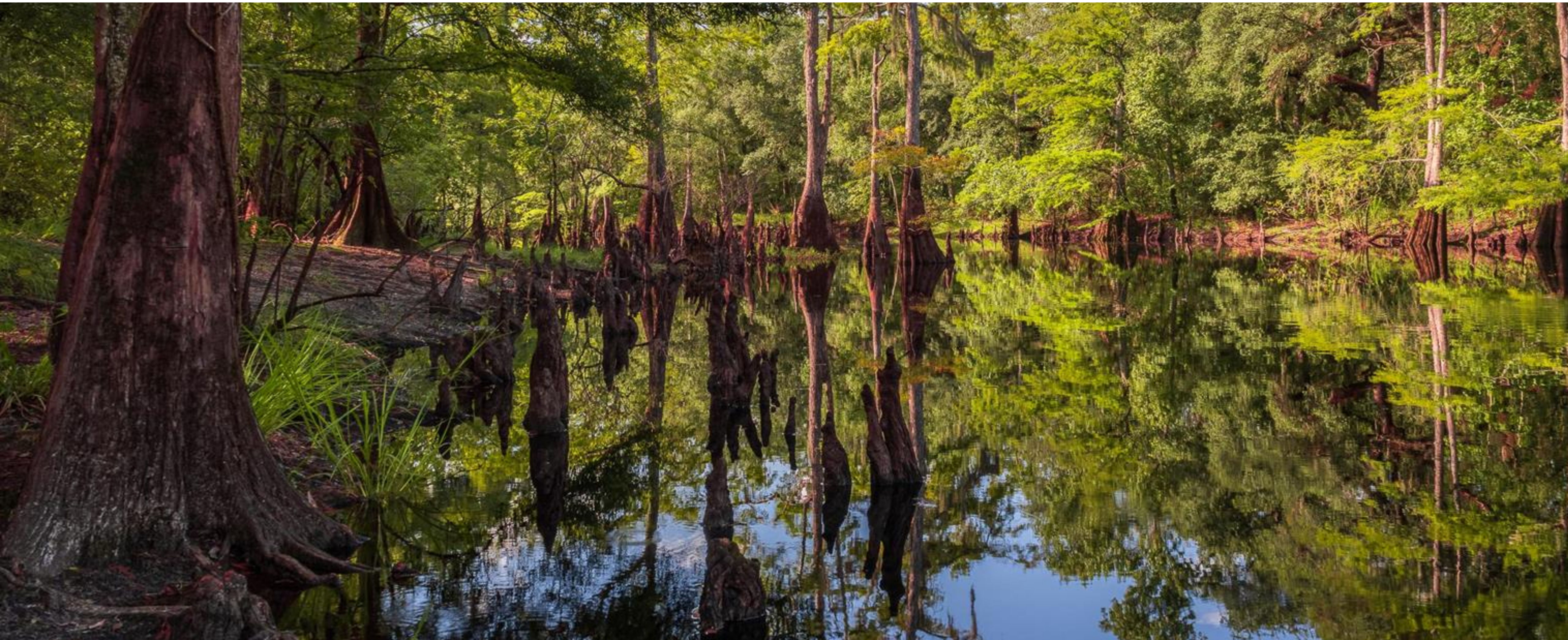


# **FROM THE MACRO TO THE MICRO:**

## **Connecting the Corridor with Collaborative Tools**





# Conservation Strategies

1. City-County Partnership Approach to Environmental Connectivity
2. Transfer of Development Rights Programs
3. Rural Protection Areas
4. Conservation Subdivisions
5. Creation of a Blueway
6. Fee Simple Acquisition and Conservation Easements

\*Recognition of the FWC



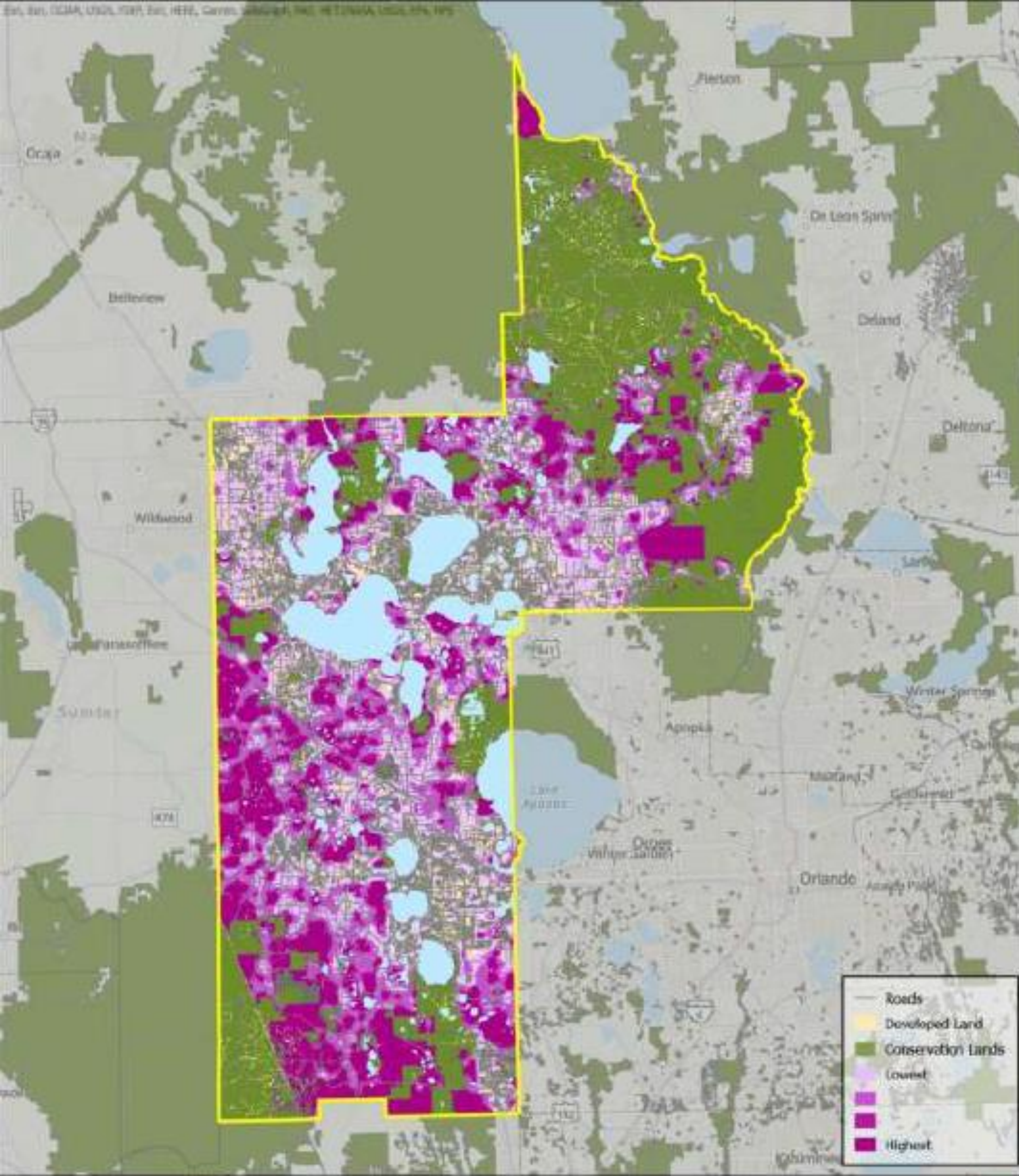


# Collaborative & Strategic Approach

- JPA Initiative (Sept 2022)
  - Across 14 municipalities
  - East Central Florida Regional Planning Council
  - 1000 Friends of Florida
  - UCF & Stetson University
  - County & City Staff
- Strong Towns Initiative
- Rural Conservation Subdivision Design Standards







## Natural Lands Inventory and Planning Strategies Review in Support of Resilient Green Space Conservation in Lake County, Florida

The Marxan model map of Lake County ranks undeveloped lands for potential inclusion within a resilient open space network.

Dark Pink=Highest Priority

Light Pink=Lowest Priority





## **Joint Planning Area Visioning**

Looking at a city and its surroundings to plan for future growth, development and annexations to ensure growth is aligned with the city's and county's vision for the future.





# Strategic Plan

Adopted June 21, 2022

## Mission

The City of Groveland is an ecosystem intentionally connecting safety, service, and innovation to support a vibrant welcoming community with natural charm.

## Vision

Groveland is a collection of towns, villages, and hamlets interweaving a diversity of people into an eco-agrarian landscape.

## Values

Intentionality, Connectivity, Vitality, Knowledge, Heart

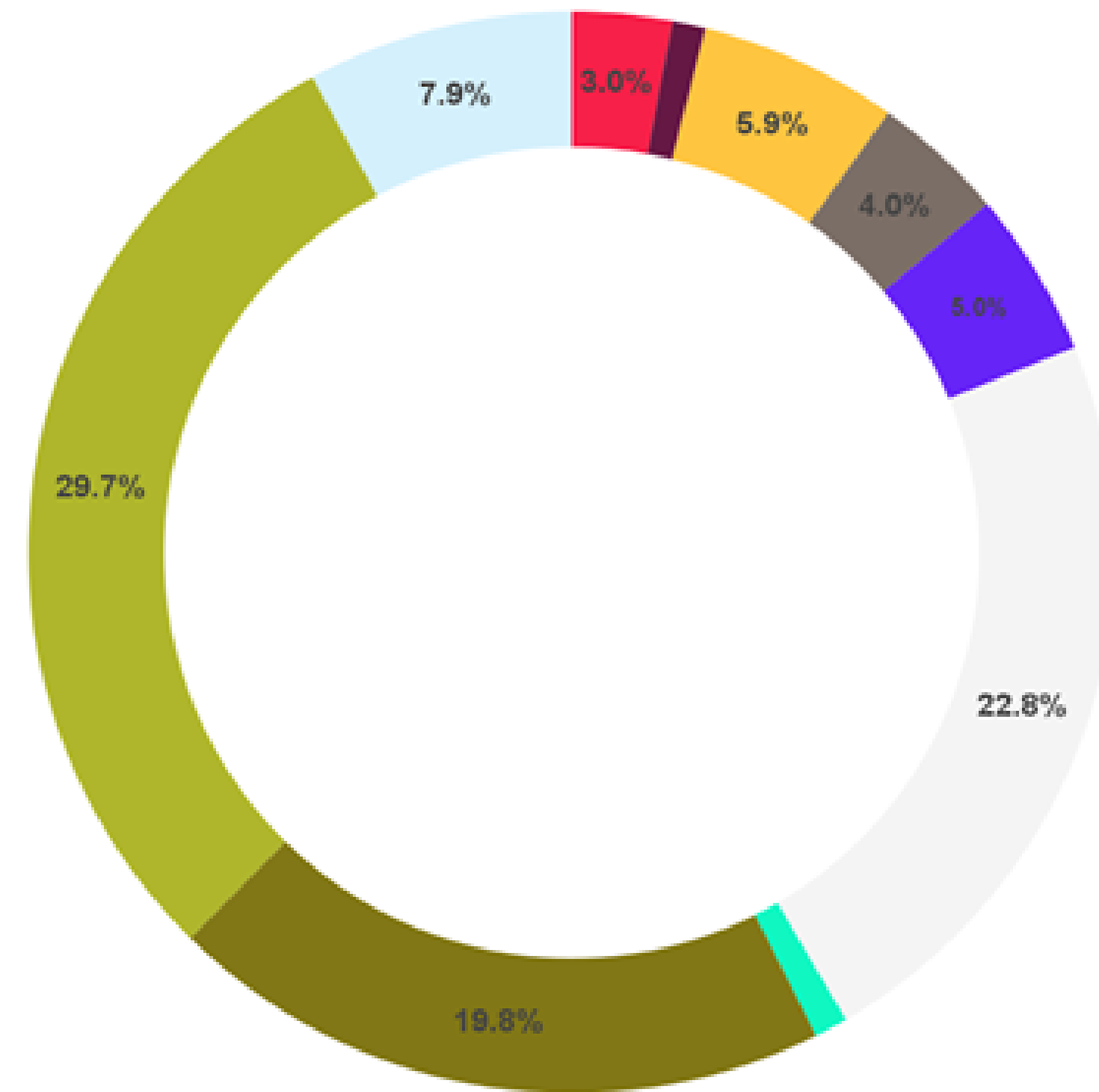
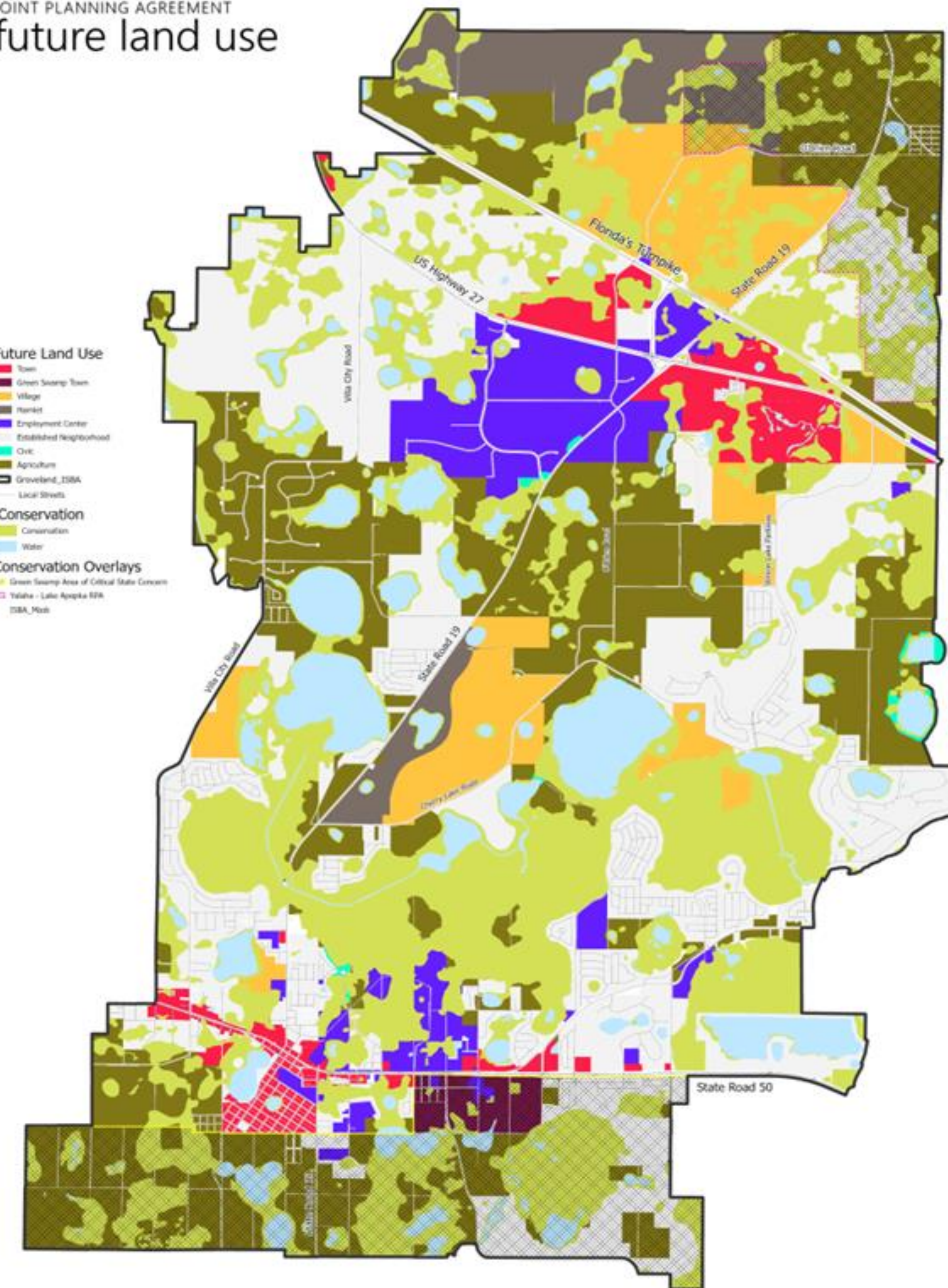
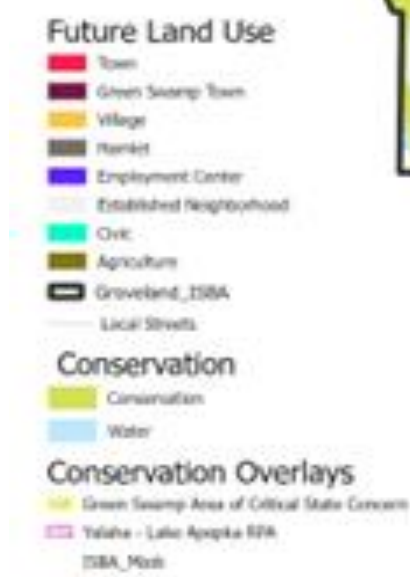


STRATEGIC PLAN • JUNE 21, 2022



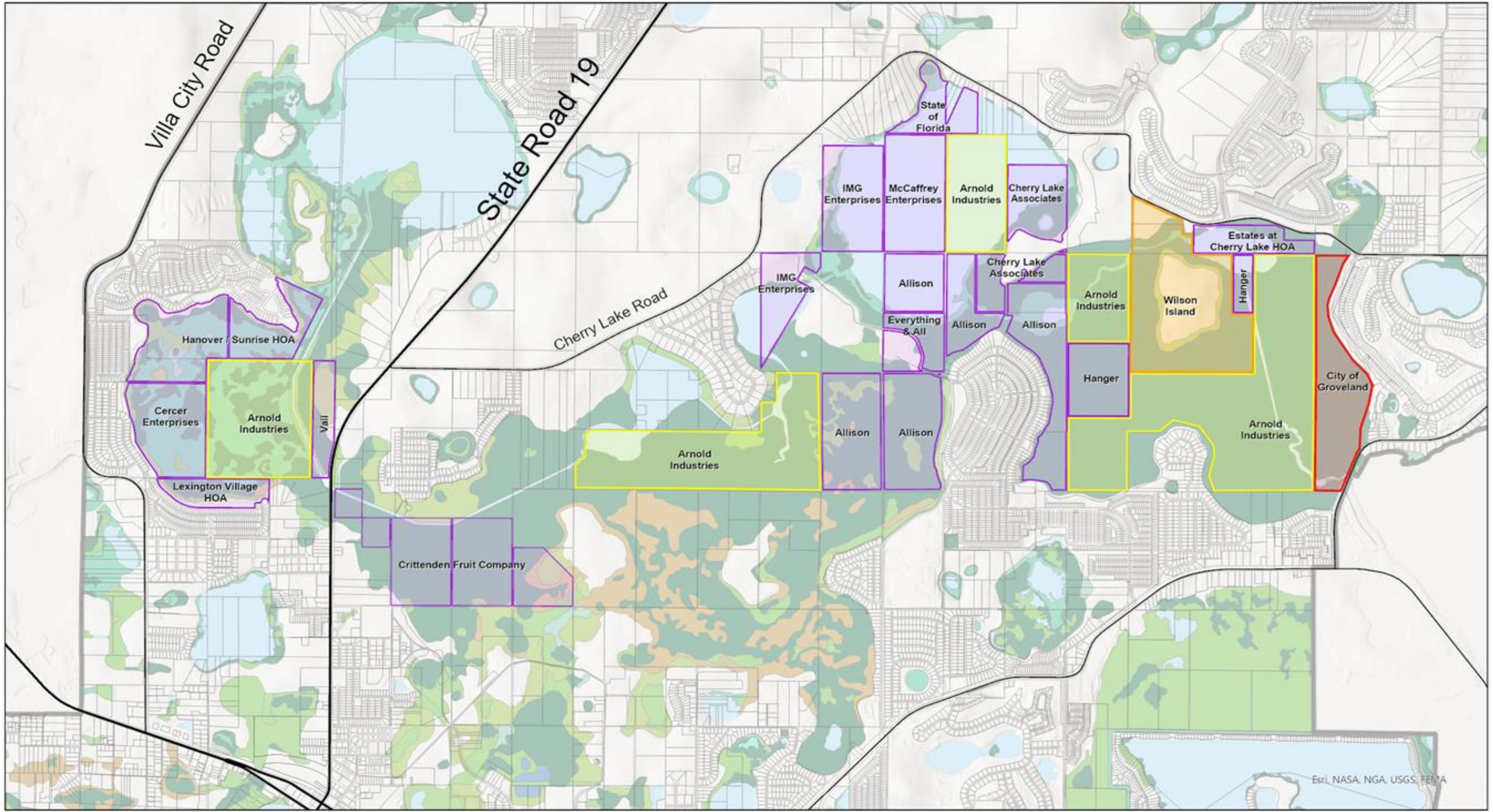
# JPA Map

## Future Land Use Distribution

JOINT PLANNING AGREEMENT  
future land use

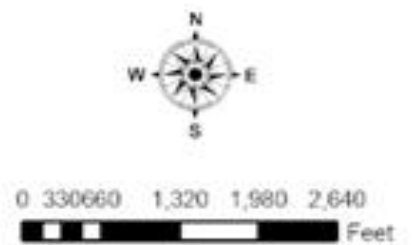


# Conservation Efforts



**City of Groveland**  
Palatlakaha Conservation Corridor  
156 S. LAKE AVENUE  
GROVELAND, FL 34736  
WWW.GROVELAND-FL.GOV

- Acquired by Groveland
- Under Negotiation
- Pending Transfer
- Properties of Interest





# Current Projects

- Wildflower Medians
- SR 50 Splitter Island
- Urban Forestry Program
- Landscape Code Update: Conservation Landscapes
- Historic Oak Tree Union Colored Cemetery of Taylorville Restoration





# Agrarian Code


TRACTOR FARM



HAND-TENDED FARM/ ORCHARD



FORAGEABLE WILDERNESS



COMMUNITY GARDEN



GREEN ROOF



FRONT YARD GARDEN




AQUAPONICS



APIARY



CHICKEN COOP



RAIN HARVESTING



HYDROPONICS



GREEN HOUSE



## Agrarian Transect Code Summary

DRAFT 3/21/2025



ZONING DISTRICTS	T1 Conservation	T2 Agriculture	T3 Village Edge Hamlet Edge Single Family Limited Single Family Res. Low Density Res. GS Rural GS Low Density	T4 Town Edge Village Center Hamlet Center Moderate Density Res.	T5 Town Center Village Core Hamlet Core	T6 Town Core Core
Uses Along the Transect						
GARDENS						
Community Garden		P	P	NC		
Front Yard Garden		P	P	P		
Backyard Garden		P	P	P		
Green Roof		P	P	P	P	P
Balcony Garden		P	P	P	P	P
Window Garden		P	P	P	P	P
FARMS & FOODSCAPES						
Hand-tended Farm/Orchard		P				
Tractor Farm		P				
Forageable Wilderness		P				
ACCESSORY STRUCTURES						
Aquaponics		P	P	NC		
Hydroponics		P	P	NC		
Coop		P	NC			
Apiary		P	P	NC		
Rain Harvesting		P	P	P	P	P
Compost		P	P	P	P	P
Greenhouse		P	P	P	NC	NC
Farmstand		P	P	NC	NC	NC
Livestock		P				

Key: P Permitted S Special Exception NC Neighborhood Consent



# Dark Sky Certified

Dark Sky Certification - August 2022

Dark Sky Lighting Standards

Annual Star Party - CherryLake Tree Farm









# FWC Corridor Compatible Communities (CCC) Design Guidelines

- Category 1: Site Planning and Design
- Category 2: Reducing Impacts from Infrastructure
- Category 3 Biodiversity and Ecological Improvements
- Category 4 Community Access, Culture and Education

## Design Guidelines for **CORRIDOR COMPATIBLE COMMUNITIES**



# City of Jacksonville Resiliency







# OUTSIDE

SUSTAINABLE LANDSCAPE COLLABORATIVE



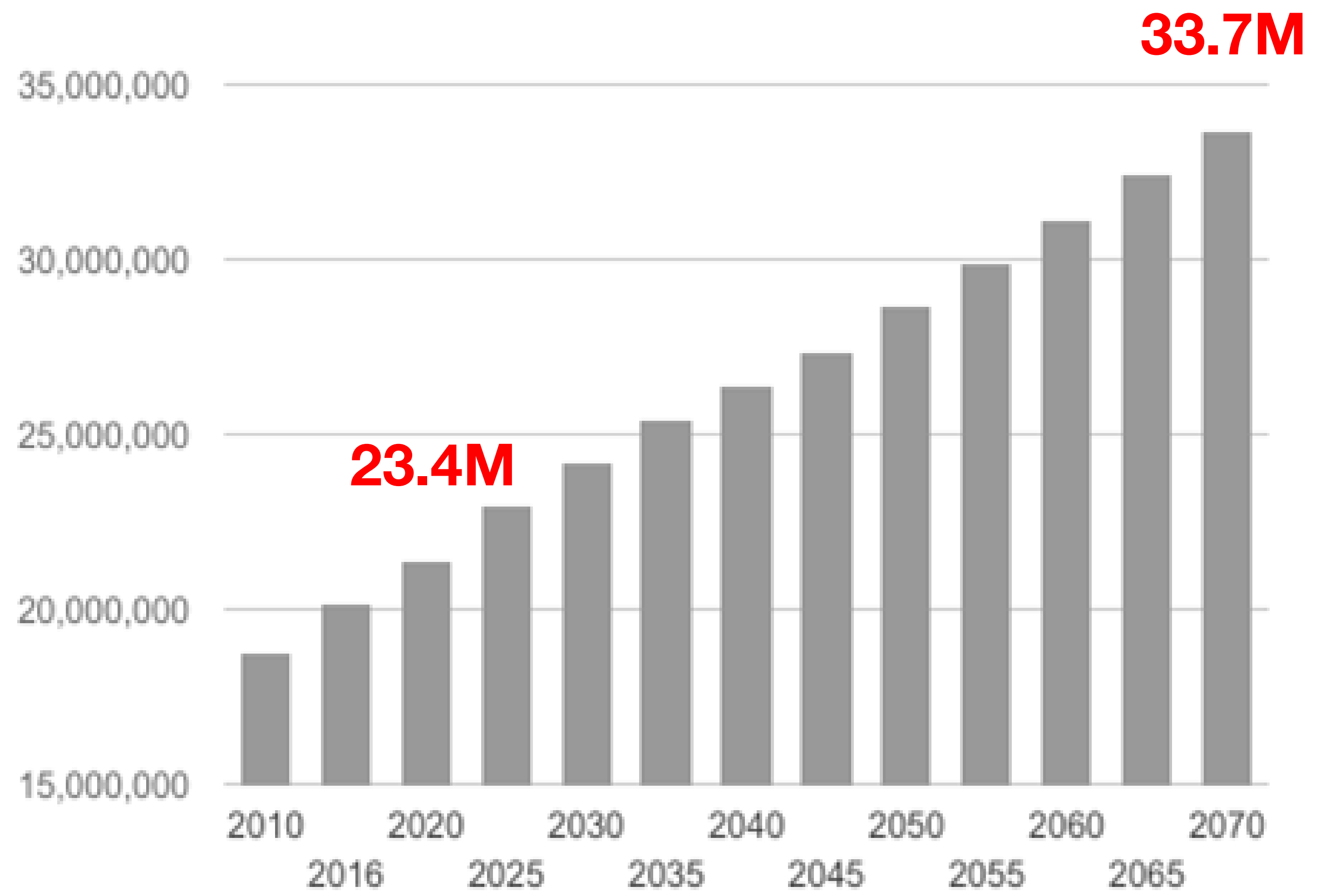
# CHAIN OF CUSTODY



COLLABORATION



# BEBR: FLORIDA POPULATION FORECAST







# **WATER CRISIS**

**FLORIDA IS ALREADY EXPERIENCING WATER SUPPLY SHORTAGES**

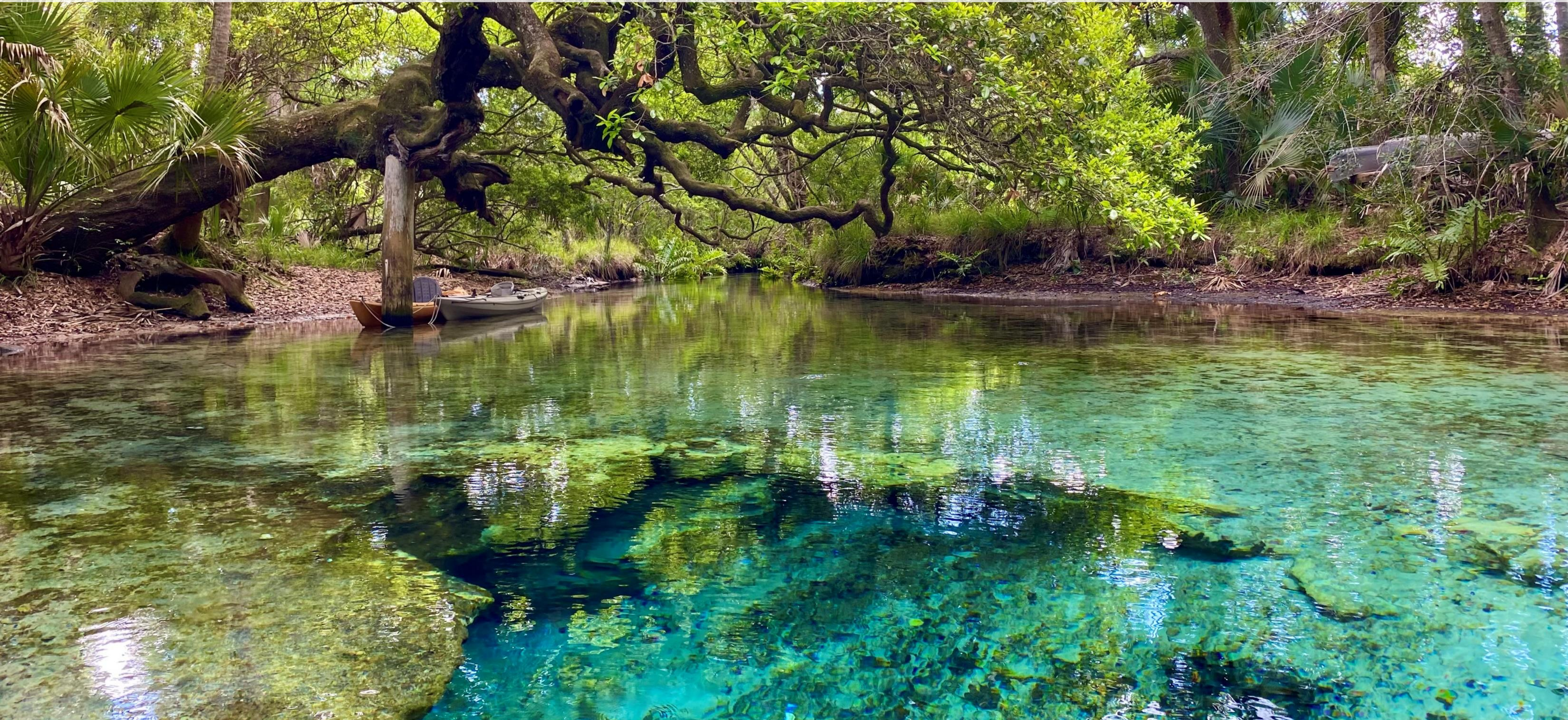
Source: Water 2070

*Image Credit: SJRWMD*



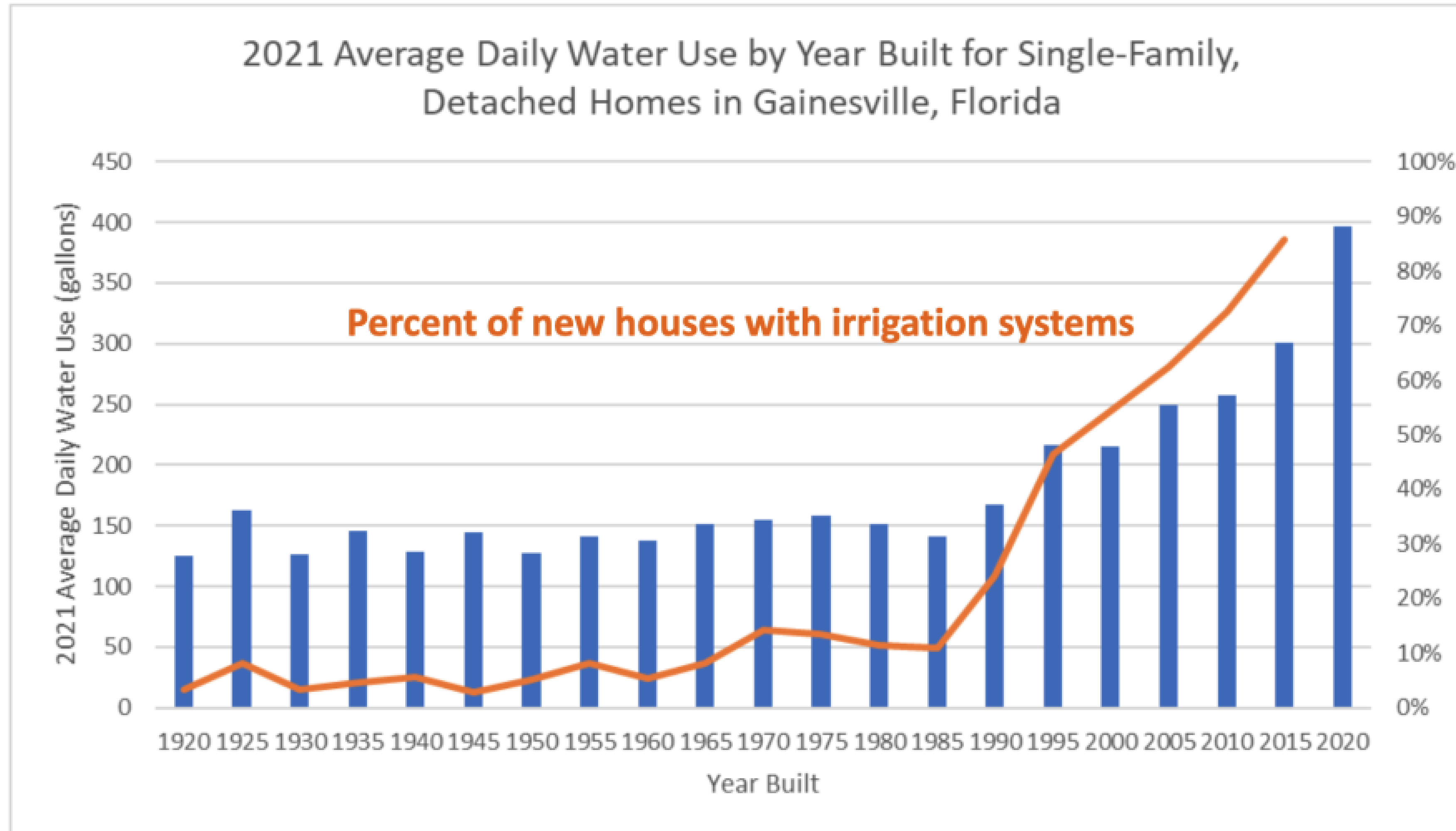
**“Any decline in aquifer levels translates into reduced spring flows. The number of Florida springs that have decreased or ceased flows increases every year”**

**Silenced Springs: Moving From Tragedy to Hope by Robert L. Knight (2015)**





# IRRIGATION SYSTEMS DRIVE UP WATER USE

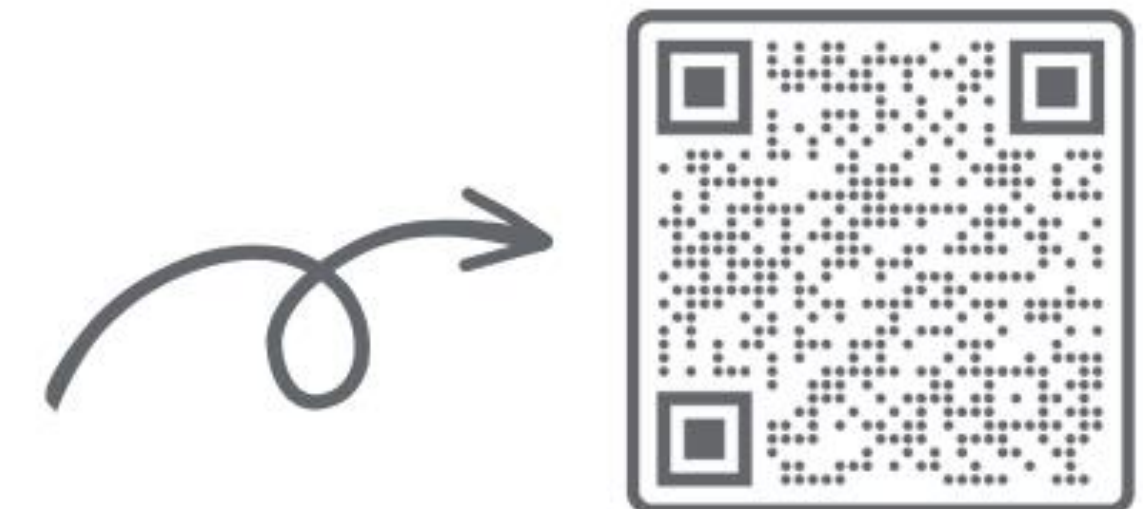


*Source: UF IFAS Program for Resource Efficient Communities*



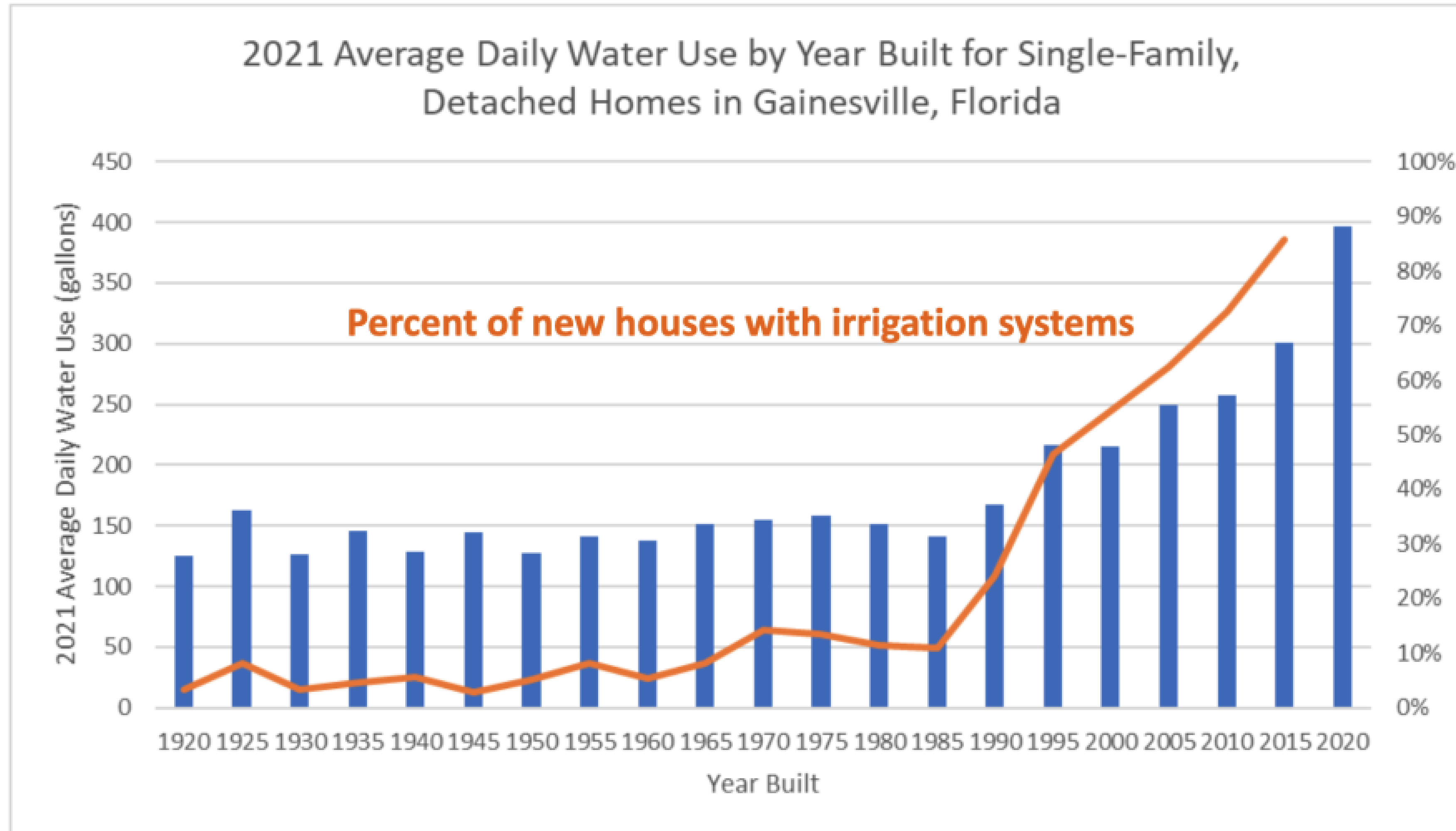


For more information, visit: [1000friendsofflorida.org/florida2070/](http://1000friendsofflorida.org/florida2070/)





# IRRIGATION SYSTEMS DRIVE UP WATER USE



Source: UF IFAS Program for Resource Efficient Communities





*Matanzas River in St. Augustine, Florida By Cnagel*





St. John's River Photo Credit: Tom James, [www.pelicanmedia.tv](http://www.pelicanmedia.tv)



## BIODIVERSITY: A UNIFYING THEME

- Ecosystems and biodiversity are declining more rapidly than ever
- Can't reach sustainability goals without sustaining biodiversity
- Need local to global efforts
- Landscape planning and design can make a difference



SUSTAINABLE  
DEVELOPMENT GOALS

[Home](#)

[About](#) ▾

[Campaigns](#) ▾

[Goals](#) ▾

[Take Action](#) ▾

[Partnerships](#) ▾

[News And Media](#) ▾

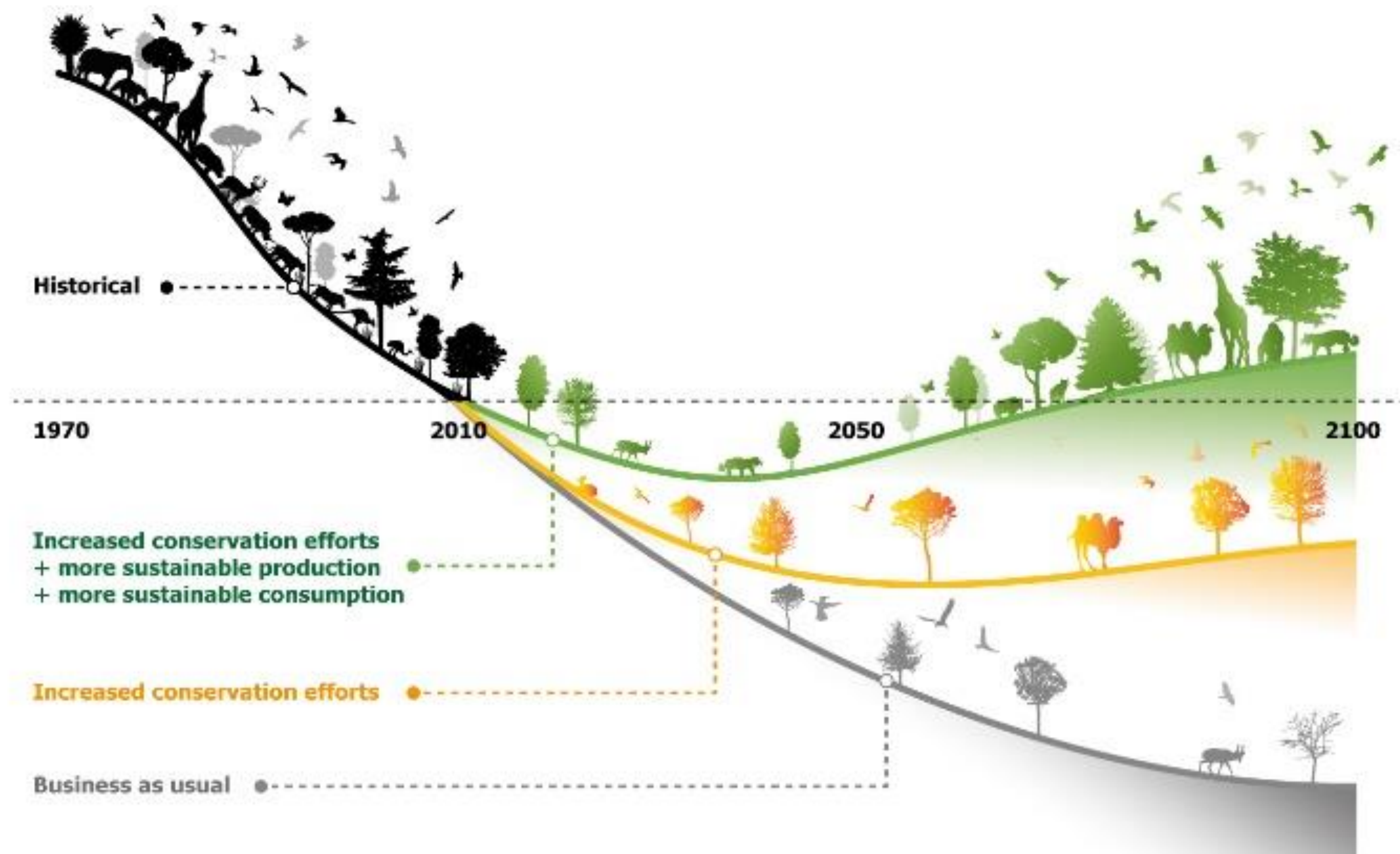
[Learn More](#) ▾

UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'





# BIODIVERSITY LOSS







*Image Credit: National Geographic/ Shutterstock*





**WE HAVE THE ABILITY TO DESIGN OUR LANDSCAPES IN A WAY  
THAT NOT ONLY MINIMIZES THE LOSS OF NATURAL  
ECOSYSTEMS BUT SUPPORTS THEM.**



# THE BIG 4

- Minimize/Eliminate Irrigation Beyond Establishment
- Minimize/Eliminate Mineral Fertilizer Use
- Minimize/Eliminate Pesticides
- Promote/Maximize Ecosystem Services







IRRIGATION TO ESTABLISH

FUNCTIONAL ZONES

CANOPY

STORMWATER STORY

MINIMIZE TURF

BIOSWALES

PRESERVE SOIL MOISTURE

PLANT NATIVE

**Minimize/Eliminate Irrigation Beyond Establishment**



CELEBRATE FLORIDA

BIODIVERSITY

CANOPY

PROVIDE HABITAT

PUBLIC HEALTH

PREVENT EROSION

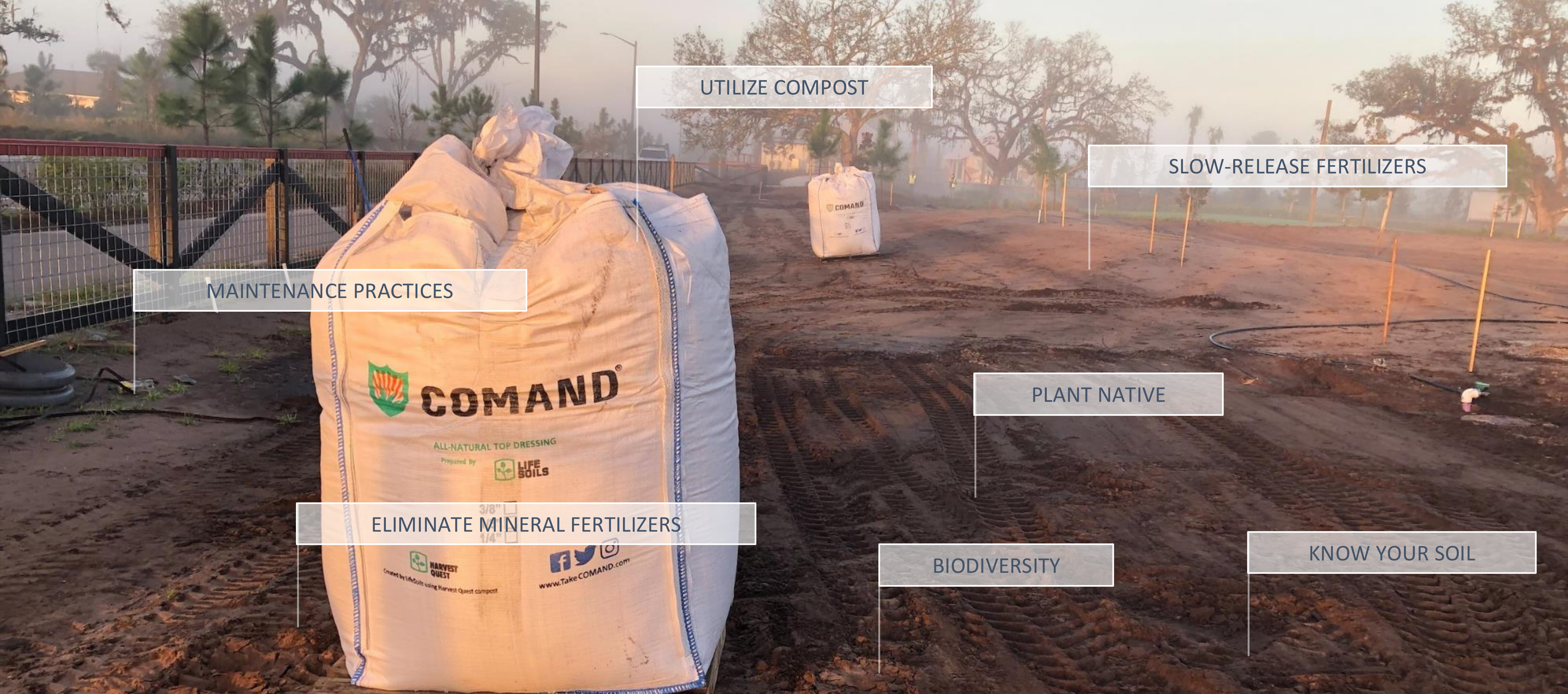
INVITE POLLINATORS

EMBRACE STORMWATER

AIR AND WATER QUALITY

# Promote/Maximize Ecosystem Services





UTILIZE COMPOST

SLOW-RELEASE FERTILIZERS

MAINTENANCE PRACTICES

PLANT NATIVE

ELIMINATE MINERAL FERTILIZERS

BIODIVERSITY

KNOW YOUR SOIL

Minimize/Eliminate Mineral Fertilizer Use





## Minimize/Eliminate Pesticides





MINIMIZE PLANT REPLACEMENT

COSTS OF FERTILIZER AND  
PESTICIDES

REDUCE LONG-TERM  
MAINTANANCE

QUIET MAINTENANCE

REDUCE COST OF WATER

REDUCE STRESS ON INFRASTRUCTURE

**Tangible Results: TIME + COST SAVINGS**

*Sunbridge, Orlando, FL*





# Implementing the Big 4





Chris Hite's Residence

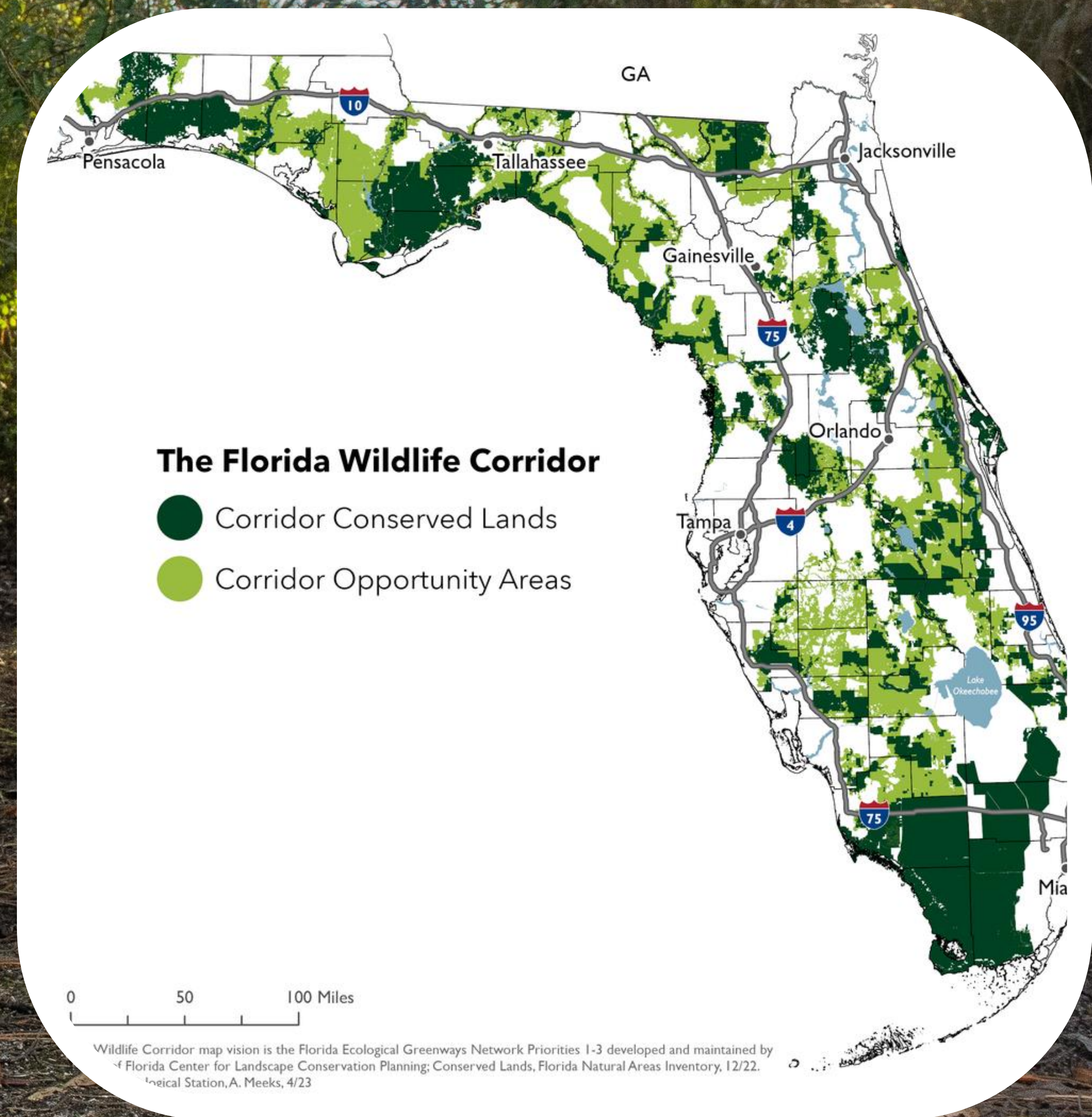


Hite Family Residence

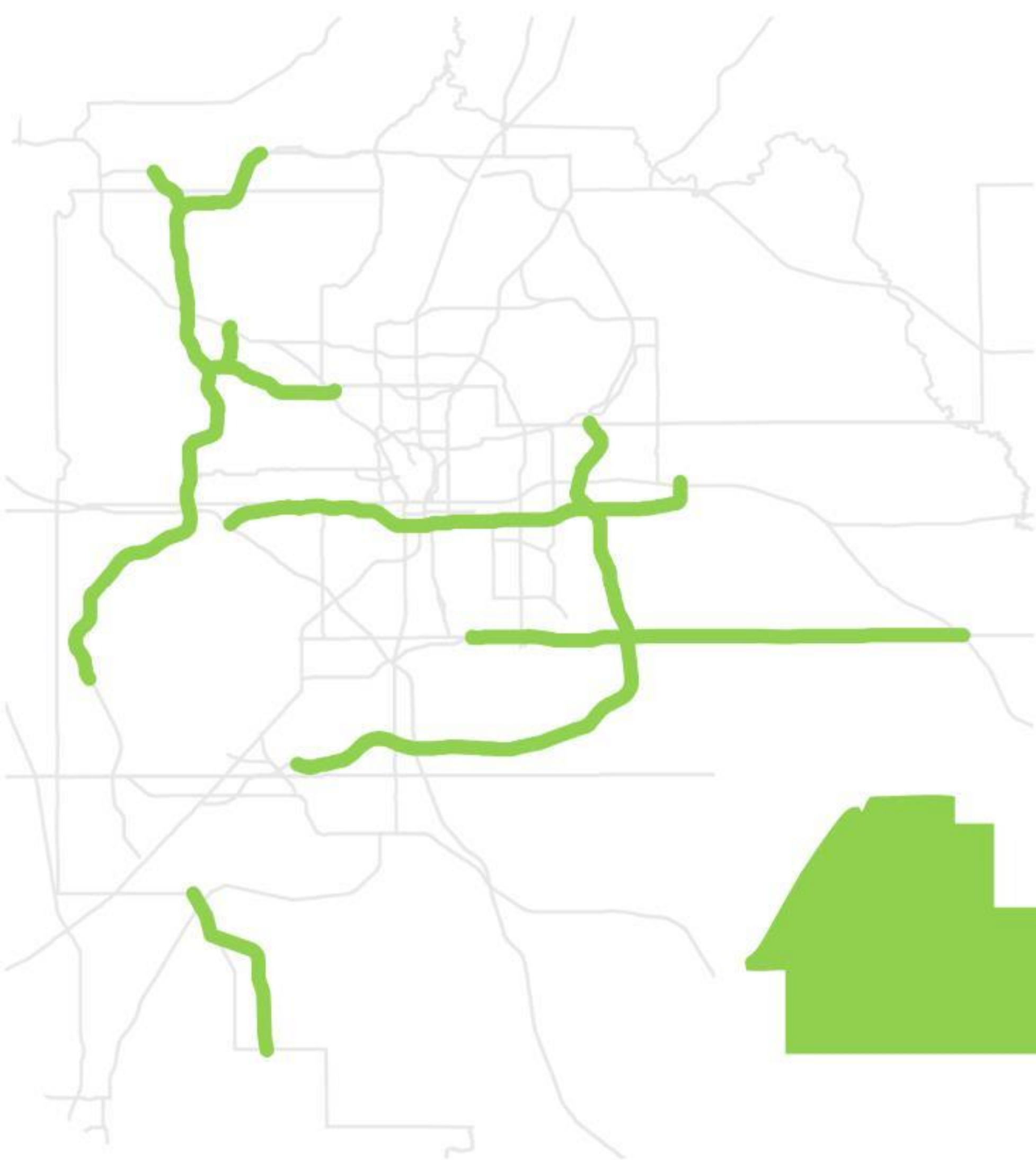




Image Credit: Carlton Ward, Jr.







**CFX**  
**125 MILES**



**WATERLIN**  
**6000 ACRES**



**CREST LAKE PARK**  
**39 ACRES**

**IT'S HERE**



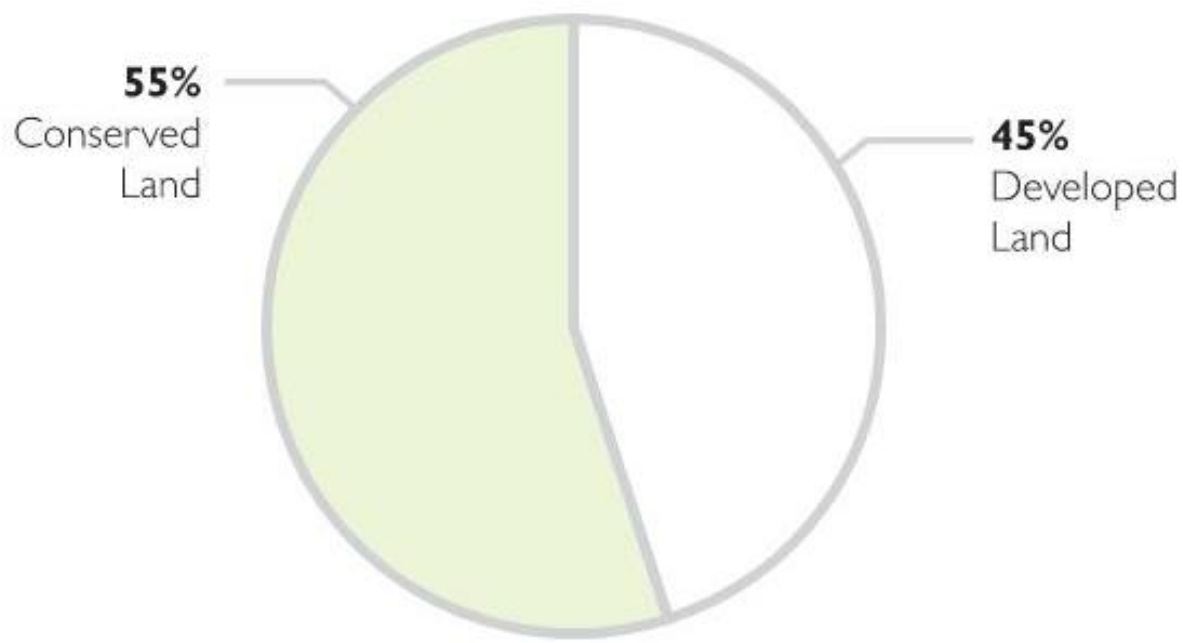
**RESIDENCE**  
**.10 ACRES**



# OVERALL DESIGN INTENSITY

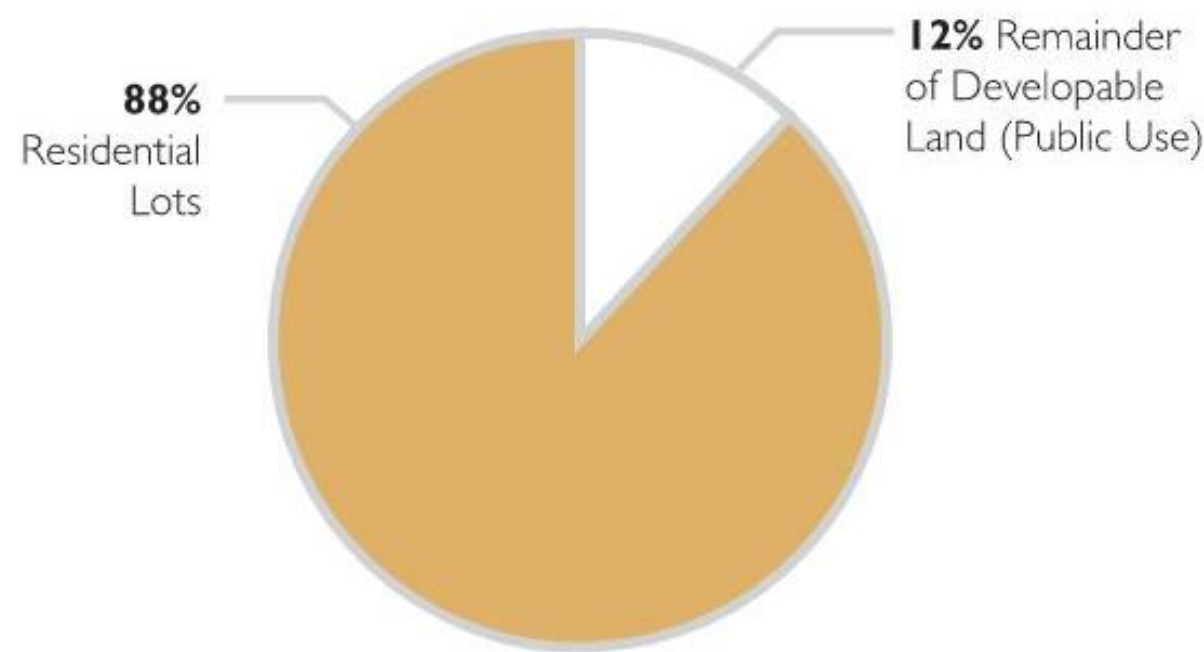


## DEVELOPMENT IMPACT



Around 45% of the site will be developed for residences, amenities, park spaces, and roadways with about 55% remaining undeveloped.

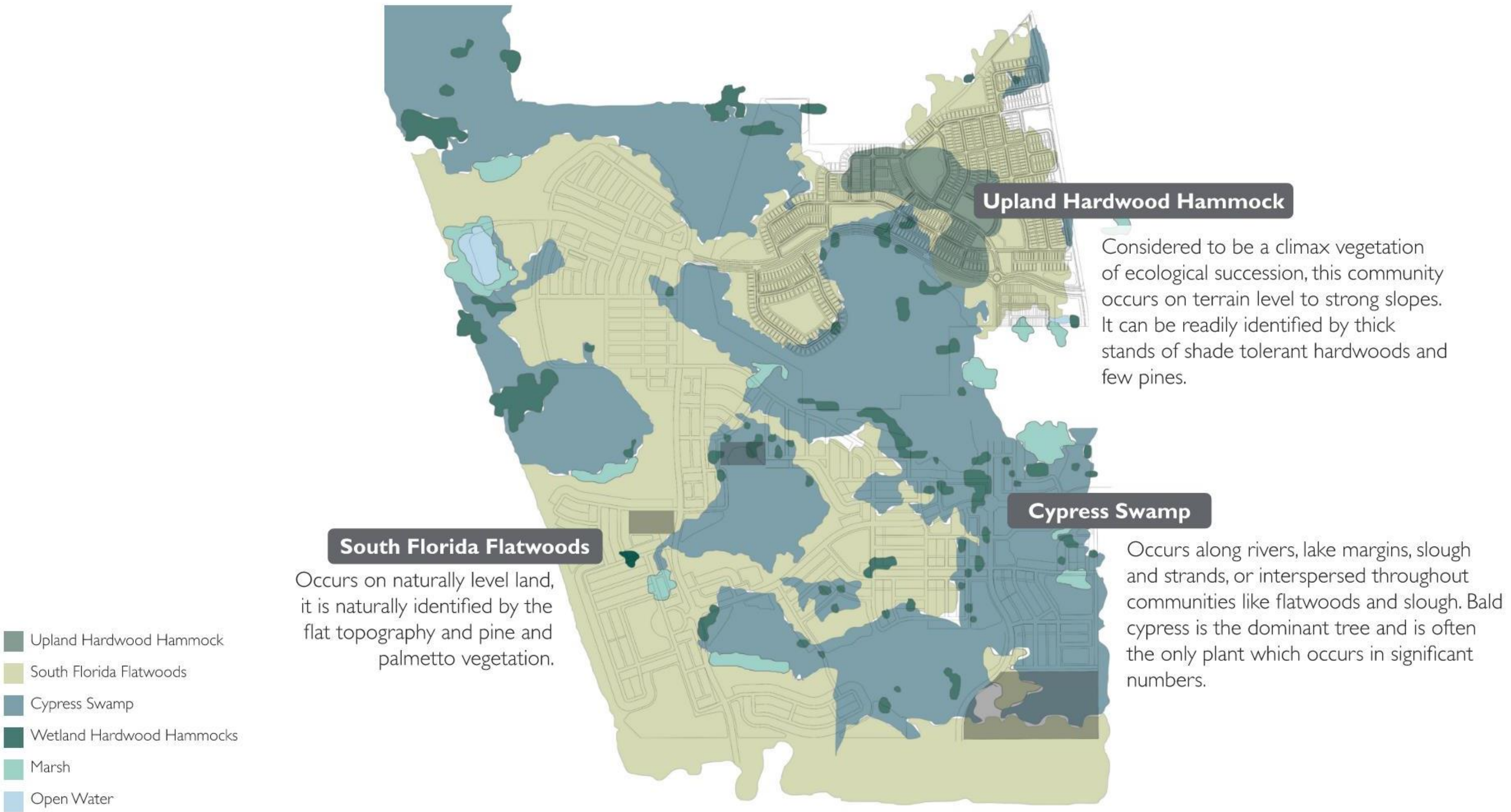
## RESIDENTIAL IMPACT



Around 88% of **developable land** on the site is comprised of residential lots.



# UTILIZING NATIVE PLANT COMMUNITIES TO INFORM DESIGN





A photograph of a mangrove forest at dusk or dawn. The trees have dense green foliage and prominent, tangled, light-colored prop roots extending into the water. The sky is a deep, dark blue with some lighter clouds. The overall scene is dimly lit, with the text overlaid in bright white.

HOW DO **COMPOST** AND **IRRIGATION** AFFECT  
OVERALL **NATIVE PLANT HEALTH**, BUT ALSO **FLORAL**  
**ABUNDANCE** AND IN TURN, THE **POLLINATORS** THAT  
THESE NATIVE PLANTS ATTRACT?



# MODEL HOME TESTS





# TEST PLOTS



















**“OUR PRELIMINARY RESEARCH SHOWS  
THAT COMPOST NEARLY DOUBLED BOTH  
FLORAL AND POLLINATOR ABUNDANCE.”**

MYKAYLA HAGAMAN, UCF URBAN ECOLOGY LAB



## GOALS: THE BIG 4

### THE FLORIDA ECOSYSTEM

# THE NEW YARD PATTERN BOOK

FOR FLORIDA'S SUSTAINABLE  
SINGLE FAMILY HOMES

OUTSIDE COLLABORATIVE  
A CASE FOR SUSTAINABILITY, FUNCTION, AND BEAUTY

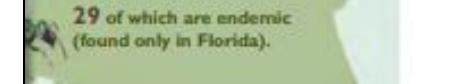
nearly 8,000 lakes, 1,700 rivers,  
and springs, thousands of miles of canals  
and wetlands.

an array of functions such as fish and wildlife habitat and provide human uses  
recreation, irrigation, drinking water, and flood control.



Florida is home to  
300  
SPECIES OF NATIVE  
BEES

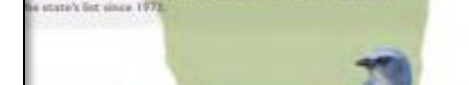
29 of which are endemic  
(found only in Florida).



Our state animal is the  
**FLORIDA PANTHER**  
(*Felis concolor coryi*)

The Florida Panther is one of the most  
endangered animals in the world with an  
estimated 120-130 panthers left in the wild.

It has been on the federal endangered species list since 1967 and  
the state's list since 1979.



Endemic to Florida is the  
**FLORIDA JAY**

habitat, an ecosystem that exists  
in the coastal areas of the Atlantic coast.

Culture and development purposes, and what is



ard Handbook

INTRO

5



#### ECOSYSTEM BENEFITS

ing a variety of native species in varied heights, textures,  
form results in a resilient and beautiful yard. It also  
des habitat for many different animals, conserving  
da's natural heritage and promoting human wellness.



#### HOLISTIC PEST MANAGEMENT

osing native plants builds habitat, creating balanced  
systems in which living organisms suppress pest  
lations and pesticides are rarely used.

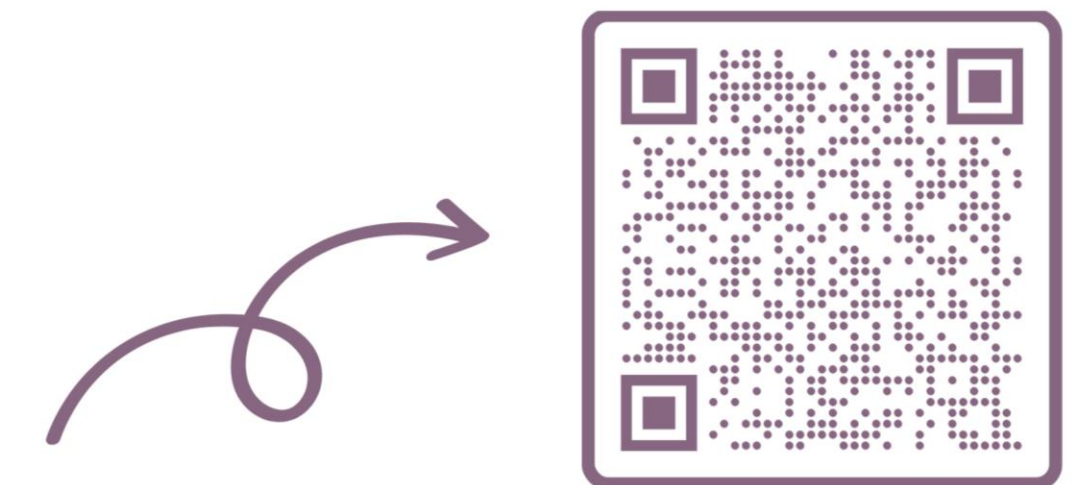
e New Yard Handbook

INTRO

7

## THE BIG 4

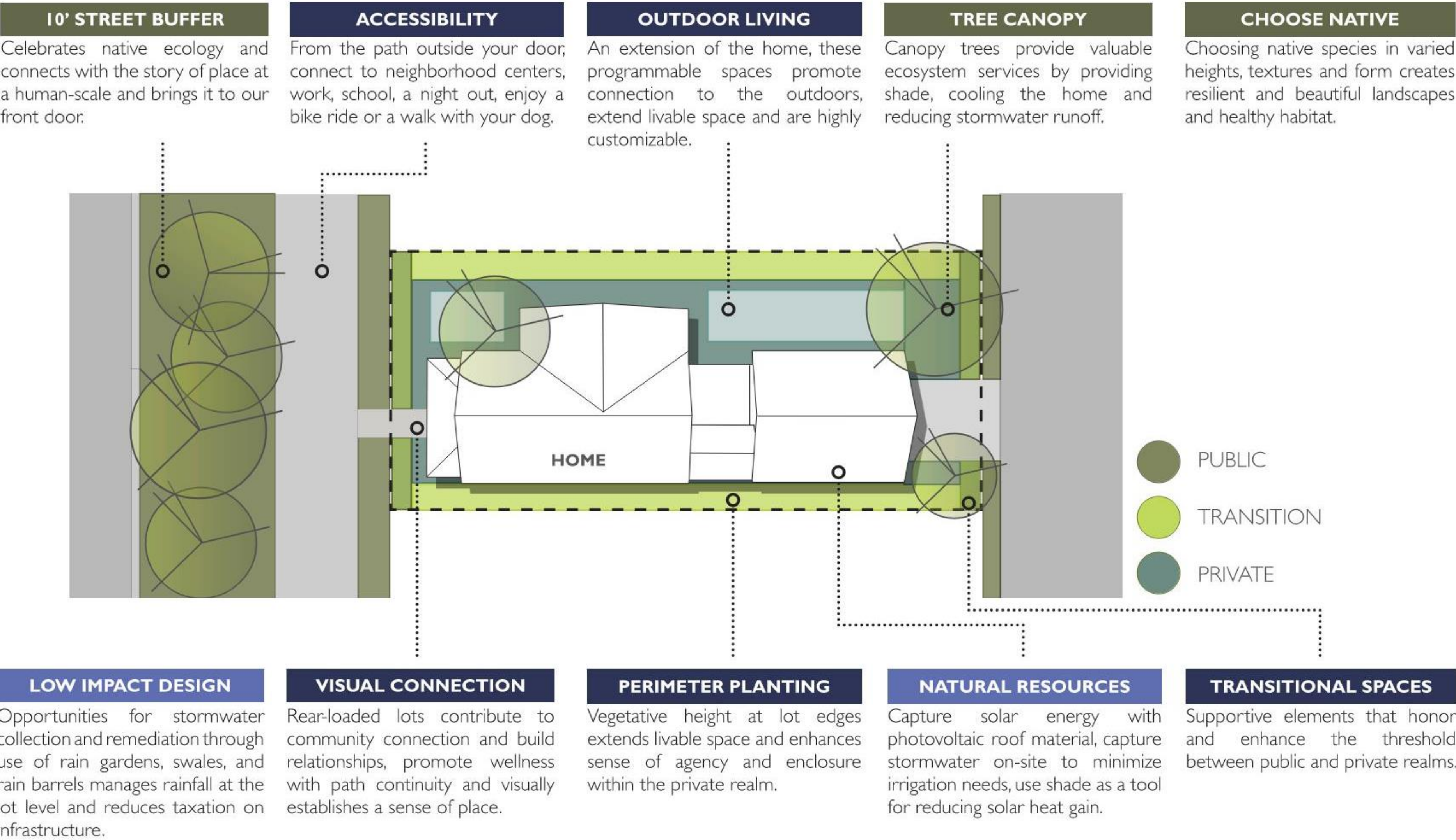
- Minimize/Eliminate Irrigation Beyond Establishment
- Minimize/Eliminate Mineral Fertilizer Use
- Minimize/Eliminate Pesticides
- Promote/Maximize Ecosystem Services



<https://www.dixhite.com/projects/newyardpatternbook>



# RESIDENTIAL LANDSCAPE LOT GUIDELINES





## TYPICAL FRONT YARD CONDITION



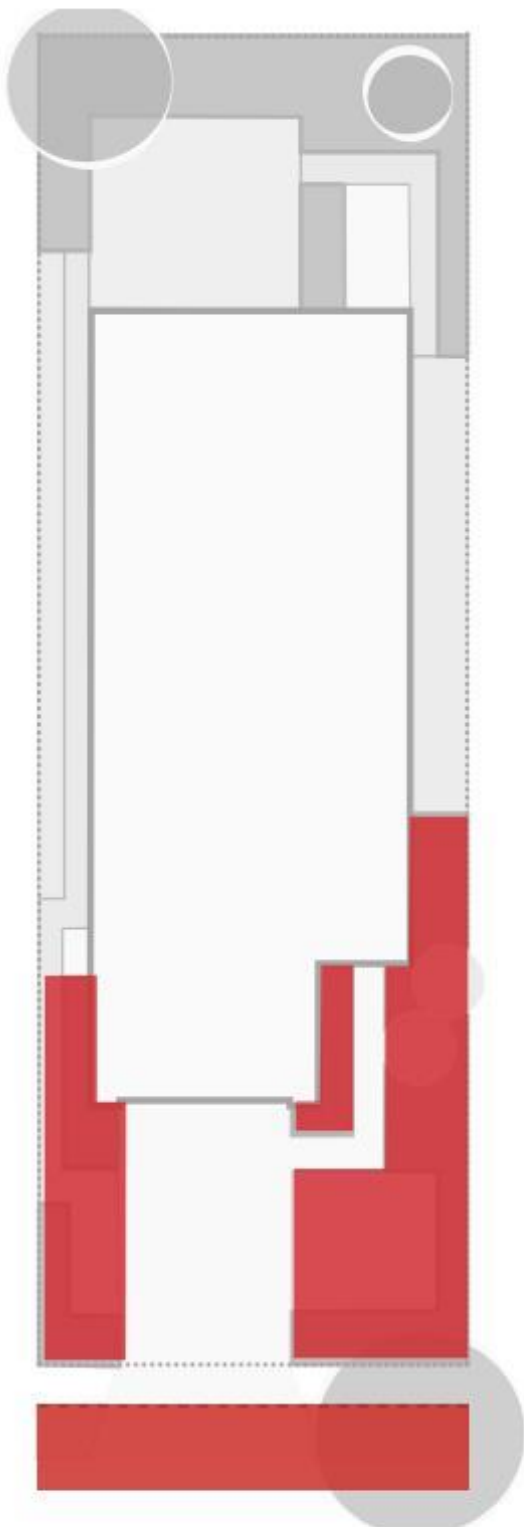


# IRRIGATION

What does irrigating 50% of the lot look like?

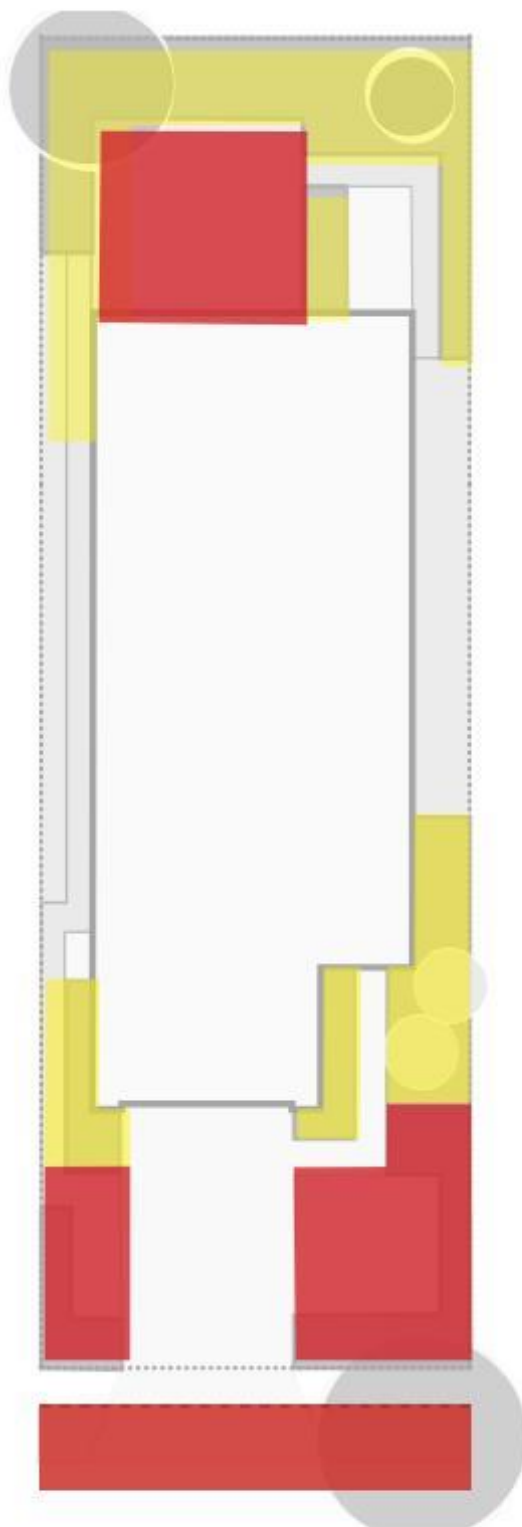
LEGEND

- High Volume
- Moderate Volume
- Low Volume
- No Irrigation



TOHO WATER  
AUTHORITY

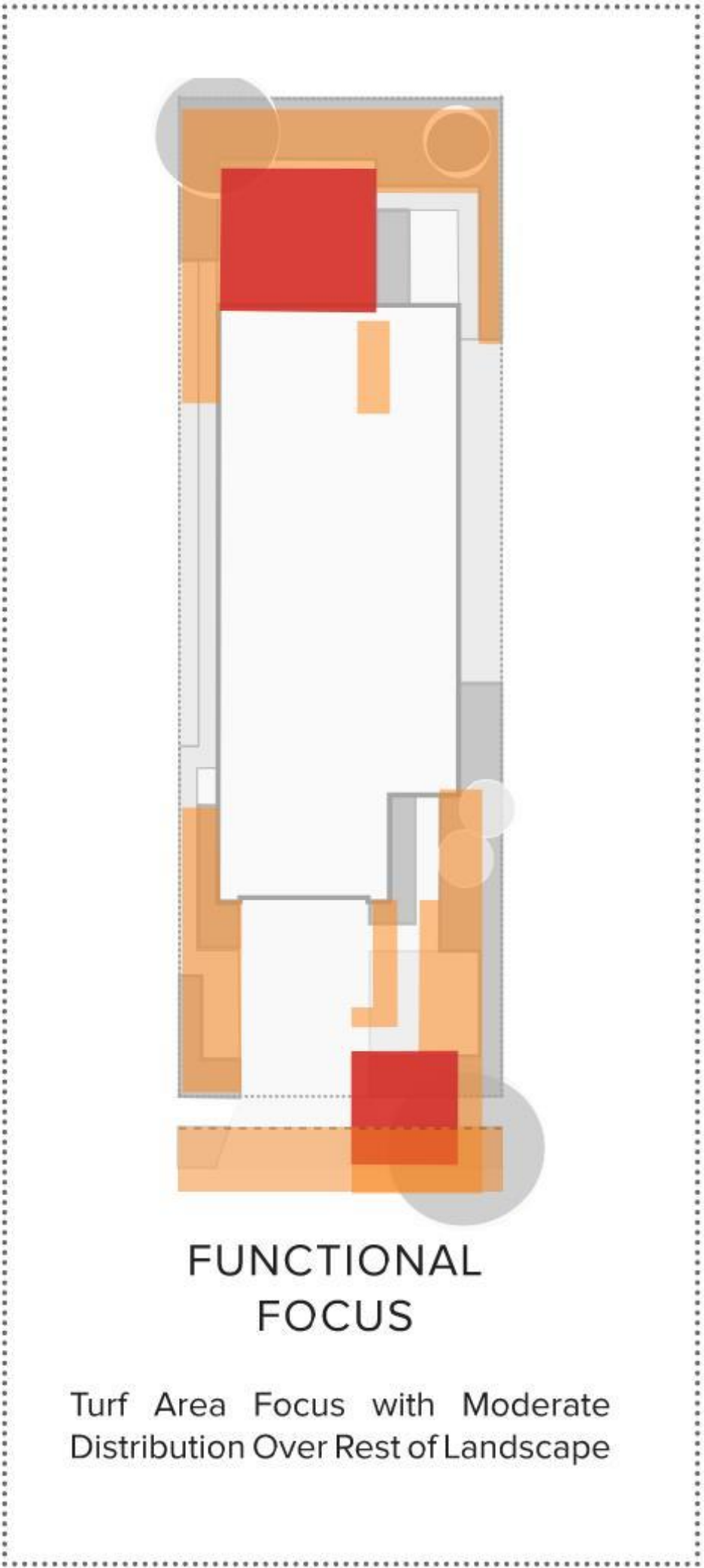
Full Irrigation Applied to Front Yard



ENHANCED  
FRONT YARD

Irrigation Focus on Front Yard and  
Turf Areas, Remaining Landscape  
is Irrigated at a Minimum. Requires  
Multiple Hydrozones.

PREFERRED STRATEGY



FUNCTIONAL  
FOCUS

Turf Area Focus with Moderate  
Distribution Over Rest of Landscape





6450

Pulte  
HOMES  
**Bordeaux**  
407.214.3013  
pulte.com  
SUNBRIDGE

FALL  
SALES EVENT

Pulte Homes  
SUNBRIDGE



# Landscaping Practices @ Sunbridge

## Del Webb vs Weslyn Park





## Landscaping Practices @ Sunbridge Del Webb vs Weslyn Park

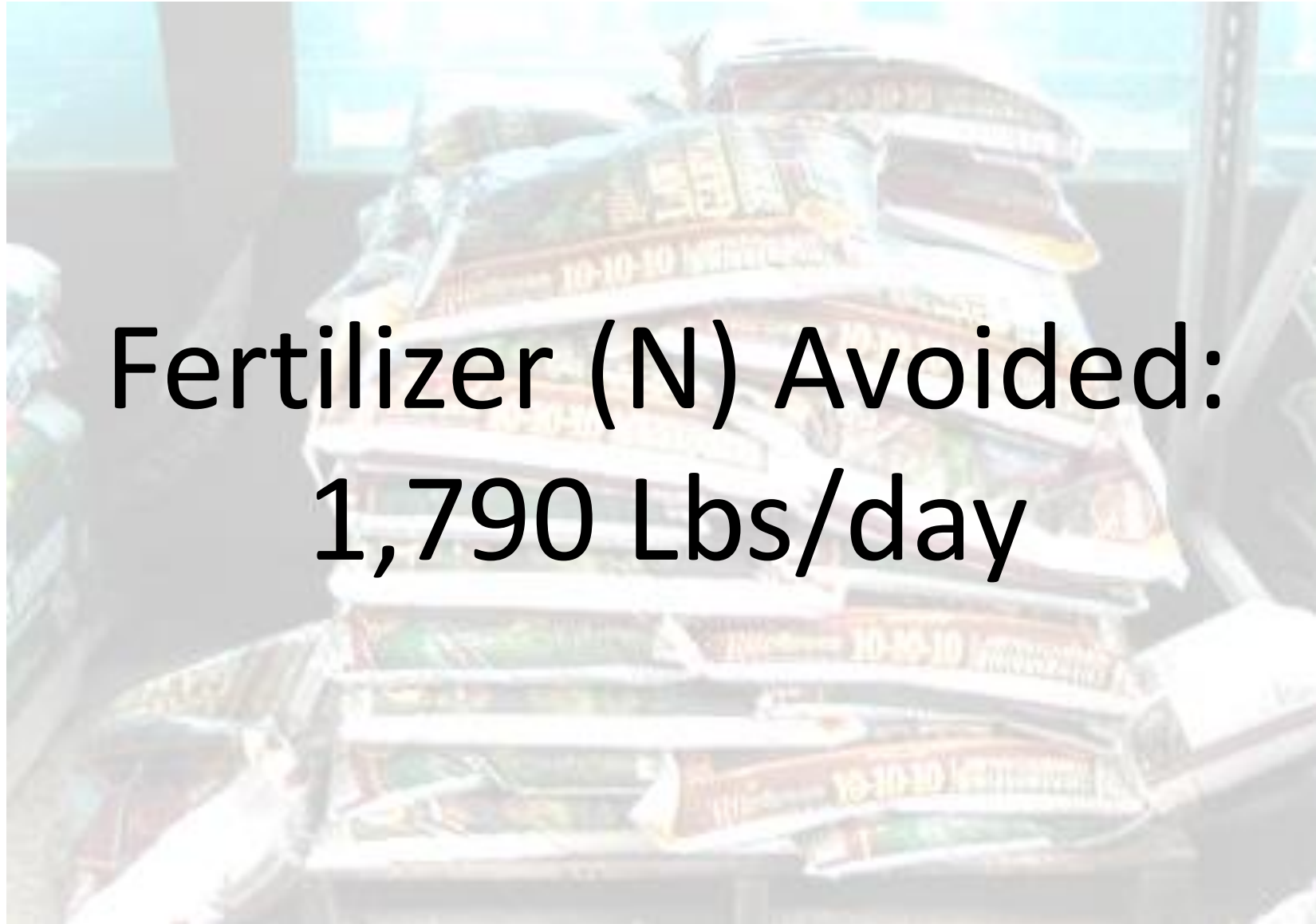




## Projected Landscaping Impact Reductions Sunbridge Stewardship District – 36,000 Dwelling Units



Mowing Avoided:  
430 Acres/day



Fertilizer (N) Avoided:  
1,790 Lbs/day



Pesticide Avoided:  
40 Acres/day



Irrigation Avoided:  
10,600,000 Gal/day

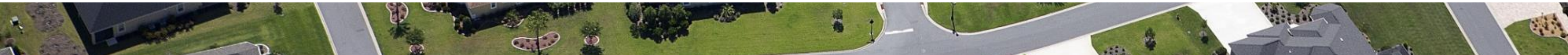








**NOT THIS**







**THIS**

*Dix.Hite + Partners*





**THIS**

*Dix.Hiter's Home, Orlando, FL*





**THIS**

*Crest Lake Park, Clearwater, FL*

Dix.Hite + Partners





**THIS**

*Starkey Ranch, Odessa, FL*

*Dix.Hite + Partners*





**THIS**

*Crest Lake Park, Clearwater, FL*

*Dix.Hite + Partners*





**THIS**

*Hamlin, Orlando, FL*

*Dix.Hite + Partners*



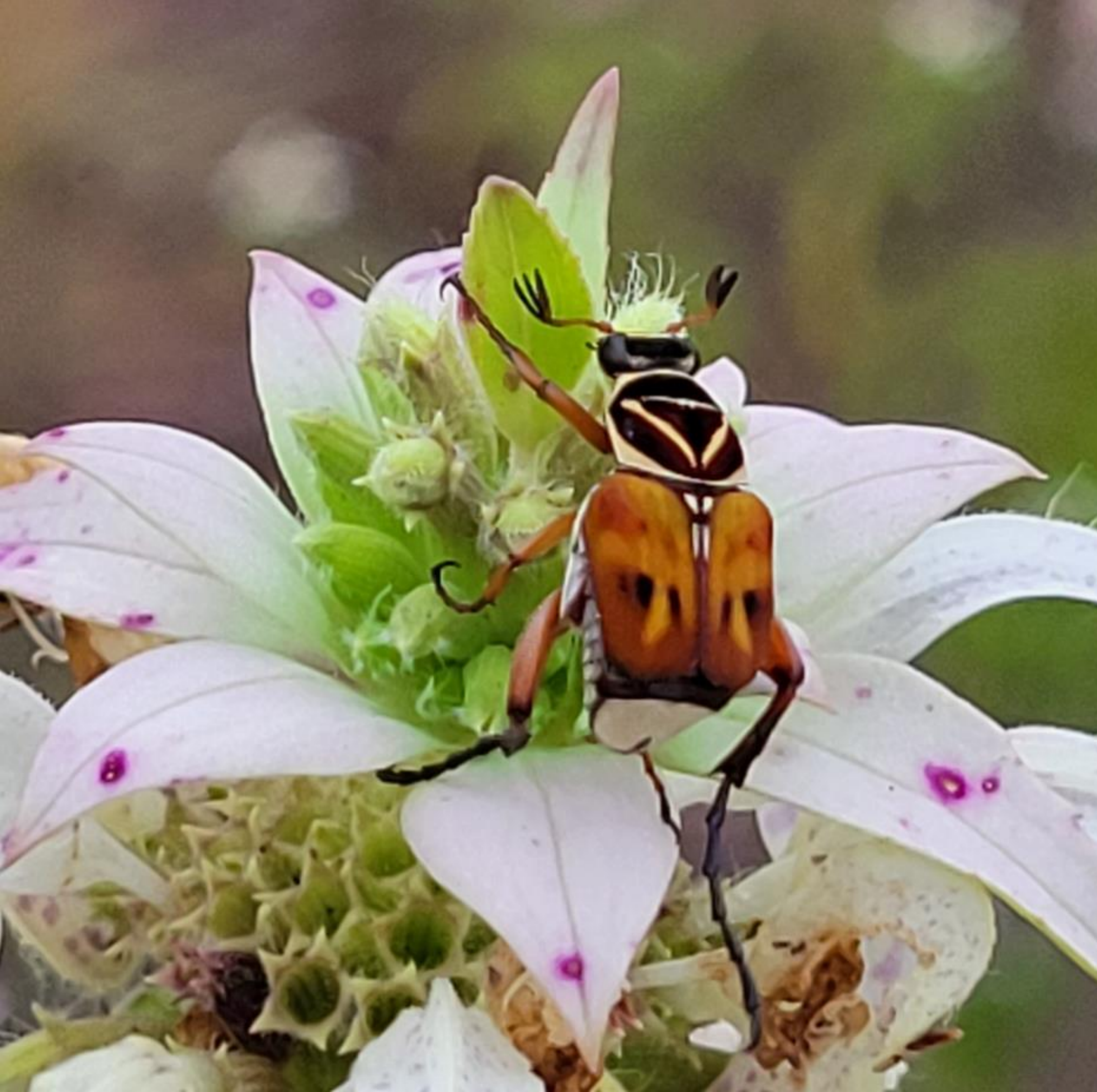


**THIS**

*Hamlin, Orlando, FL*

*Dix.Hite + Partners*





**“In the past, we have asked one thing  
of our gardens: that they be pretty.**

**Now they have to support life,  
sequester carbon, feed pollinators and  
manage water”**

**Doug Tallamy, Co-founder HNP**