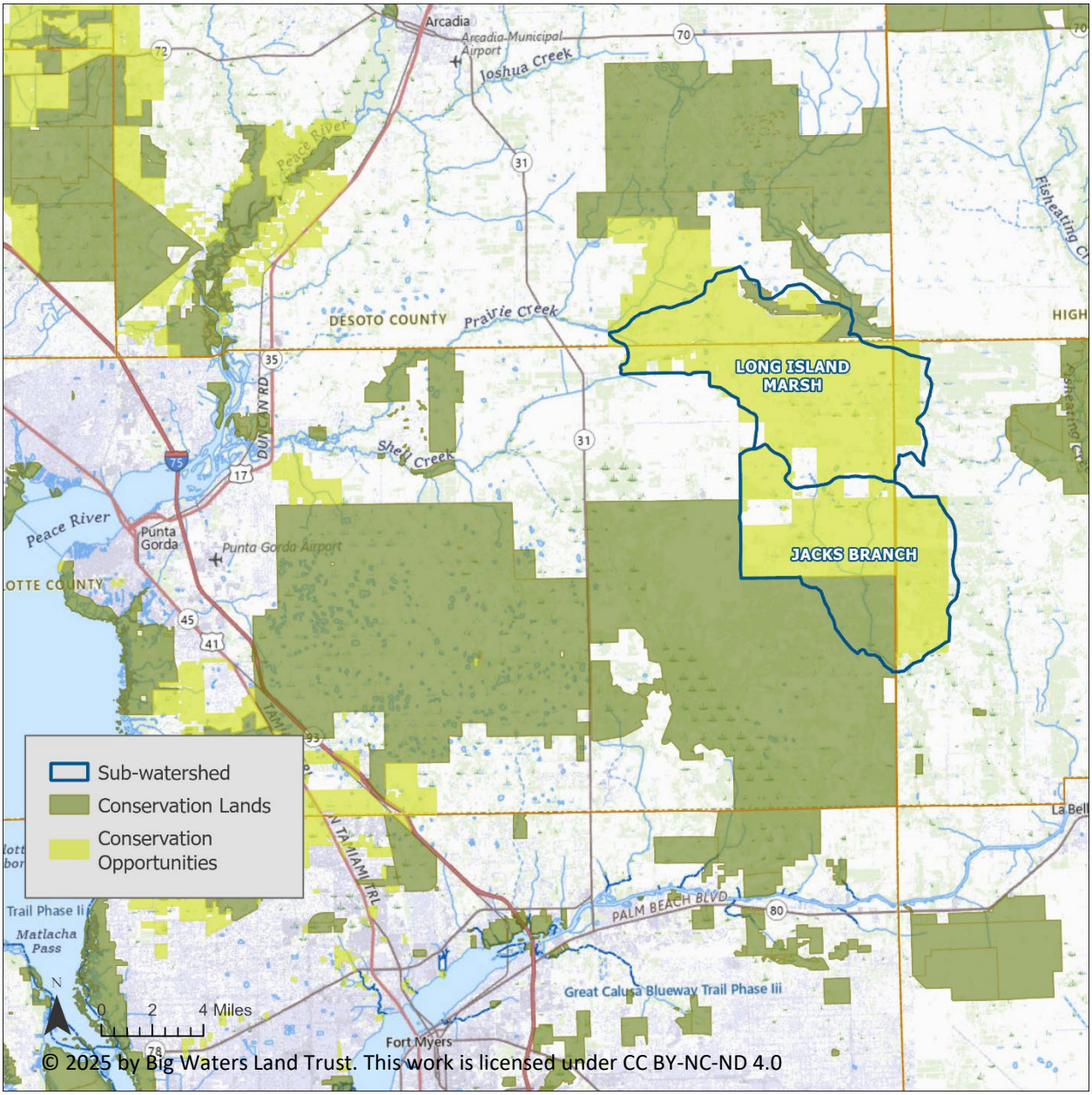
This focus area is particularly important for protecting surface drinking water supplies, as its wetlands and streams play a key role in filtering and replenishing water within two separate public drinking water supplies. Specifically, Jacks Branch flows southward into Caloosahatchee River and the public drinking water supply at the Olga Water Treatment Plant, and Long Island Marsh flows westward into Prairie Creek and the Shell Creek/Punta Gorda Water Treatment Plant.

Additionally, the focus area was selected for its priority-one ranking in the Florida Wildlife Corridor. The only other location in Big Waters Land Trust's service area that contains priority-one corridors is the Corkscrew Swamp Focus Area. This corridor connects Babcock-Webb Wildlife Management Area to the Bright Hour Watershed Conservation Easement. Within this area are large stretches of natural land cover including dry prairie, an imperiled natural community type.

While recognizing these important Conservation Values, it is also important to recognize that this focus area contains the least development pressure of any focus area selected. This makes land more affordable, but less threatened.

The Jacks Branch-Long Island Marsh Focus Area spans 60,860 acres of privately-owned land, distributed among 44 landowners. Conservation efforts here aim to prevent fragmentation of natural and agricultural lands, preserve wildlife corridors, and sustain clean public drinking water. Strategic land acquisitions in this area can safeguard these benefits while allowing sustainable agricultural practices to thrive.

Jacks Branch-Long Island Marsh Focus Area



Jacks Branch-Long Island Marsh Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Jacks Branch	Long Island Marsh
Water Quality	% Natural Land Cover	65.0	40.0
	% Headwater Streams	100.0	100.0
	Index of Importance to Surface Drinking Water Supply	92.9	78.6
Habitat Value	% Biodiversity	53.9	37.4
	% Wildlife Corridor	50.7	47.1
	% Scrub Jay Habitat	0.0	1.0
Sustainable Agriculture	% Agricultural Lands	33.6	58.5
	% Citrus BMP Enrolled	7.50	15.30
Access For All	Index of Low Tree Equity	0.0	0.0
	Index of Park Access Need	0.0	0.0
Coastal Resilience	% Coastal Marsh Migration Area	0.0	0.0
Carbon Sequestration	Index of Total Potential Carbon Storage	5.5	3.8
Risk of Development	% Projected Developed Area	18.0	22.6

Jacks Branch-Long Island Marsh Selected Parcels Summary

Total acres of selected parcels	60860
Number of selected parcels	166
Average parcel acreage	364
Max parcel acreage	2513
Number of homestead parcels (% of total)	2 (1%)
Total acres homestead parcels	43
Total just value of selected parcels	$329,222,479
Just value per acre	$5,410

Jacks Branch-Long Island Marsh Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	20	0.0%
Residential property (multi-family, retirement homes)	0	0.0%
Non-homestead agricultural and other use-valued property	60568	99.5%
Vacant and miscellaneous residential	0	0.0%
Non-agricultural acreage and other undeveloped parcels	229	0.4%
Homestead Agricultural	43	0.1%

Jacks Branch-Long Island Marsh Selected Parcels Landowner Summary

Number of unique landowners	44
Number of homestead landowners (% of total)	2 (5%)
Number of Florida-based landowners (% of total)	39 (89%)
Average acres owned	1383
Max acres owned	10533
Max number of parcels owned	17

Charlotte Harbor

The Charlotte Harbor Focus Area spans five sub-watersheds in western Charlotte County: two on the western side of Charlotte Harbor (Trout Creek-Catfish Creek Frontal, and Buck Creek-Coral Creek Frontal) and three on the eastern side (Myrtle Slough-Webb Wildlife Management Area, Lower Alligator Creek Frontal, and Yucca Pen Creek Frontal). These sub-watersheds drain into Charlotte Harbor, a designated National Estuary that supports extensive mangroves, seagrass beds, and tidal creeks vital for fish and wildlife habitat.

This focus area was created in two parts, and then conceptually linked together. The first part is the west wall of Charlotte Harbor, where Big Waters Land Trust selected the sub-watersheds based upon the GIS model showing high potential for coastal marsh migration corridors, as well as high carbon storage potential. Specifically, the sub-watershed Trout Creek-Catfish Creek Frontal contains the second-highest concentration of carbon reserves within Big Waters Land Trust's service area, behind the Everglades area (see Corkscrew Swamp Focus Area).

The second part is the east wall of Charlotte Harbor, centered around Babcock-Webb Wildlife Management Area. These are the lands of the Charlotte Harbor Flatwoods Initiative, a multi-partner conservation priority, with an extensive acquisition and restoration plan, and two designated Florida Forever project areas: Charlotte Harbor Flatwoods and Charlotte Harbor Estuary. These are the only coastal watersheds in Big Waters Land Trust's service area, outside of the Everglades, that could be protected extensively from the uplands to the estuary, resulting in the majority of the watershed being protected. The watersheds' tidal creeks are essential nursery habitat for fish and are part of the Charlotte Harbor Vital Tidal Creeks acquisition and restoration plan.

The Charlotte Harbor focus area contains an unusually high concentration of federally designated Critical Habitats for federally listed species. They are designated Critical Habitat for Florida bonneted bat (*Eumops floridanus*), and Matlacha Pass is designated Critical Habitat for Florida manatee (*Trichechus manatus latirostris*) and smalltooth sawfish (*Pristis pectinata*). Other noteworthy species include the Pine Island rice rat (*Oryzomys palustris planirostris*) and beautiful pawpaw (*Deeringothamnus rugellii*).

Charlotte Harbor is the largest and most intact coastal ecosystem within Big Waters Land Trust's service area. The Charlotte Harbor Focus Area, along with the Lower Myakka River, Lower Peace River, and Cape Coral Focus Areas, surround and protect the harbor and its tributaries. Importantly, as sea levels rise, the most productive part of the estuary – the turbidity maximum zone – will be pushed upstream in each of the rivers, where the river channel narrows. This means that over time, the footprint of the area will shrink, and the estuary will shrink and become less productive, unless adjacent land can be flooded, permitting the river channel to widen naturally and become the new parts of the estuary. In this way, it is crucial to preserve the lands along the mouths of the three rivers – Myakka, Peace, and Caloosahatchee.

The Charlotte Harbor Focus Area encompasses 18,022 acres of privately-owned land, divided among 97 landowners. Strategic land acquisition and conservation partnerships in this area offer a unique opportunity to conserve vital coastal ecosystems and bolster resilience to future environmental changes.

Charlotte Harbor Focus Area

Charlotte Harbor Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	Myrtle Slough-Webb WMA	Lower Alligator Creek Frontal	Yucca Pen Creek Frontal	Trout Creek-Catfish Creek Frontal	Buck Creek-Coral Creek Frontal
Water Quality	% Natural Land Cover	92.1	65.5	82.5	65.4	25.6
	% Headwater Streams	99.9	87.1	25.7	53.9	75.5
	Index of Importance to Surface Drinking Water Supply	0.0	0.0	0.0	0.0	0.0
Habitat Value	% Biodiversity	6.2	22.1	14.5	2.0	6.0
	% Wildlife Corridor	0.0	0.0	0.0	0.0	0.0
	% Scrub Jay Habitat	0.3	0.0	0.1	0.2	2.1
Sustainable Agriculture	% Agricultural Lands	6.6	8.5	5.2	0.3	0.5
	% Citrus BMP Enrolled	0.00	0.00	0.00	0.00	0.00
Access For All	Index of Low Tree Equity	0.0	6.0	3.0	0.0	1.5
	Index of Park Access Need	0.0	0.0	2.0	0.0	6.0
Coastal Resilience	% Coastal Marsh Migration Area	0.9	6.7	2.8	9.5	8.6
Carbon Sequestration	Index of Total Potential Carbon Storage	1.1	16.9	2.7	28.8	6.0
Risk of Development	% Projected Developed Area	12.9	53.1	36.0	35.9	68.6

Charlotte Harbor Selected Parcels Summary

Total acres of selected parcels	18022
Number of selected parcels	194
Average parcel acreage	92
Max parcel acreage	670
Number of homestead parcels (% of total)	4 (2%)
Total acres homestead parcels	119
Total just value of selected parcels	$233,783,627
Just value per acre	$12,972

Charlotte Harbor Selected Parcels by Land Use

Land Use	Acres	Percent

Residential property (single-family, condos, co-ops, and mobile homes)	0	0.0%
Residential property (multi-family, retirement homes)	0	0.0%
Non-homestead agricultural and other use-valued property	13038	72.3%
Vacant and miscellaneous residential	471	2.6%
Non-agricultural acreage and other undeveloped parcels	4394	24.4%
Homestead Agricultural	119	0.7%

Charlotte Harbor Selected Parcels Landowner Summary

Number of unique landowners	97
Number of homestead landowners (% of total)	4 (4%)
Number of Florida-based landowners (% of total)	78 (80%)
Average acres owned	186
Max acres owned	1731
Max number of parcels owned	11

Cape Coral

The Cape Coral Focus Area encompasses the North Matlacha Pass Frontal, South Matlacha Pass Frontal, and Yellow Fever Creek-Four Mile Cove sub-watersheds in Lee County. Conservation in Cape Coral aims to enhance access to green spaces and recreational areas, benefiting local communities that currently have limited tree canopy and parks within a 10-minute walking distance.

The City of Cape Coral, one of the largest and fastest-growing cities in Southwest Florida, is home to over 200,000 residents. Despite boasting more than 52 public parks, the community has one of the lowest park-to-population ratios in the region, along with limited tree canopy shade and an extensive canal network that disrupts walking between neighborhoods. According to the Trust for Public Land ParkServe model, an estimated 84% of residents do not live within a 10-minute walking distance of a park, as compared to just 19% in the City of Sarasota. Part of Cape Coral, defined as the Yellow-Fever Creek Fourmile Cove sub-watershed, contains the greatest concentration of underserved areas within Big Waters Land Trust's service area: 256 census blocks. By way of comparison, the next greatest need is in Ft Myers - the Orange Creek-Whiskey Creek Frontal sub-watershed – with just 156 underserved census blocks, and the third-greatest need is Philippee Creek [sic] sub-watershed, with 122 underserved census blocks (less than half that of Cape Coral). What this model suggests is that investments in park and shade access are most-likely to benefit the greatest number of people if they are invested in Cape Coral, all other things being equal.

At the same time, these watersheds drain into Charlotte Harbor, a designated National Estuary that supports mangroves, seagrass beds, essential nursery habitats for fish and shellfish, and designated Critical Habitat for federally listed species, smalltooth sawfish (*Pristis pectinata*) and Florida manatee (*Trichechus manatus latirostris*). Despite dense urban and suburban development dominating the area, the fringing coastal wetlands are protected, so upland areas remain a priority for conservation due to their role in providing coastal marsh migration corridors. Similarly, undeveloped tidal creeks remain a conservation priority. Finally, all upland areas, developed or natural, may serve as critical resting areas for neo-tropical migratory birds. Due to limited opportunities, there is urgency to conserve and restore remaining natural spaces.

The Cape Coral Focus Area includes 3,536 acres of privately-owned land divided among 52 landowners. Land acquisition here offers an opportunity to balance urban growth with the need for accessible green spaces, improved water quality, and the preservation of critical coastal ecosystems.

Cape Coral Focus Area

Cape Coral Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	North Matlacha Pass Frontal	South Matlacha Pass Frontal	Yellow Fever Creek-Fourmile Cove
Water Quality	% Natural Land Cover	14.7	32.2	19.1
	% Headwater Streams	97.0	42.9	65.5
	Index of Importance to Surface Drinking Water Supply	0.0	0.0	0.0
Habitat Value	% Biodiversity	3.8	1.6	7.5
	% Wildlife Corridor	0.0	0.0	0.0
	% Scrub Jay Habitat	0.0	0.0	0.2
Sustainable Agriculture	% Agricultural Lands	0.3	0.0	2.1
	% Citrus BMP Enrolled	0.00	0.00	0.00
Access For All	Index of Low Tree Equity	28.4	31.3	100.0
	Index of Park Access Need	0.0	8.0	100.0
Coastal Resilience	% Coastal Marsh Migration Area	1.4	4.2	2.8
Carbon Sequestration	Index of Total Potential Carbon Storage	4.9	23.8	4.2
Risk of Development	% Projected Developed Area	91.4	69.4	89.9

Cape Coral Selected Parcels Summary

Total acres of selected parcels	3536
Number of selected parcels	75
Average parcel acreage	47
Max parcel acreage	621
Number of homestead parcels (% of total)	1 (1%)
Total acres homestead parcels	9
Total just value of selected parcels	$165 M
Just value per acre	$46,689

Cape Coral Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	5.5	0.1%
Residential property (multi-family, retirement homes)	123	30.8%
Non-homestead agricultural and other use-valued property	1331	0.6%
Vacant and miscellaneous residential	208	21.1%
Non-agricultural acreage and other undeveloped parcels	1867	8.3%
Homestead Agricultural	0	0.0%

Cape Coral Selected Parcels Landowner Summary

Number of unique landowners	52
Number of homestead landowners (% of total)	1 (2%)
Number of Florida-based landowners	35 (67%)
Average acres owned	68
Max acres owned	701
Max number of parcels owned	10

Corkscrew Swamp

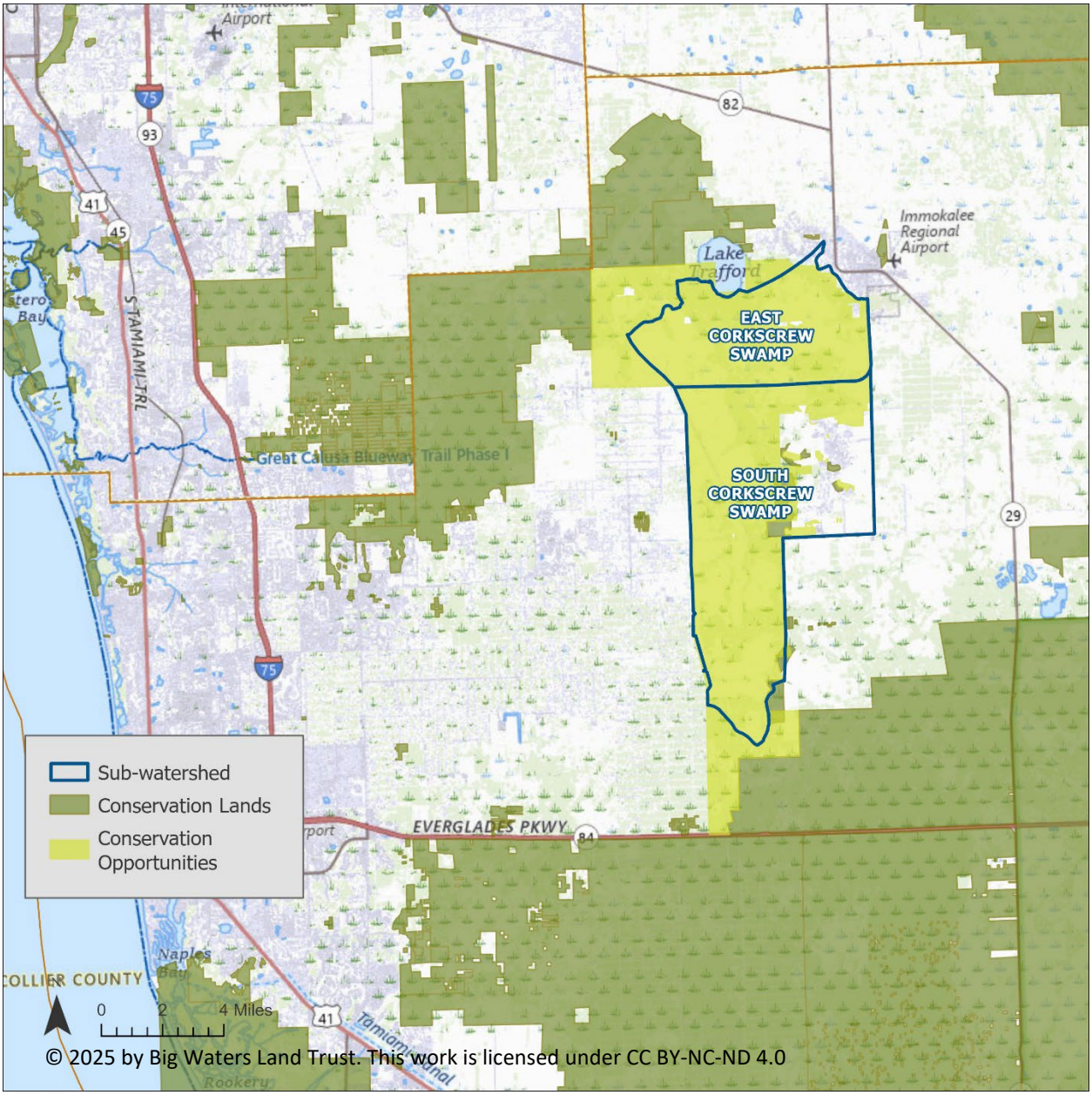
The Corkscrew Swamp Focus Area includes the East Corkscrew Swamp and South Corkscrew Swamp sub-watersheds in Collier County. These sub-watersheds are part of a vast wetland system that feeds into the Corkscrew Regional Ecosystem Watershed (CREW) and supports the Big Cypress Basin, a critical freshwater resource for Southwest Florida. The area contains extensive cypress swamps, marshes, and wet prairies that provide habitat for iconic species such as the wood stork and Florida panther.

This focus area was selected for the primary purposes of preserving priority-one corridors within the Florida Wildlife Corridor, as well as preserving natural carbon stores. Big Waters Land Trust's service area contains only two areas of priority-one corridors: the area around Jacks Branch-Long Island Marsh, and the area around this focus area. However, unlike Jacks Branch-Long Island Marsh, the Corkscrew Swamp is federally designated primary habitat for Florida panther.

Regarding carbon storage, the Everglades contains the greatest concentration of natural carbon storage within Big Waters Land Trust's service area; Big Waters Land Trust limited the Focus Area to the two sub-watersheds within the Everglades that are the most at-risk of development. Additionally, these sub-watersheds form a critical link between CREW and the Florida Panther National Wildlife Refuge, making it stand out from other parts of the Everglades.

The focus area spans 56,313 acres of privately-owned land, divided among 14 landowners. The area is largely undeveloped, but significant areas of citrus groves may make this area more vulnerable to future development. Strategic land conservation and restoration efforts can help prevent habitat loss, enhance water quality, and safeguard the region's freshwater resources. By conserving this area, we can sustain the ecological integrity of one of Southwest Florida's most important panther habitats and wetland systems.

Corkscrew Swamp Focus Area



Corkscrew Swamp Conservation Value Scores

Scores are listed for each Focus Area sub-watershed (HUC12) as Percent or Index 0 -100. See Appendix 1 for metadata and methods.

Conservation Value	Metric (0-100)	East Corkscrew Swamp	South Corkscrew Swamp
Water Quality	% Natural Land Cover	54.6	46.0
	% Headwater Streams	100.0	100.0
	Index of Importance to Surface Drinking Water Supply	0.0	60.2
Habitat Value	% Biodiversity	57.0	49.6
	% Wildlife Corridor	49.7	64.9
	% Scrub Jay Habitat	0.1	0.0
Sustainable Agriculture	% Agricultural Lands	41.9	46.4
	% Citrus BMP Enrolled	19.50	6.60
Access For All	Index of Low Tree Equity	6.0	0.0
	Index of Park Access Need	2.0	0.0
Coastal Resilience	% Coastal Marsh Migration Area	0.0	0.0
Carbon Sequestration	Index of Total Potential Carbon Storage	32.1	34.7
Risk of Development	% Projected Developed Area	45.1	55.1

Corkscrew Swamp Selected Parcels Summary

Total acres of selected parcels	56313
Number of selected parcels	142
Average parcel acreage	295
Max parcel acreage	8205
Number of homestead parcels (% of total)	0 (0%)
Total acres homestead parcels	0
Total just value of selected parcels	$329,305,644
Just value per acre	$5,848

Corkscrew Swamp Selected Parcels by Land Use

Land Use	Acres	Percent
Residential property (single-family, condos, co-ops, and mobile homes)	8363	14.9%
Residential property (multi-family, retirement homes)	0	0.0%
Non-homestead agricultural and other use-valued property	43044	76.4%
Vacant and miscellaneous residential	0	0.0%
Non-agricultural acreage and other undeveloped parcels	4906	8.7%
Homestead Agricultural		0.0%

Corkscrew Swamp Selected Parcels Landowner Summary

Number of unique landowners	14
Number of homestead landowners (% of total)	0 (0%)
Number of Florida-based landowners (% of total)	13 (93%)
Average acres owned	4022
Max acres owned	17087
Max number of parcels owned	63

Appendix 1 - GIS Methodology

Data Selection

The strategic analysis uses geospatial data and analysis with a Geographic Information System (GIS) model specifically calibrated to Big Waters Land Trust's Goals and Conservation Values. We compiled 80 relevant data sets from a variety of authoritative sources, including state and federal government entities, scientific research organizations, and other conservation groups. We evaluated and prioritized data sets for inclusion in the geospatial model that were deemed accurate and representative measures of the six conservation values and risk. Fifteen data sets were selected—12 core natural and community resource data layers and three data layers representing potential development risk (Table A-1). Four other relevant datasets were used in combination to remove areas from consideration.

Table A-1. Data layers included in the geospatial model that measure aspects of Big Waters Land Trust's core conservation values.

Resource Value	Data Name	Data Detail	Data Source	Date Updated	Download URL
Water Quality	Natural Land Cover	% of HUC12 area with natural land cover	EPA Watershed Index Online (WSIO) Indicator Data Library	April 2023	https://www.epa.gov/wsio/wsio-indicator-data-library
	Headwater Streams	% of HUC12 area draining into 1st, 2nd, or 3rd order streams	EPA Watershed Index Online (WSIO) Indicator Data Library	April 2023	https://www.epa.gov/wsio/wsio-indicator-data-library
	Surface Drinking Water Supply	Index of HUC12 importance to surface drinking water supply	US Forest Service Index of Surface Drinking Water Importance	August 2022	https://arc-gis-hub-home-arcgishub.hub.arcgis.com/datasets/usfs::surface-drinking-water-importance-forests-on-the-edge-feature-layer/about
Habitat and Wildlife	CLIP Biodiversity Index	% of HUC12 containing priority 1 and 2 biodiversity areas	Florida Natural Areas Inventory Critical Lands and Waters Identification Project (CLIP) 4.0	August 2016	https://www.fnai.org/services/clip
	Florida Ecological	% of HUC12 containing priority 1 corridor areas	University of Florida Center for Landscape	August 2021	https://conservation.dcp.ufl.edu/fegn/

Resource Value	Data Name	Data Detail	Data Source	Date Updated	Download URL
	Greenways Network		Conservation Planning		
	Scrub jay habitat	% of HUC12 containing potential scrub jay habitat	Big Waters Land Trust	2023	
Carbon Sequestration	Carbon Sequestration Potential	Index of HUC12 total potential carbon storage (soil & forest) 2050	Center for Resilient Conservation Science at The Nature Conservancy	August 2024	https://www.conservationgateway.org/ConservationPractices/ClimateChange/Pages/RCN-Downloads.aspx Data By Request to Analie Barnett https://tnc.app.box.com/s/bnc1ni0wo4ue433xi80bh6k92y24ppvw
Coastal Resilience	Resilient Coastal Sites	% of HUC12 area available for marsh migration with up to 6.5 ft of sea level rise	Center for Resilient Conservation Science at The Nature Conservancy	April 2020	https://www.conservationgateway.org/ConservationPractices/ClimateChange/Pages/RCN-Downloads.aspx Data by Request to Analie Barnett https://tnc.app.box.com/s/lptc0v6kjgar8alzorvinj1k5t1y8jvy
Access For All	Tree Equity Score	Index of number of census block groups within HUC12 with score <=69 (High Priority)	American Forests	August 2023	https://www.treeequityscore.org/methodology
	Park Access Need	Index of number of census block groups within HUC12 with Park Priority 1-3 and 10+minute walk	Trust for Public Lands	May 2024	https://www.tpl.org/park-data-downloads
Sustainable Agriculture	Agricultural Land Use	% of HUC12 area with agricultural land use	EPA Watershed Index Online (WSIO) Indicator Data Library	April 2023	https://www.epa.gov/wsio/wsio-indicator-data-library

Resource Value	Data Name	Data Detail	Data Source	Date Updated	Download URL
	Citrus opportunity	% of HUC12 area with citrus groves enrolled in BMP program	Florida Department of Agriculture and Consumer Services	February 2024	https://geodata.fdacs.gov/datasets/c371390bb1044f59a9f0ab92dd78cc99_0/explore
Risk of Development	Future Land Use – near term	CONUS land cover projected for 2030 under IPCC emissions scenario A1B	United States Geological Survey	September 2018	https://www.sciencebase.gov/catalog/item/5b96c2f9e4b0702d0e826f6d
	Future Land Use – long term	Sprawl scenario for developed lands in 2070	University of Florida Center for Landscape Conservation Planning	May 2023	https://fgdl.org/zips/metadata/xml/sl2070_sprawl_may23.xml
	Future Land Use – indeterminate	Florida future land use classifications by local governments	University of Florida Geoplan Center	April 2022	https://fgdl.org/zips/metadata/xml/flu_l2_2020_apr22.xml
Other	Protected lands	Florida conservation lands removed from selections	Florida Natural Areas Inventory	March 2024	https://www.fnai.org/publications/gis-data
	Phosphate Mine Risk	Conceptual phosphate mineable limit (Bone Valley)	Big Waters Land Trust	December 2019	
	Phosphate Mine Risk	Lands subject to mining regulations (mining lands)	Big Waters Land Trust	December 2019	
	Phosphate Mine Risk	Mosaic owned lands	Big Waters Land Trust	2021	

Model Building and Resource Analysis

We organized the hierarchal geospatial decision model around the six Conservation Values—clean water, imperiled species, coastal resiliency, sustainable agriculture, access for all, and carbon sequestration—with relevant subsets of data layers used to measure resource conservation value. We also evaluated risk of development using three data layers representative of near- and long-term growth and future land use projections.

Using GIS tools, data were transformed across a standard spatial scale (the HUC12 sub-watershed) and into a standard numerical scale (either percent (0-100) HUC12 area or an index (0-100) normalized to the study area). Thus, the geospatial decision model mapped our Conservation Values across the seven-county region at the HUC12 sub-watershed scale with standardized metrics indicating the highest relative resource values and risk of development (Appendix 2).

Focus Area Selection

Based upon the quantitative HUC12 metrics combined with field-based experience and knowledge of local conditions, staff selected 24 of the highest priority HUC12 sub-watersheds. These selected areas were then grouped into nine Focus Areas representing natural geographic clusters (Table A-2).

Table A-2. Focus Areas and included clusters of sub-watersheds (HUC12s).

Focus Area	HUC12	NAME
Cape Coral	31001030104	NORTH MATLACHA PASS FRONTAL
Cape Coral	31001030105	SOUTH MATLACHA PASS FRONTAL
Cape Coral	30902050603	YELLOW FEVER CREEK-FOURMILE COVE
Jacks Branch-Long Island Marsh	30902050403	JACKS BRANCH
Jacks Branch-Long Island Marsh	31001011004	LONG ISLAND MARSH
Charlotte Harbor	31001011105	MYRTLE SLOUGH-WEBB STATE WILDLIFE MANAGEMENT AREA
Charlotte Harbor	31001030102	LOWER ALLIGATOR CREEK FRONTAL
Charlotte Harbor	31001030103	YUCCA PEN CREEK FRONTAL
Charlotte Harbor	31001030201	TROUT CREEK-CATFISH CREEK FRONTAL
Charlotte Harbor	31002010303	BUCK CREEK-CORAL CREEK FRONTAL
Corkscrew Swamp	30902040203	EAST CORKSCREW SWAMP
Corkscrew Swamp	30902040401	SOUTH CORKSCREW SWAMP
Lower Myakka River	31001020303	CURRY CREEK
Lower Myakka River	31001020505	LOWER MYAKKA RIVER
Lower Myakka River	31001020506	TIPPECANOE BAY
Lower Peace River	31001010907	LETTUCE LAKE
Upper Manatee River	31002020103	CORBIT BRANCH
Upper Manatee River	31002020104	GILLEY CREEK
Myakka Ranchlands	31001020103	OWEN CREEK
Myakka Ranchlands	31001020202	TATUM SAWGRASS SWAMP
Myakka Ranchlands	31001020402	NORTH COCOPLUM WATERWAY
Myakka Ranchlands	31001020501	WILDCAT SLOUGH
Myakka Ranchlands	31001020503	BIG SLOUGH CANAL
Terra Ceia	31002060502	COCKROACH BAY-TERRA CEIA BAY FRONTAL

Parcel Selection

After using the geospatial decision model to narrow our geographic focus to the 24 HUC12 sub-watersheds in nine Focus Areas, we conducted parcel level analysis within these selected Focus Areas to identify opportunities for lands and landowners that are a good fit for our land protection tools and resources. Starting with all parcels in the 2024 Florida Department of Revenue Statewide property tax roll geodatabase (Table A-3), we *removed* all parcels meeting these criteria:

- Location: Beyond 100 feet of the boundary of the 24 selected HUC12 sub-watersheds
- Size: Less than 20 acres
- Conservation status: Already conserved (as listed in the Florida Natural Areas Inventory Florida Conservation Lands database or listed in the parcel database with a conservation easement or conservation value)
- Development status: Already developed (as listed in the parcel database with Base Strata Code: blank, 06, 07, 10, 11, 12, 13, 08). Six Base Strata Code categories of land uses were retained for analysis (Base Strata Code: 01, 02, 03, 04, 05, 09) (Appendix 3-B).

Then we added back select parcels outside but adjacent to HUC12 areas using visual inspection of the map layers and manual selection of parcels meeting these criteria:

- Adjacent to a preserve or a connection to a preserve
- Parcels that fill a hole within an area of selected parcels
- Outstanding amount of native ground cover (visual estimate)

Table A-3. Download and user information for statewide parcel geodatabase used for parcel analysis.

Data Name	Data Detail	Data Source	Date Updated	Download URL	User Guide and metadata
Statewide parcels	Property tax roll information provided annually by Florida's county property appraisers to FDOR	Florida Department of Revenue	August 2024	https://geodata.floridagio.gov/datasets/efa909d6b1c841d298b0a649e7f71cf2_1/explore	https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx

Parcel and Landowner Analysis

The selection of parcels was then exported for analysis. We used the AI open-source tool *OpenRefine Cluster Analysis* to resolve ambiguity of landowner names (e.g., variations in spelling and abbreviations, similarly named individuals and trusts, and similarly named corporate entities). Landowner names with a common mailing address were standardized manually when warranted (e.g., when multiple parcel owners in the same focus area were listed with the same mailing address (excluding P.O. Boxes)). Thus, we generated a landowner opportunity list for further outreach efforts. Landowner details include

number of parcels owned, total acreage owned, total homestead exempt value, and total just value (Appendix 5).

Excel Pivot Tables were used to generate summary statistics for selected parcels (Appendix 3) and unique landowners (Appendix 4), both overall and for each focus area including:

- Total acres of selected parcels
- Number of selected parcels
- Average parcel acreage
- Max parcel acreage
- Number of homestead parcels
- Total acres homestead parcels
- Total just value of selected parcels
- Just value per acre
- Total acres for each land use
- Number of unique landowners
- Number of homestead landowners
- Number of Florida-based landowners
- Average acres owned
- Max acres owned
- Max number of parcels owned

Appendix 2 – Watershed Scores

	Water Quality			Habitat Value			Sustainable Agriculture		Access For All		Coastal Resilience	Carbon Sequestration	Risk of Development
Focus Area Sub-watershed	% Natural Land Cover	% Headwater Streams	Index of Surface Drinking Water Supply	% Biodiversity	% Wildlife Corridor	% Scrub Jay Habitat	% Agricultural Lands	% Citrus BMP Enrolled	Index of Low Tree Equity	Index of Park Access Need	% Coastal Marsh Migration Area	Index of Total Potential Carbon Storage	% Projected Developed Area
Cape Coral													
North Matlacha Pass	15	**97**	0	2	0	0	0	0	**28**	0	1	5	**91**
South Matlacha Pass	32	43	0	8	0	0	0	0	**31**	**8**	4	**24**	**69**
Yellow Fever Creek – Fourmile Cove	19	66	0	4	0	0	2	0	**100**	**100**	3	4	**90**
Jacks Branch-Long Island Marsh													
Jacks Branch	**65**	**100**	**93**	**54**	**51**	0	34	8	0	0	0	6	18
Long Island Marsh	40	**100**	79	**37**	**47**	1	**58**	**15**	0	0	0	4	23
Charlotte Harbor													
Myrtle Slough-Webb WMA	**92**	**100**	0	6	0	0	7	0	0	0	1	1	13
Lower Alligator Creek	**65**	87	0	22	0	0	8	0	6	0	7	17	53
Yucca Pen Creek	**82**	26	0	15	0	0	5	0	3	2	3	3	36
Trout Creek-Catfish Creek	**65**	54	0	2	0	0	0	0	0	0	9	**29**	36
Buck Creek-Coral Creek	26	75	0	6	0	2	0	0	1	**6**	9	6	**69**

	Water Quality			Habitat Value			Sustainable Agriculture		Access For All		Coastal Resilience	Carbon Sequestration	Risk of Development
Focus Area Sub-watershed	% Natural Land Cover	% Headwater Streams	Index of Surface Drinking Water Supply	% Biodiversity	% Wildlife Corridor	% Scrub Jay Habitat	% Agricultural Lands	% Citrus BMP Enrolled	Index of Low Tree Equity	Index of Park Access Need	% Coastal Marsh Migration Area	Index of Total Potential Carbon Storage	% Projected Developed Area
Corkscrew Swamp													
East Corkscrew Swamp	55	**100**	0	**57**	**50**	0	42	**20**	6	2	0	**32**	45
South Corkscrew Swamp	46	**100**	60	**50**	**65**	0	46	7	0	0	0	**35**	55
Lower Myakka River													
Curry Creek	**67**	82	0	17	0	0	4	0	0	2	**18**	5	50
Lower Myakka River	51	74	**90**	22	0	3	3	0	9	**6**	**25**	4	**67**
Tippecanoe Bay	29	53	0	8	0	**5**	0	0	0	0	9	5	**62**
Lower Peace River													
Lettuce Lake	53	67	64	15	0	1	32	7	1	0	8	**26**	44
Upper Manatee River													
Corbit Branch	39	**100**	**99**	10	0	2	**53**	**11**	0	0	0	13	74
Gilley Creek	45	**100**	**99**	25	0	1	**54**	7	0	0	0	4	68
Myakka Ranchlands													
Owen Creek	30	**100**	0	21	0	**9**	**69**	2	0	0	0	6	**100**
Tatum Sawgrass Swamp	37	82	0	5	0	**4**	**51**	3	0	0	0	12	**72**
North Cocoplum Waterway	**71**	**100**	**83**	10	0	0	23	2	0	0	0	9	31
Wildcat Slough	36	**100**	**87**	14	0	4	**60**	4	0	0	0	9	**87**
Big Slough Canal	46	**94**	**88**	9	0	0	**53**	7	0	0	0	7	38

	Water Quality			Habitat Value			Sustainable Agriculture		Access For All		Coastal Resilience	Carbon Sequestration	Risk of Development
Focus Area Sub-watershed	% Natural Land Cover	% Headwater Streams	Index of Surface Drinking Water Supply	% Biodiversity	% Wildlife Corridor	% Scrub Jay Habitat	% Agricultural Lands	% Citrus BMP Enrolled	Index of Low Tree Equity	Index of Park Access Need	% Coastal Marsh Migration Area	Index of Total Potential Carbon Storage	% Projected Developed Area
Terra Ceia													
Cockroach Bay-Terra Ceia Bay	40	42	0	7	0	0	12	1	4	0	**11**	13	55

Appendix 3 – Selected Parcel Summary

A. Summary Stats	Cape Coral	Jacks Branch-Long Island Marsh	Charlotte Harbor	Corkscrew Swamp	Lower Myakka River	Lower Peace River	Upper Manatee River	Myakka Ranchlands	Terra Ceia	Overall
Total acres of selected parcels	3536	60860	18022	56313	5032	14225	31868	79663	5617	275136
Number of unique selected parcels	75	166	194	142	63	133	94	377	60	1304 *
Average parcel acreage	47	364	92	295	76	90	339	211	91	198
Max parcel acreage	621	2513	670	8205	379	472	2343	2472	724	8205
Number of homestead parcels	1	2	4	0	5	11	8	49	1	81
Total acres homestead parcels	9	43	119	0	160	350	266	2828	29	3804
Total just value of selected parcels	$165 M	$329 M	$234 M	$329 M	$362 M	$97.8 M	$199 M	$638 M	$102 M	$2.46 B
Just value per acre	$46,689	$5,410	$12,972	$5,848	$72,002	$6,874	$6,253	$8,007	$18,084	$8,927

* Total parcels in GIS selection = 1387 due to 51 parcels with multiple records.

B. Land Use (acres)	Cape Coral	Jacks Branch-Long Island Marsh	Charlotte Harbor	Corkscrew Swamp	Lower Myakka River	Lower Peace River	Upper Manatee River	Myakka Ranchlands	Terra Ceia	Overall
Residential property (single-family, condos, co-ops, and mobile homes)	5.5	20	0	8363	25	149	21	521	0	9104
Residential property (multi-family, retirement homes)	123	0	0	0	0	0	50	226	0	399
Non-homestead agricultural and other use-valued property	1331	60,568	13,038	43,044	1607	11,766	30,040	73,846	3696	23,8936
Vacant and miscellaneous residential	208	0	471	0	26	0	0	30	253	988
Non-agricultural acreage	1867	229	4394	4906	3239	2055	1491	2569	1639	22389
Homestead Agricultural	0	43	119	0	135	255	266	2471	29	3318

Appendix 4 – Landowner Partner Summary

	Cape Coral	Jacks Branch-Long Island Marsh	Charlotte Harbor	Corkscrew Swamp	Lower Myakka River	Lower Peace River	Upper Manatee River	Myakka Ranchlands	Terra Ceia	Overall	
Number of unique landowners	52	44	97	14	32	70	44	196	39	570	*
Number of homestead landowners	1	2	4	0	5	11	8	49	1	81	*
Number of Florida-based landowners	35	39	78	13	23	61	43	185	33	496	*
Average acres owned	68	1383	186	4022	157	203	724	406	144	483	
Max acres owned	701	10533	1731	17087	2009	3226	14599	8928	970	17087	
Max number of parcels owned	10	17	11	63	18	14	37	22	6	63	

*Rows do not sum because some landowners own in more than one focus area.

Appendix 6 - Big Waters Land Trust Past Project List

Map Id	Name	Focus Area	Sub-watershed	HUC12
1	Manatee River Conservation Area	-	-	-
2	Robinson Preserve Expansion	-	-	-
3	Johnson Preserve at Braden River	-	-	-
4	2525 Ringling Blvd.	-	-	-
5	Tatum Sawgrass Conservation Area	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
6	Triangle Ranch	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
7	Myakka River Preserve	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
8	Siesta Key Preserve	-	-	-
9	Bay Preserve at Osprey	-	-	-
10	Casey Key Conservation Area	-	-	-
11	Blackburn Point Park Addition	-	-	-
12	O-Bar-O Conservation Area	-	-	-
13	Rocky Ford Preserve	-	-	-
14	Myakka Pines Preserve	-	-	-
15	Merkle Park Addition	-	-	-
16	Michael Biehl Park	-	-	-
17	Walton Ranch	-	-	-
18	Longino Ranch	Myakka Ranchlands	NORTH COCOPLUM WATERWAY	031001020402
19	Warm Mineral Springs Creek Preserve	Lower Myakka River	LOWER MYAKKA RIVER	031001020505
20	Tarpon Point Landing	Lower Myakka River	LOWER MYAKKA RIVER	031001020505
21	South Venice Lemon Bay Preserve	-	-	-
22	Manasota Scrub Preserve	-	-	-
23	Manasota Key Conservation Area	-	-	-
24	Coral Creek Peninsula	Charlotte Harbor	BUCK CREEK-CORAL CREEK FRONTAL	031002010303
25	Pine Island Preserve at Matlacha Pass	-	-	-

Map Id	Name	Focus Area	Sub-watershed	HUC12
26	Pine Island Flatwoods Preserve	-	-	-
27	Pepper Ranch Preserve	-	-	-
28	Resilient Retreat	-	-	-
29	Murphy Marsh	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
30	Tatum Sawgrass Scrub Preserve	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
31	Old Miakka Preserve Addition	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
32	Flatford Swamp Addition	-	-	-
33	Felt's Audubon Preserve	Terra Ceia	COCKROACH BAY-TERRA CEIA BAY FRONTAL	031002060502
34	Celery Fields - Quad Parcels	-	-	-
35	Orange Hammock Ranch	-	-	-
36	Braden River Conservation Area	-	-	-
37	Celery Fields Conservation Area	-	-	-
38	CREW Preservation Area	-	-	-
39	Bobby Jones Golf Club Preservation Area	-	-	-
40	Crowley Museum and Nature Center	Myakka Ranchlands	TATUM SAWGRASS SWAMP	031001020202
41	Don Pedro Island State Park Addition	Charlotte Harbor	BUCK CREEK-CORAL CREEK FRONTAL	031002010303
42	Charlotte Harbor Preserve State Park Addition	Lower Myakka River	TIPPECANOE BAY	031001020506
43	Crooked River Preserve	-	-	-

Appendix 7 - Helpful Regional Planning Resources

Coastal & Heartland National Estuary Partnership (CHNEP). 2019b. Habitat Restoration Needs Plan. Environmental Science Associates. 118 pp. https://www.chnep.org/publications

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