

McIlvane Marsh Preserve Final Management Plan



Managed by:

**Collier County, FL
Conservation Collier Program**

**January 2024 – January 2034
BCC Approved 3/12/2024**

Prepared by: Collier County Conservation Collier Staff



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Land Management Plan Executive Summary

Lead Agency: Conservation Collier Program, Development Review Division, Collier County Growth Management Department

Properties included in this Plan: McIlvane Marsh Preserve consists of 10 parcels located within Sections 29 and 30, Township 51, and Range 27 East, in Collier County, Florida.

Total Acreage: 380

Management Responsibilities: Collier County Conservation Collier Program staff

Designated Land Use: Preservation

Unique Features: The preserve lies at the junction of three larger conservation areas and protects and provides habitat/corridors for wildlife and plants, while also protecting water resources.

Desired Future Conditions:

Vegetation: A preserve with a matrix of high-quality mangrove swamp, marshes, and flatwoods with mixed-age stands, a diverse understory, and less than 10% infestation of non-native vegetation.

Wildlife: A preserve with the appropriate vegetative communities, resource use, and connectivity to support wildlife species native to that habitat.

Preserve Safety and Security: A preserve free of littering, dumping, illicit activities, neighbor disturbances, unauthorized vehicles, and after-hours trespass.

Public Involvement

As part of the Land Management Plan Update drafting process, a public meeting was held on November 1st, 2023, to gather input from members of the public and preserve stakeholders.

Introduction

The 380-acre, Mcllvane Marsh Preserve lies within the 800-acre Mcllvane Marsh area which is west of the intersection of Tamiami Trail E (US-41) and San Marco Road (State Rd 92) and northeast of Marco Island (Figure 1.1.2). The preserve is located at the junction of Rookery Bay National Estuarine Research Reserve, Ten Thousand Islands National Wildlife Refuge, and Collier Seminole State Park. It is primarily comprised of mangrove swamp, salt marsh, and wet flatwoods. Parcels in this preserve were acquired between 2007-2015. Acquisitions in this area have been purchased with funds from the Conservation Collier acquisition fund or received as donations. County holds fee simple title. The Conservation Collier Program manages this parcel under authority granted by the Conservation Collier Ordinance 2002-63, as amended. Preservation is the designated use of the property. Management activities allowed are those necessary to preserve and maintain this environmentally sensitive land for the benefit of present and future generations.

Conservation Collier: Land Acquisition Program and Management Authority

Voters originally approved the Conservation Collier Program in November 2002 and subsequently confirmed it in November 2006 by ballot referendum. On November 3, 2020, the Collier County electors approved the Conservation Collier referendum with a 76.5% majority which reestablished the acquisition portion of the Program. These voter-approved referendums enable the program to acquire environmentally sensitive lands within Collier County, Florida (Ordinance 2002-63, as amended). Properties must support at least two of the following qualities to qualify for consideration: rare habitat, aquifer recharge, flood control, water quality protection, and listed species habitat. The BCC appointed Conservation Collier Land Acquisition Advisory Committee (CCLAAC) to consider any selected or nominated properties that an owner has indicated a willingness to sell. The committee recommends property purchases for final approval by the BCC.

Lands acquired with Conservation Collier funds are titled to “COLLIER COUNTY, a political subdivision of the State of Florida, by and through its Conservation Collier program.” The Board of County Commissioners of Collier County (BCC) established the Conservation Collier Program to implement the program and manage acquired lands. As such, Conservation Collier holds management authority for the Mcllvane Marsh Preserve.

Purpose and Scope of Plan

The purpose of the final management plan is to provide management direction for the Mcllvane Marsh Preserve by identifying the desired future conditions of each element and the appropriate tools to achieve these conditions. This plan is divided into sections that include an introduction, parcel description, management element conditions, objectives, potential tools, and a projected budget. This plan will be updated on a five-year cycle, with the next update due in 2028.

Conservation Collier Mcllvane Marsh Preserve Final Management Plan

Plan	Date Approved by Board of County Commissioners
Interim Management Plan	January 12, 2010
Interim Management Plan 1 st Extension	September 24, 2013
Interim Management Plan 2 nd Extension	December 8, 2015
Interim Management Plan 3 rd Extension	April 10, 2018
Interim Management Plan 4 th Extension	January 26, 2021

Parcel Description

1. Location

1.1. Description

The 380-acre, Mcllvane Marsh Preserve lies within the 800-acre Mcllvane Marsh area which is west of the intersection of Tamiami Trail E (US-41) and San Marco Road (State Rd 92) and northeast of Marco Island (Figure 1.1.2). The preserve is located at the junction of Rookery Bay National Estuarine Research Reserve, Ten Thousand Islands National Wildlife Refuge, and Collier Seminole State Park (Figure 1.1.1). Complete legal descriptions are provided in the appendix (Table 10.2).

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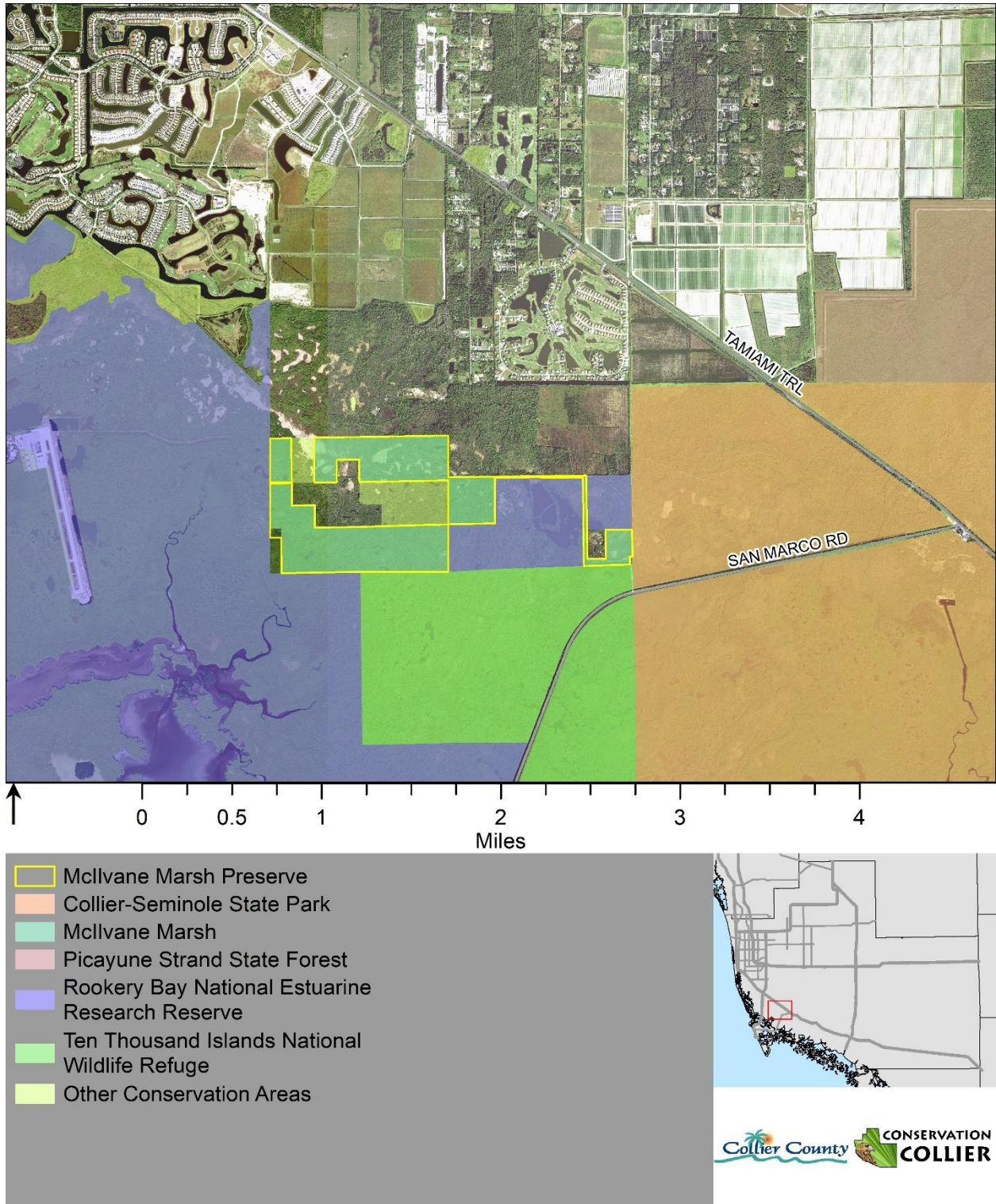


Figure 1.1.1. Overview map and surrounding conservation areas

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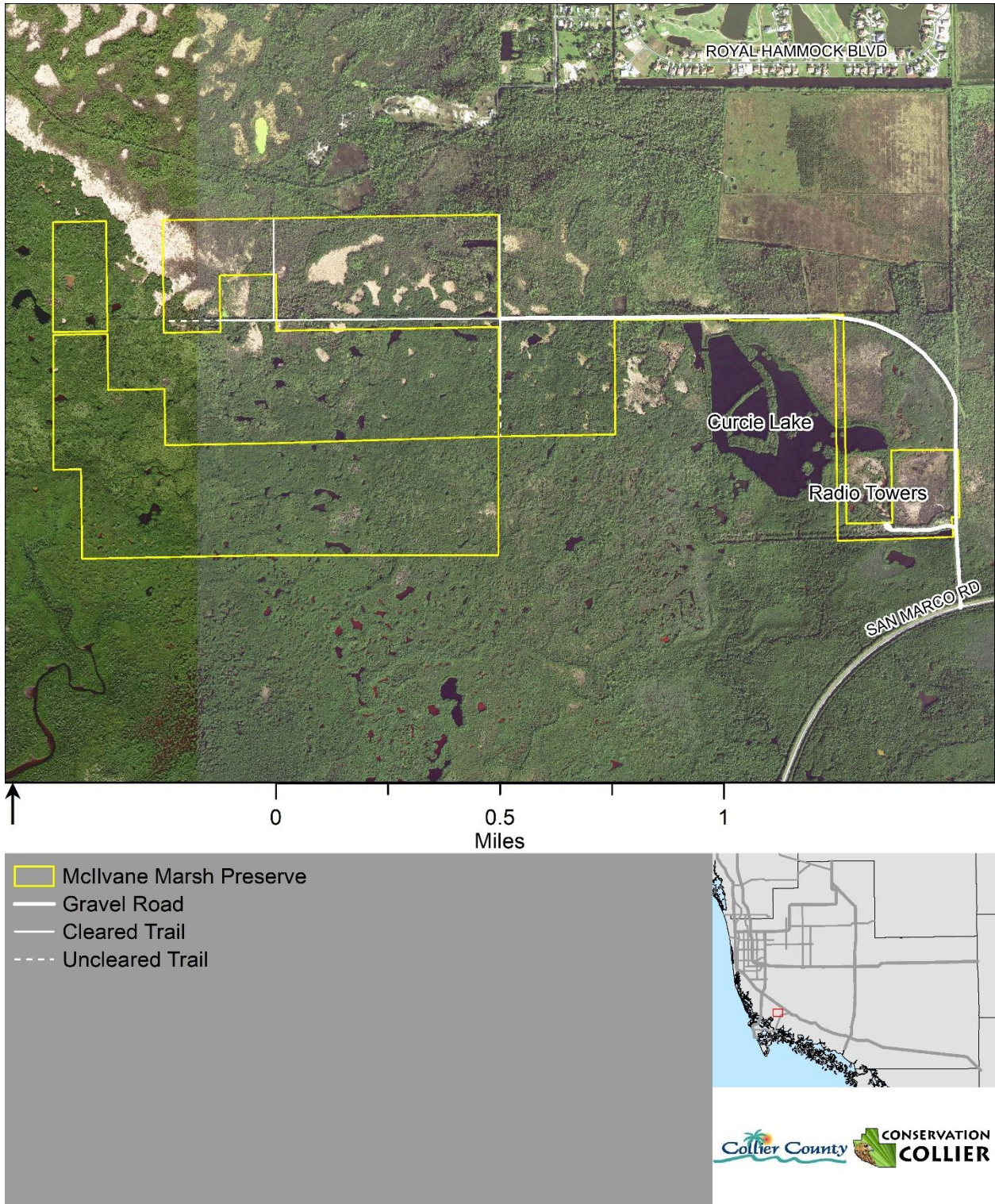


Figure 1.1.2. 2022 Aerial close-up

2. Physiography

2.1. Description

LIDAR and Surface Waters

A Light Detection and Ranging (LIDAR) map provides information about the elevation of the Earth's surface. The topographical map of the Preserve (Figure 2.1.1) indicates surface features of lower elevation in deepening shades of blue. The preserve is dominated by mangrove swamps and salt marshes which are flooded for most of the year. The wet flatwoods flood during the height of the rainy season. There are several borrow pit ponds and ditches as well as the 51-acre Curcie Lake on the adjacent parcel. These surface waters are tidally influenced to a small degree and flow into the Big Marco River.

Aquifer Recharge Potential

The preserve is within a Priority 6 CLIP4 (Critical Lands and Waters Identification Project) Aquifer Recharge designation and not within the protection zone of the Collier County Utilities Golden Gate Wellfield (Figure 2.1.2).

Soils

Four soil types can be found within the preserve (Figure 2.1.3). Hydric soils present include Durbin and Wulfert Mucks (Frequently Flooded), Estero and Peckish Soils (Frequently Flooded), and Basinger Fine Sand (Occasionally Flooded). A Hydric is soil formed under saturation, flooding, or ponding conditions long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Drier, Ft. Drum and Malabar, High, Fine Sands are found along the northern boundary of the preserve (Figure 2.1.3).

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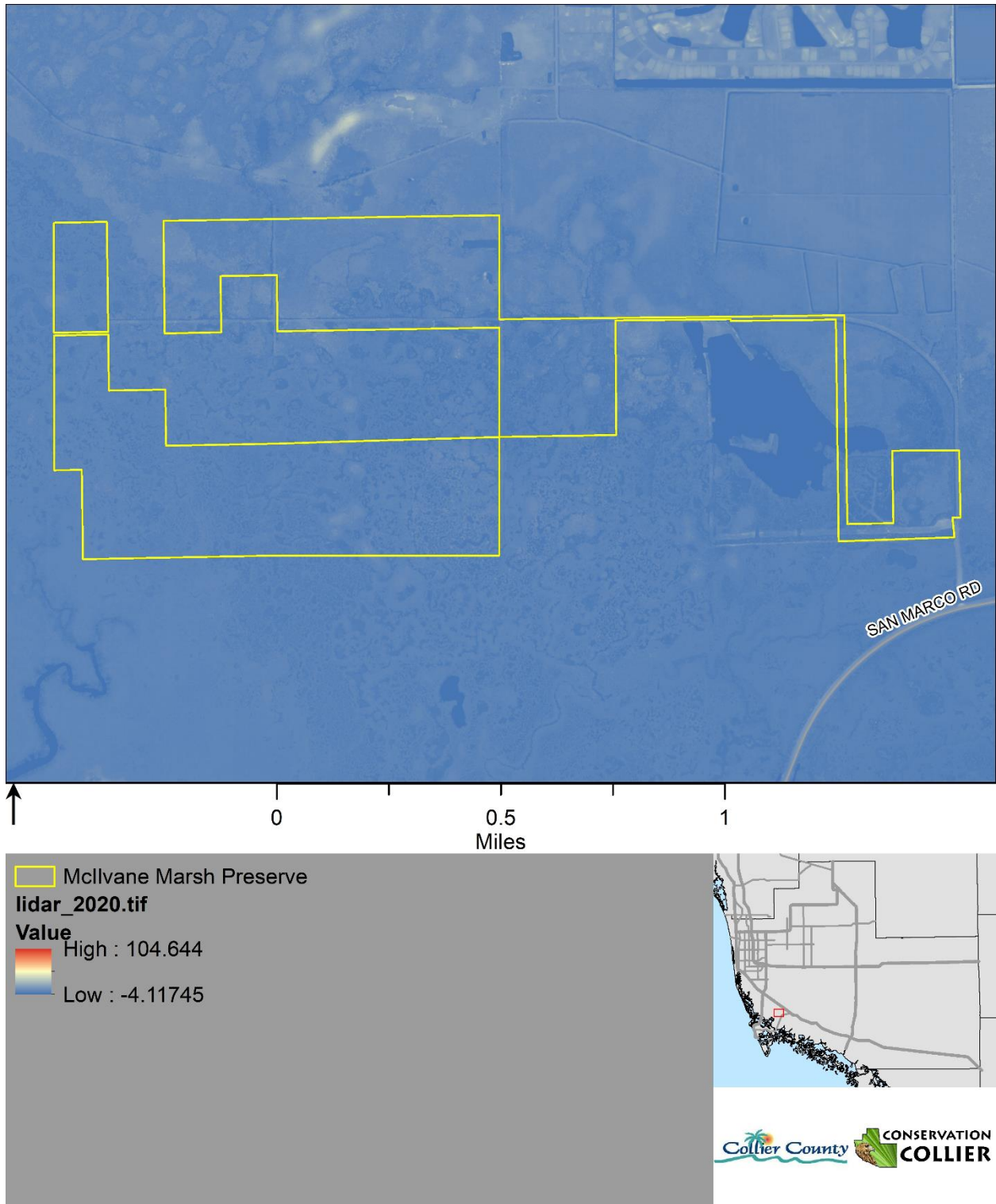


Figure 2.1.1. Topographical Map (LIDAR)

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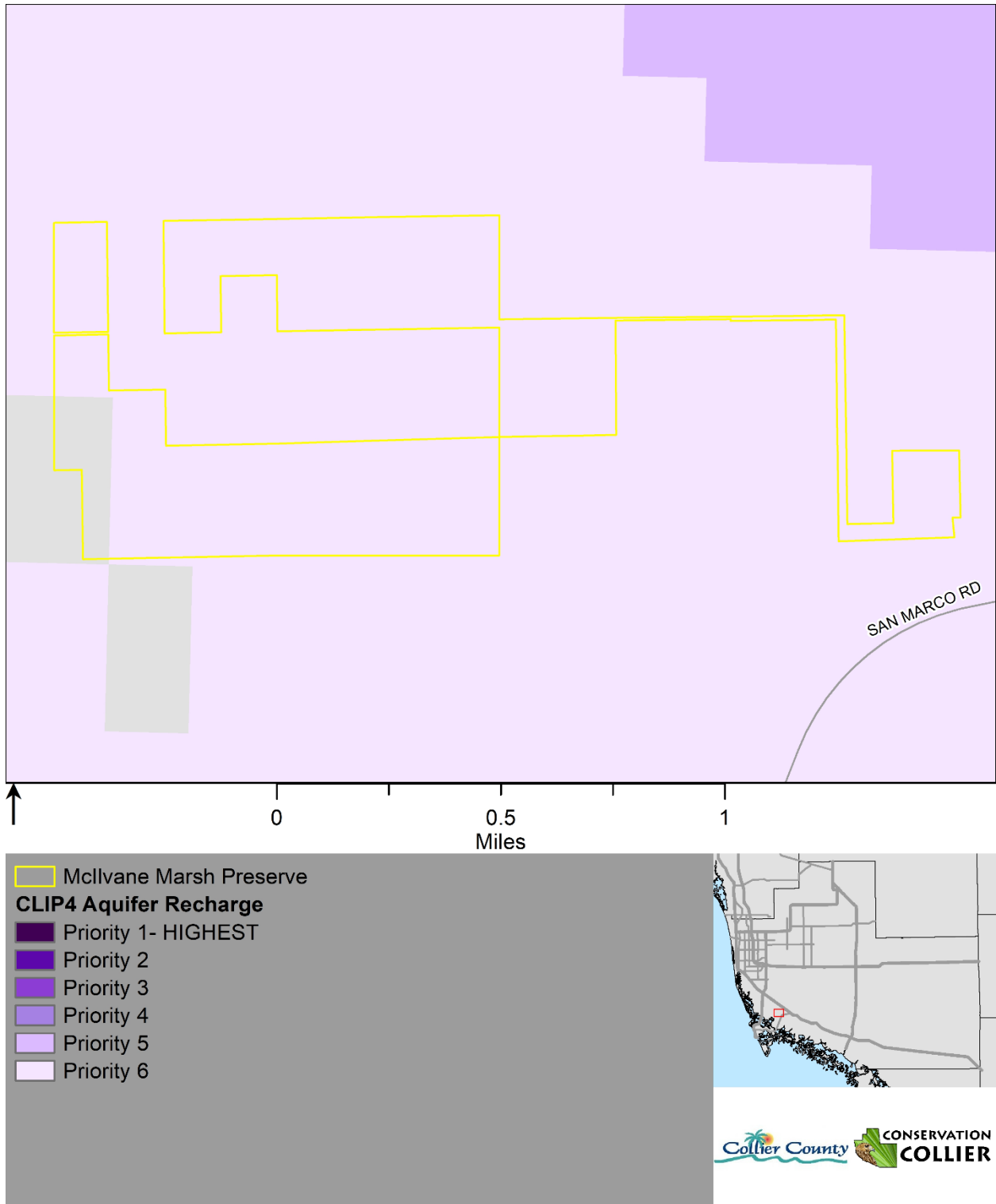


Figure 2.1.2. Aquifer Map (CLIP4 Aquifer Priority Map)

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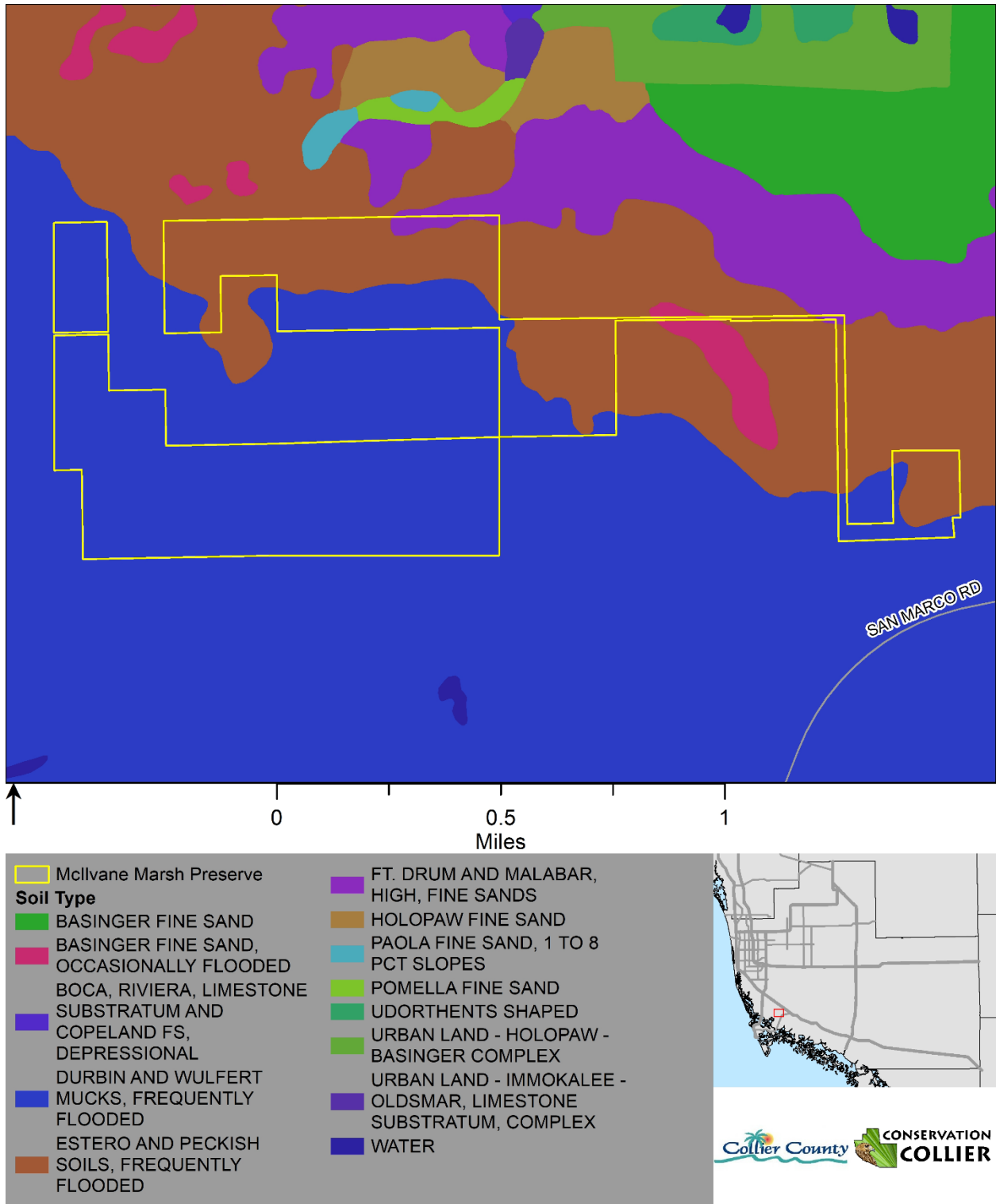


Figure 2.1.3. Hydric Soils Map (Collier County Soils Survey)

3. Historical Land Use

3.1. Description

Aside from some trails, this area was undeveloped until the 1970's, after which borrow pits, roads, and a communications tower array were installed. Limestone fill mining began 1984 which resulted in the creation of the 51-acre Curcie Lake. A Section, Township, and Range query of the Florida Master Site File for Sections 29 & 30, T51S, R27E, with result received on July 22, 2009, shows no recorded historical or archaeological sites present within the search area.

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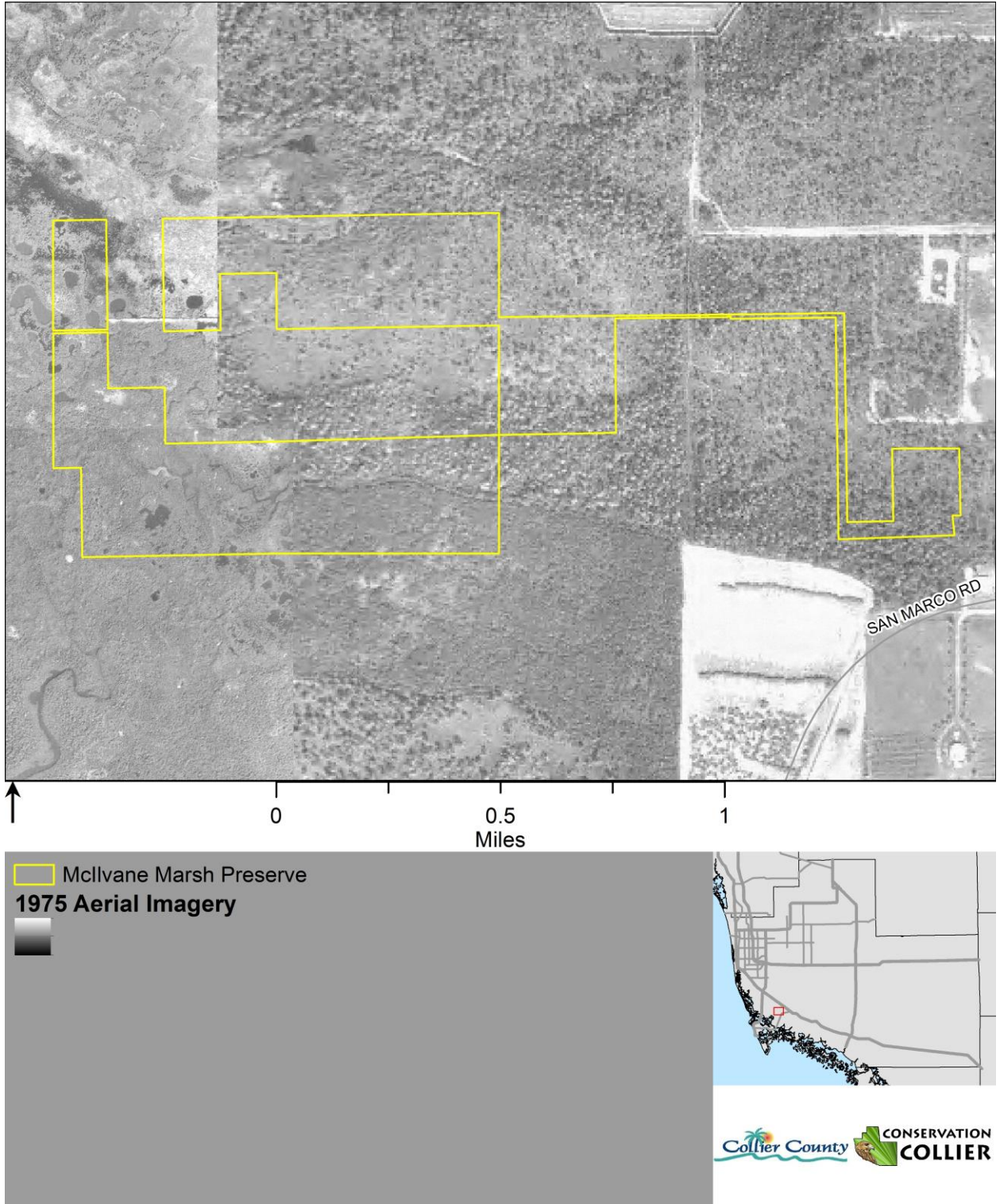


Figure 3.1.1. Historical Aerial Imagery

4. Adjacent Land Use

4.1. Description

The preserve lies at the junction of Rookery Bay National Estuarine Research Reserve, Ten Thousand Islands National Wildlife Refuge, and Collier Seminole State Park (Figure 1.1.1). Immediately to the north is a defunct vehicle scrapyards and a cattle pasture. Further north are the Eagle Lakes and Fiddlers Creek communities, a low-density residential neighborhood, and several agricultural areas. Within McIlvane Marsh are several undeveloped private inholdings and the Relevant Radio communications tower array.

5. Acquisition and Expansion

5.1. Acquisition Description

Acquisition in this area began in 2007 when six parcels totaling 259-acres were acquired (Table 5.1.1., Figure 5.1.2.). Additional parcels were acquired in a piecemeal fashion between 2008 and 2015 as they became available (Table 5.1.1, Figure 5.1.2.).

Table 5.1.1. Acquired Parcel Attributes

Seller	Folio(s)	Acreage	Price	Acquisition Date
Ralph A. Calo and Barbara Calo	00775000005	40	\$270,000	7/2/2007
Robert Reed Rivers Jr.	00775520006	19.54	\$133,500	7/2/2007
William C. Scherer and Irene K. Scherer	00775440005	80	\$540,000	7/16/2007
James L. Price Jr.	00775480007	20	\$135,000	7/16/2007
Edward L. Connolly Jr. Revocable Trust	00775400003	70	\$472,500	10/30/2007
RJS, L.L.C.	00775680001	30	\$202,500	11/16/2007
An Trinh	00775360004	80	\$760,000	12/15/2008
Triangle Licensing Corporation	00775080009	29.33	\$289,400	7/27/2009
Ginnie Evans Poovey Kania	00775560008	10	Donation	12/24/2012
Earl Willett	00775760002	2.02	\$2,500	7/7/2015

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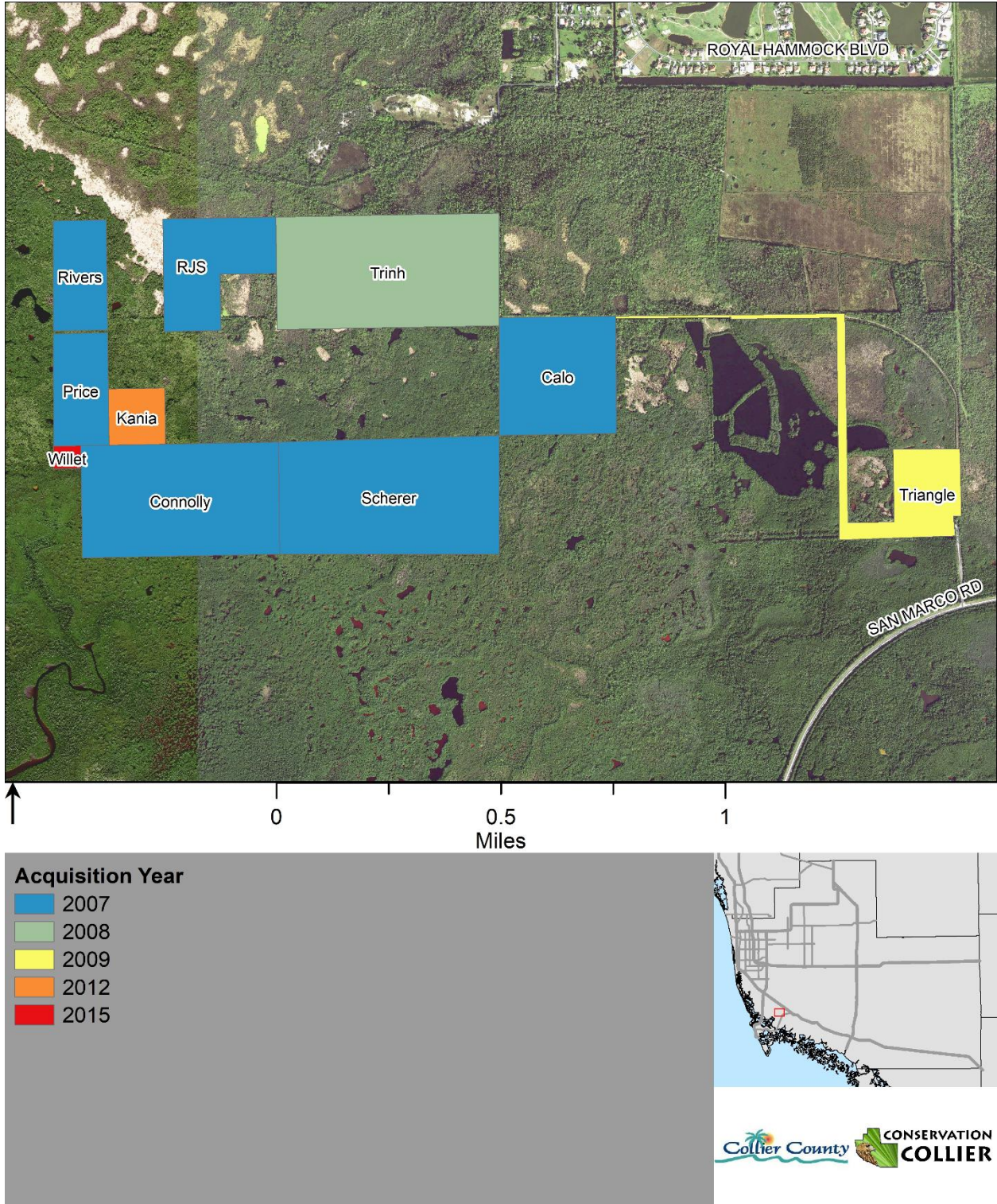


Figure 5.1.2. Parcel Acquisition History

5.2. Potential Preserve Expansion

Parcels adjacent to the preserve must be evaluated and approved on an individual basis before acquisition. Acquisition of parcels to the north of the preserve is a high priority because they include rare upland habitats and provide a buffer between the current preserve and nearby developments.

Management

6. Vegetation Management

6.1. Current Vegetative Community Conditions

The Florida Land Cover Classification System habitats are identified in Figure 6.1.1. Non-native species are denoted with an *. Plant communities identified statewide under this cooperative land cover system partially rely on aerial imagery for plant community classification. Plant communities are listed below in order of most to least common.

5250 Mangrove Swamp - Estuarine wetland on muck/sand/or limestone substrate; inundated with saltwater by daily tides; central peninsula and Keys; no fire; dominated by mangrove and mangrove associate species; red mangrove, black mangrove, white mangrove, buttonwood. (Florida Natural Areas Inventory).

Notes: Area dominated by red mangrove (*Rhizophora mangle*) with buttonwood (*Conocarpus erectus*) forests in upper tidal areas and in transitional zones. Some slash pine (*Pinus elliottii*) and cabbage palm (*Sabal palmetto*) islands present within mangrove swamp.

Major Canopy Components: Red mangrove (*Rhizophora mangle*) and buttonwood (*Conocarpus erectus*)

Major Midstory Components: none

Major Understory Components: Giant leather fern (*Acrostichum danaeifolium*)

5240 Salt Marsh - Estuarine wetland on muck/sand/or limestone substrate; inundated with saltwater by daily tides; statewide; occasional or rare fire; treeless, dense herb layer with few shrubs; saltmarsh cordgrass, needle rush, saltgrass, saltwort, perennial glasswort, seaside oxeye. (Florida Natural Areas Inventory)

Notes: Encroachment by coastal plain willow (*Salix caroliniana*) and common cattail (*Typha latifolia*)

Major Canopy Components: None

Major Midstory Components: Coastal plain willow (*Salix caroliniana*)

Major Understory Components: Black needle rush (*Juncus roemerianus*), saltgrass (*Distichlis spicata*), cordgrass (*Spartina sp.*), sawgrass (*Cladium jamaicense*), and common cattail (*Typha latifolia*)

2221 Wet Flatwoods – Flatland with sand substrate; seasonally inundated; statewide except extreme southern peninsula and Keys; frequent fire (2-4 years for grassy wet flatwoods, 5-10 years for shrubby wet flatwoods); closed to open pine canopy with grassy or shrubby understory;

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slash pine, pond pine, large gallberry, fetterbush, sweetbay, cabbage palm, wiregrass, toothache grass. (Florida Natural Areas Inventory)

Notes: Previously heavily infested with Melaleuca (*Melaleuca quinquenervia*)* and old-world climbing fern (*Lygodium microphyllum*)*

Major Canopy Components: Slash pine (*Pinus elliottii*), cabbage palm (*Sabal palmetto*), and laurel oak (*Quercus laurifolia*)

Major Midstory Components: Wax myrtle (*Myrica cerifera*), buttonbush (*Cephalanthus occidentalis*), and Dahoon holly (*Ilex cassine*)

Major Understory Components: Swamp fern (*Telmatoblechnum serrulatum*), broomsedge (*Andropogon* spp.), grapevine (*Vitis* spp.), greenbriar (*Smilax* spp.), old world climbing fern (*Lygodium microphyllum*)*, and wedelia (*Sphagneticola trilobata*)*

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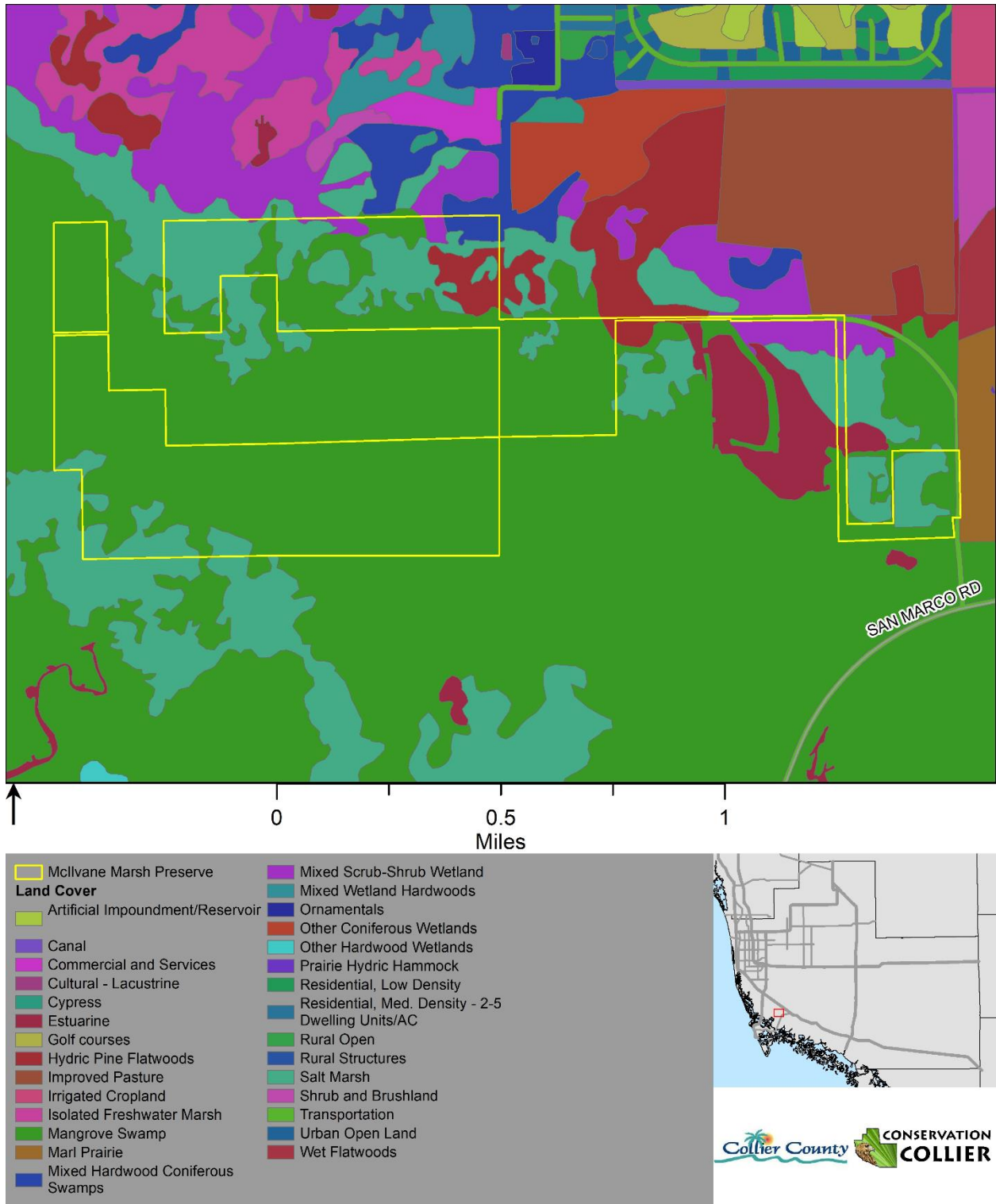


Figure 6.1.1. Florida Cooperative Land Cover Classification System Map

Table 6.1.2. Threatened and Endangered Plant Species

Common Name	Scientific Name	Protection Status
Giant air plant	<i>Tillandsia utriculata</i>	State Endangered
Stiff-leaved wild-pine, Cardinal air plant	<i>Tillandsia fasciculata</i>	State Endangered
Twisted air plant	<i>Tillandsia flexuosa</i>	State Threatened
Reflexed wild-pine, Northern needleleaf	<i>Tillandsia balbisiana</i>	State Threatened
Butterfly orchid	<i>Encyclia tampensis</i>	State Threatened

6.1.3. Vegetation Management Concerns

Invasive vegetation appears to be most prevalent in the wet flatwoods and along the roadsides of the preserve. Due to difficulty of access, the infestation status of the mangrove swamps in the southern half of the preserve is unknown. It is assumed that these tidal areas are inhospitable to most species, but old aerals suggest that climbing fern may be present on some of the cabbage palm islands. Primary species of concern are old world climbing fern, Brazilian pepper, and melaleuca. To date, only the RJS, Trinh, and Calo parcels of the preserve have been treated for invasive vegetation. These parcels had extremely heavy infestations of melaleuca and climbing fern in their more upland areas. Much progress has been made on controlling these species since efforts began in 2020, but the disturbance caused by their removal has allowed other invasive species such as cogon grass (*Cylindrica imperata*) and wedelia to invade. Thick rachis mats from treated climbing fern remain and are preventing recruitment of native species. Application of prescribed fire is necessary for restoration of the flatwoods and maintenance of the salt marsh communities.

6.2. Desired Future Conditions

A preserve with high-quality mangrove swamp, salt marsh, and flatwoods with mixed-age stands, with less than 10% infestation of non-native vegetation.

6.3. Management Tools

6.3.1. Invasive Plant Removal

It is cost prohibitive to treat the southern and western portions of the preserve due to their inaccessibility. Treatment strategy will focus on continuing maintenance treatment of old-world climbing fern, melaleuca, Brazilian pepper (*Schinus terebinthifolia*), seaside mahoe (*Thespesia populnea*), Java plum (*Syzygium cumini*), earleaf acacia (*Acacia auriculiformes*), and cogon grass on the RJS, Trinh, and Calo parcels. The RJS and Calo parcels received 3 treatments between 2020-2022, and the Trinh parcel has received 4 treatments between 2020-2023. When funding becomes available, the Triangle parcel will be included into the annual treatment rotation. Treatment costs at this preserve are largely driven by the difficulty in traversing the terrain so prices are not expected to drop significantly as the infestation level lowers. In 2023, trails were re-cleared in order to improve accessibility (Figure 1.1.2).

6.3.2. Native Plant Restoration

Native plants are naturally recolonizing areas previously infested with invasive vegetation. Large scale replanting does not appear necessary and may be a poor investment as the upland areas are increasing transitioning to mangrove swamp.

6.3.3. Prescribed Fire

The wet flatwood and salt marsh communities' health depends on a 5–10-year fire return interval. The preserve has not seen significant fire activity since acquisition and as a result is experiencing fuel loading and encroachment of woody species such as mangroves, willow, and oak in areas that should either be grassy or herbaceous. On March 24th, 2021, a great egret collided with a powerline and ignited a 3-acre wildfire on the Triangle parcel. Interagency plans are in progress to conduct a prescribed burn of the saltmarsh and flatwoods on the Calo and Triangle parcels as well as the Rookery Bay parcels in between. The Trinh parcel will be burned once a firebreak is installed along the northern boundary. Burning the Trinh parcel will expedite restoration by consuming rachis mats and slash from previous invasive vegetation treatments.

6.3.4. Hydrological Restoration

The construction of roads, ditches, canals, and mines has interrupted the natural flow of water into the marsh. These interruptions have altered the hydroperiod and, therefore, the distribution/composition of plant communities. McIlvane Marsh is situated near and is expected to be influenced by the Picayune Strand Restoration Project, a sub-project of the Comprehensive Everglades Restoration Project. The project area includes 55,000 acres located between Alligator Alley and Tamiami Trail in southeastern Collier County and involves plugging canals, building and operating pump stations, placing culverts under the Tamiami Trail, removing old roadbeds and removing exotic vegetation. The goal of the project is to improve estuarine water quality by increasing groundwater recharge and reducing large and unnatural freshwater inflows to the estuaries along the southwest Florida coast. While this project does not directly affect the County's parcels within the McIlvane Marsh area, it is expected to increase surface water in the general area. If funding is available, construction of features designed to improve the local hydrological conditions will be pursued.

Photoset 6.3.5 Vegetation Management Concerns



Old-world climbing fern (*Lygodium microphyllum*) on the Trinh parcel, post-initial treatment, 2020.

6.4. Partnership Opportunities

Conservation Collier will continue to seek funding assistance from the Florida Fish and Wildlife Conservation Commission (FWC) Upland Invasive Exotic Plant Management Program. This program has been critical in conducting initial and otherwise cost-prohibitive invasive plant removal projects over the past 20 years. Like other Conservation Collier preserves, management partnerships will continue to exist within the prescribed fire realm. In conducting prescribed burns, Conservation Collier will continue its partnerships with the Florida Forest Service, U.S. Fish and Wildlife Service, FWC, Greater Naples Fire Department, South Florida Water Management District, and the Florida Department of Environmental Protection. Staff will seek opportunities to partner with researchers from higher education institutions to enhance conservation efforts of the native plant communities found on the preserve.

7. Wildlife Management

7.1. Current Wildlife Community Conditions

The estuary meets uplands along the northern edge of the preserve. This mixture of habitats provides for the needs of both terrestrial and aquatic wildlife. The preserve also provides a buffer between development and the breeding and foraging grounds of protected wading birds, bald eagles, and American crocodiles on the adjacent properties. The flatwoods and marsh on the northern edge of the preserve protect a path for Florida panthers and black bears to travel between larger conservation areas that is more traversable than the mangrove swamps to the south.

Table 7.1.1. Observed Threatened and Endangered Wildlife Species

Type	Common Name	Species	Protection Status
Birds	Everglades snail kite	<i>Rostrhamus sociabilis plumbeus</i>	Federally Endangered
	Crested caracara	<i>Caracara cheriway</i>	Federally Threatened
	Wood stork	<i>Mycteria americana</i>	Federally Threatened
	Florida sandhill crane	<i>Antigone canadensis pratensis</i>	State Threatened
	Little blue heron	<i>Egretta caerulea</i>	State Threatened
	White crowned pigeon	<i>Patagioenas leucocephala</i>	State Threatened
	Roseate spoonbill	<i>Platalea ajaja</i>	State Threatened
Mammals	Florida Panther	<i>Puma concolor coryi</i>	Federally Endangered
Reptiles	American Crocodile	<i>Crocodylus acutus</i>	Federally Threatened
	American Alligator	<i>Alligator mississippiensis</i>	Federally Threatened due to similarity of appearance

Table 7.1.2. Potential Threatened and Endangered Species

Type	Common Name	Species	Protection Status
Mammals	Big Cypress fox squirrel	<i>Sciurus niger avicennia</i>	State Threatened
	Everglade’s mink	<i>Neovison vison evergladensis</i>	State Threatened
	Florida bonneted bat	<i>Eumops floridensis</i>	Federally Endangered
Birds	Tricolored heron	<i>Egretta tricolor</i>	State Threatened
	Eastern black rail	<i>Laterallus jamaicensis</i>	Federally Threatened
Reptiles	Eastern indigo snake	<i>Drymarchon corais couperi</i>	Federally Threatened
	Gopher tortoise	<i>Gopherus polyphemus</i>	State Threatened

7.1.4. Wildlife Management Concerns

Disturbance, destruction, and poaching of the adjacent wading bird rookery and crocodile nests is the primary concern at this preserve. In 2009 a group of trespassers shot and killed at least 21 birds on the rookery on Curcie Lake. A heavy-duty gate was installed at Curcie Rd to deter trespassers. This gate is monitored with cellular enabled trail cameras by Rookery Bay and USFWS staff. Encroachment of woody vegetation in the salt marsh may degrade foraging habitat for wading birds. A breeding population of invasive Burmese pythons is present in the area and is a threat to all wildlife but especially the wading birds.

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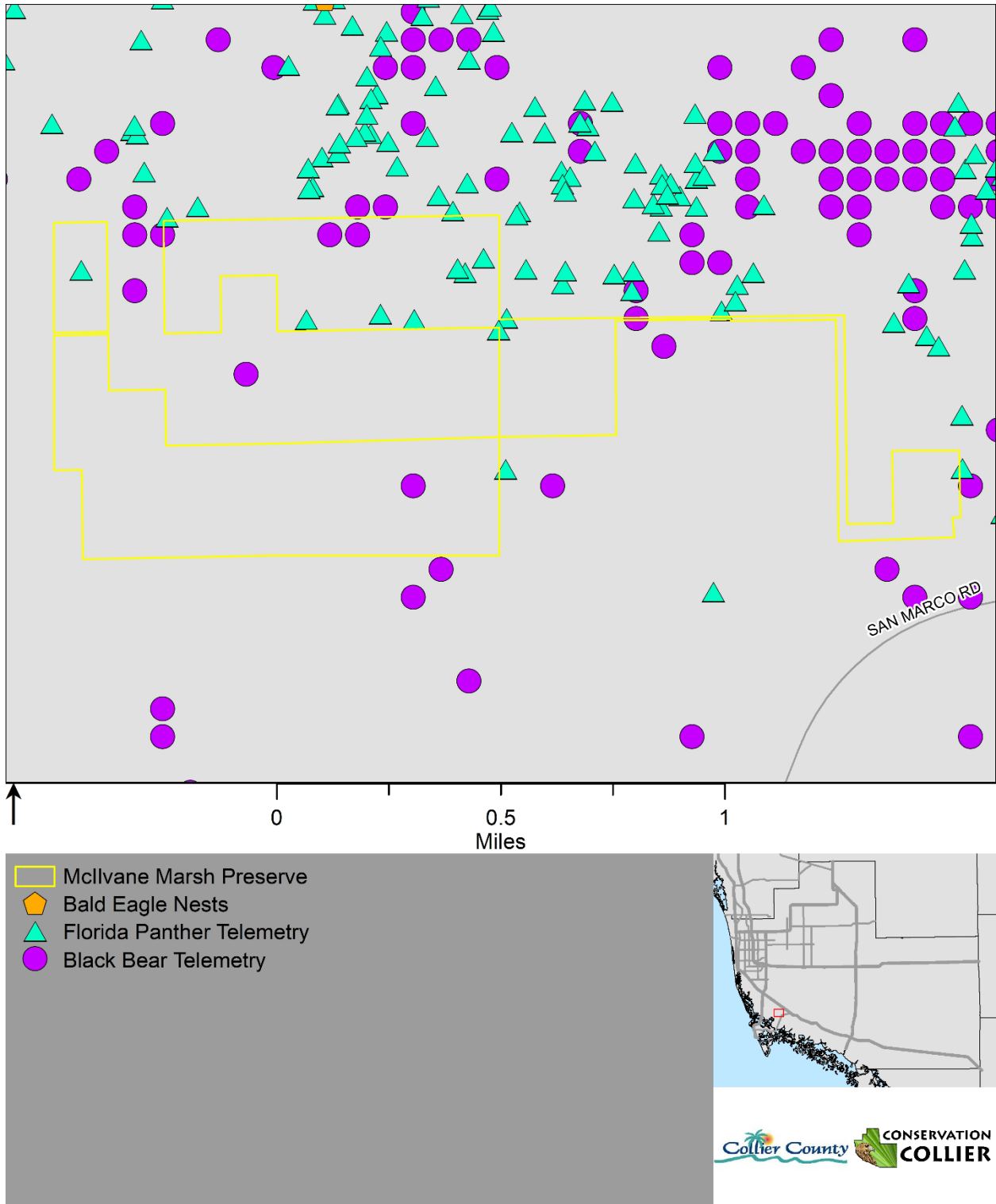


Figure 7.1.5 – Wildlife Spatial Data

7.2. Desired Future Conditions

A preserve with the appropriate vegetative communities, resource use, and connectivity to support wildlife species native to present habitat.

7.3. Management Tools

7.3.1. Habitat Improvements

Treatment and removal of invasive plant species, primarily melaleuca, Brazilian pepper, and old-world climbing fern, will promote the growth of native species that provide natural forage and cover for wildlife. Restoring fire to the landscape where feasible will increase diversity in the understory and benefit pine flatwood and salt marsh species as well as counteract woody encroachment.

7.3.2. Connectivity

The preserve is contiguous with the 110,000-acre Rookery Bay National Estuarine Research Reserve, 7,271-acre Collier Seminole State Park, and 35,000-acre Ten Thousand Islands National Wildlife Refuge, as well as several conservation easements and other undeveloped lands. Wildlife moves freely between the preserve and surrounding areas. The preserve is used as a foraging and dispersal area for threatened and endangered species that breed around Curcie Lake. Acquiring more parcels to the north of the preserve would further safeguard the upland wildlife corridor already present.

7.4. Partnership Opportunities

Conservation Collier staff continue to assist Rookery Bay, University of Florida, Conservancy of Southwest Florida, USFWS, and FWC staff with wildlife monitoring and habitat improvements in the marsh including bird and crocodile surveys, Burmese python removal, invasive vegetation management, and prescribed burning. Staff will continue to monitor the preserve for signs of trespass and work with local law enforcement to prevent damage to sensitive wildlife resources.

8. Preserve Safety and Security Management

8.1. Current/Predicted Human Conflict Conditions

The preserve is closed to the public to protect threatened and endangered wildlife breeding areas. All current access to the preserve is via the Curcie Rd gate on the Ten Thousand Islands National Wildlife Refuge. In 2009, a group of trespassers shot and killed a number of wading birds, including listed species, roosting on the islands in Curcie Lake. After this, a heavy-duty gate was installed on Curcie Rd. The gate is monitored with cellular-enabled trail cameras by USFWS and Rookery Bay staff. Trespassers still enter the property on foot, often looking to access the lake to fish. A potential point of access is the unmaintained trail that connects the preserve to Auto Ranch Rd. Clearing this trail would improve access and safety for prescribed fire activities but may increase the risk of trespass.

8.2. Desired Future Conditions

A preserve free of littering, dumping, illicit activities, neighbor disturbances, unauthorized vehicles, and after-hours trespass.

8.3. Management Tools

8.3.1. Site Security Improvements

Staff will monitor for signs of trespass/illegal activities. Staff will collaborate with adjacent landowners/agencies to address issues as they arise. If the connecting trail between the preserve and Auto Ranch Rd is cleared, a heavy-duty gate and accompanying fence will be installed.

8.3.2. Debris Removal

Prior to acquisition there was a history of dumping on the preserve and the surrounding area. Debris will continue to be removed and disposed of offsite as it is encountered. Staff will monitor the preserve boundaries for signs of illegal dumping and work collaboratively with the Collier County Sheriff's Office to address repeat offenses.

8.4. Partnership Opportunities

Staff will collaborate with USFWS Law Enforcement, Collier County Sheriff's Office, and FWC Law Enforcement to prevent and respond to any criminal site security and safety issues as they present themselves.

9. Budget

Proposed expenditures include invasive plant treatments, firebreak installation and maintenance, and road maintenance. It is proposed that the RJS, Trinh, Calo, and Triangle parcels be treated annually for all FISC Category I & II species. Based on previous quotes, these treatments are estimated to cost between \$400-600/acre, so \$84,400-126,600 for the entire 211-acre treatment unit. Cost is largely determined by difficulty to traverse the unit, not the levels of infestation, so prices are not expected to decrease significantly over time. If full funding is unavailable, these units will be treated in a 2–3-year rotation with the Trinh parcel taking priority. Installation of the northern firebreak is estimated to cost \$10,000-20,000. Maintenance of the firebreaks is estimated to cost \$2,000-5,000 and be completed on an as needed basis. Conservation Collier will contribute materials and labor along with Rookery Bay and USFWS to maintain Curcie Rd as needed. Projected expenditures based on the current available budget are listed in the Table 9.1.

Table 9.1. Projected Expenditures Table

Projected Operating Costs	2023 FY Actuals	2024	2025	2026	2027	2028
Vegetation Treatment/Removal	\$35,488.00	\$36,000.00	\$41,000.00	\$46,000.00	\$41,000.00	\$46,000.00
Road/Firebreak Installation and Maintenance	\$5,006.56	\$10,000.00			\$5,000.00	
Debris Removal			\$5,000.00			
Total Projected Costs	\$40,494.56	\$46,000.00	\$46,000.00	\$46,000.00	\$46,000.00	\$46,000.00

10. Appendix

Photoset 10.1: Representative Site Photos



Heavy-duty gate installed at the intersection of Curcie and San Marco Rd.

Conservation Collier McIlvane Marsh Preserve Final Management Plan



Triangle parcel looking south



Trinh parcel looking west

Conservation Collier McIlvane Marsh Preserve Final Management Plan

Table 10.2. Legal Description

Folio	Total Acres	Calculated Acres	Legal Description
775360004	80	79.59	30 51 27 S1/2 OF NE1/4 80 AC
775680001	30	30.32	30 51 27 W1/2 OF SE1/4 OF NW1/4, NE1/4 OF SE1/4 OF NW1/4
775000005	40	43.59	29 51 27 NW1/4 OF SW1/4 40 AC OR 1518 PG 108
775560008	10	10.07	30 51 27 SE1/4 OF NW1/4 OF SW1/4, LESS E 30FT AND N 30FT
775440005	80	80.74	30 51 27 S1/2 OF SE1/4 80 AC OR 268 PG 715
775520006	19.54	18.76	30 51 27 W1/2 OF SW1/4 OF NW1/4 LESS S 30FT 19.54 AC
775480007	20	19.61	30 51 27 W1/2 OF NW1/4 OF SW1/4 20 AC OR 291 PG 422
775400003	70	70.28	30 51 27 S1/2 OF SW1/4, LESS W1/2 OF W1/2 OF SW1/4 OF SW1/4 70 AC
775760002	2.02	1.99	30 51 27 N 267FT OF W1/2 OF W1/2 OF SW1/4 OF SW1/4 2.02 AC OR 583 PG 1620
775080009	29.33	29.33	29 51 27 N 30FT OF NE1/4 OF SW1/4, N 50FT OF W1/2 OF SE1/4, E 100FT OF W1/2 OF SE1/4, S 1054FT OF E 1320FT OF SE1/4, LESS BEG AT SE CNR OF SEC 29, N 230FT, S89DEG W 92.83FT, SLY230.70FT ALG CURVE, N 89DEG E 75.37FT TO POB, LESS N 854FT OF S 1054FT OF W 534FT OF E 1320FT OF SE1/4

10.3. Public Meeting Comments and Staff Responses

No public comment received.