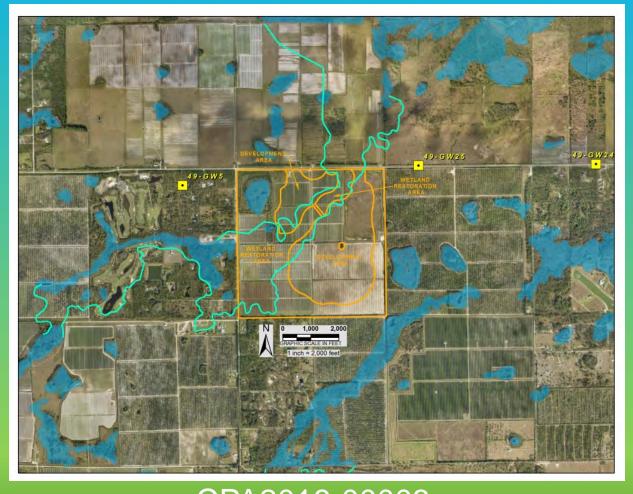
# Pepperland Ranch





CPA2016-00003
Local Planning Agency
Public Hearing
December 19, 2016



### Applicant Representatives

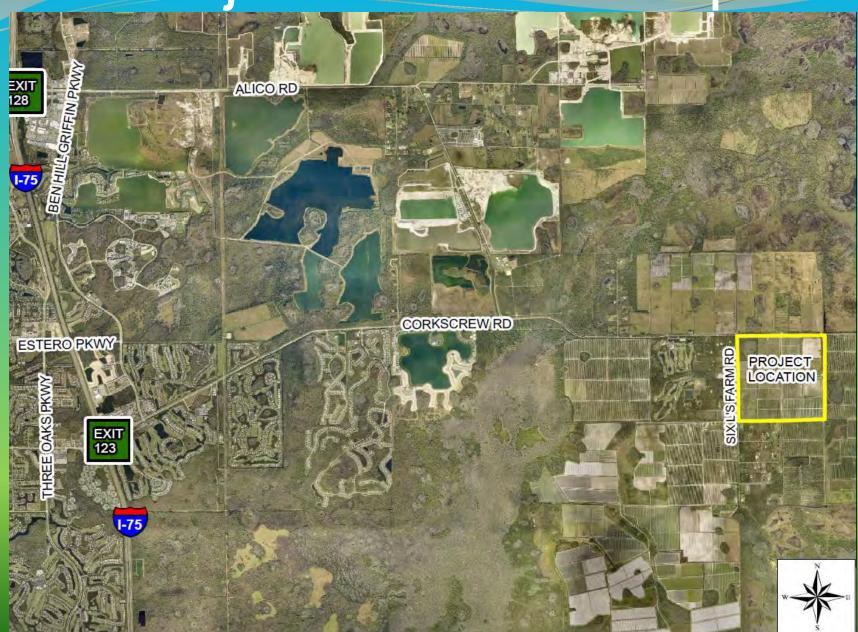
- Robert A. Cooper, Partner
  Hahn Loeser & Parks LLP
- Matthew A. Noble, AICP
   ANoblePlan, LLC
- Stacy Ellis Hewitt, AICP
   David R. Underhill, Jr., P.E.
   Banks Engineering
- Ted B. TreeshTR Transportation
- Kirk Martin, PG, President
   Water Sciences Associates
- Shane Johnson, Sr. Ecologist
   Passarella & Associates
- Brian F. Farrar, President
   BCF Management Group, LLC



#### LAND USE & PLANNING

Matthew A. Noble, AICP ANoblePlan, LLC

Project Location Map



# Project Location Map



5

#### Introduction

- 637.5 acre site with intensive ongoing agricultural operations
- SFWMD & Lee County borrow pit permitting
- Property highly impacted by existing AG uses
- Meets eligibility criteria in Lee Plan Policy 33.3.4.1 for inclusion in the Environmental Enhancement & Preservation Communities overlay

## Existing Intensive Agricultural Use



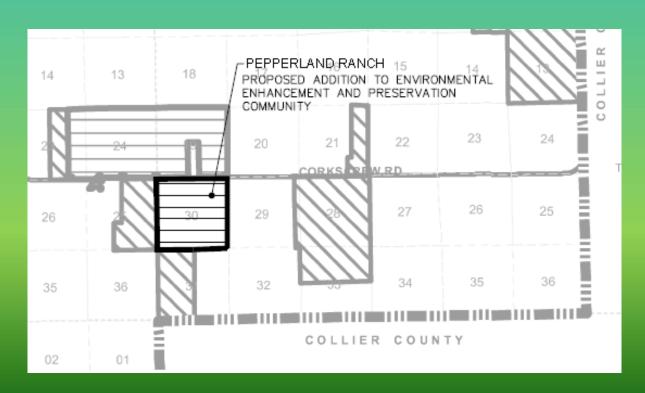






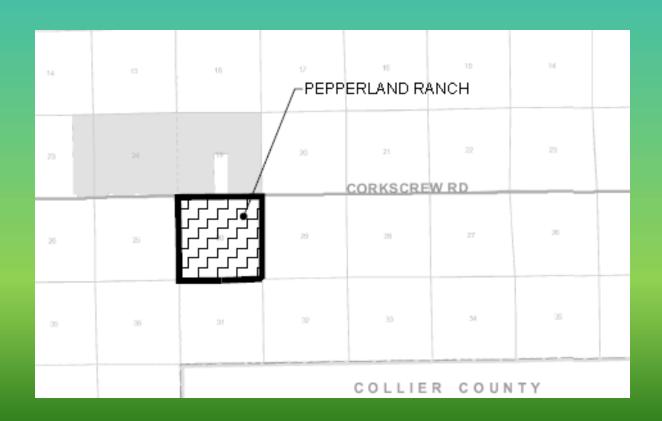
#### Requests

 Amend Lee Plan Map 17 - Southeast DR/GR Residential Overlay, to designate 637+/- acres along Corkscrew Road as an "Environmental Enhancement and Preservation Community"



### Requests

 Amend Lee Plan Maps 6 and 7 to include the property within the Future Potable Water and Sewer Service areas



- No onsite mining and associated activities such as truck traffic & blasting;
- 2. Eliminates AG use, reduce use of pesticides, herbicides & fertilizers;
- 3. Restores upland and wetland areas/flowway restoration corridor;
- 4. Preserves and restores wetlands/uplands and enhances by exotic removal; restores wildlife habitats including creation of wood stork habitat/foraging habitat for wading birds;
- 5. Preserves to provide **additional** wetland **restoration/flowway** connections to adjacent properties;
- 6. Increases the amount of land available for water recharge, while reducing impacts on groundwater resources;

- 7. Reduces water utilization over 65% from current AG use;
- 8. AG fields & ditches will be removed & the land re-graded to restore wetland areas/historic flowways and surface hydrology;
- Provides additional wildlife connections & corridors from conservation lands to the north, south, east and west of the property.
- 10. Preserved & **restored** areas will **increase wildlife** habitat;
- 11. Increases native vegetation on the property;
- 12. Connects to public water & sewer services, eliminates individual wells & septic systems, which will further protect the area's public water wellfields;

- 13. Increases basin storage that will potentially allow additional surface water flows to enter the property from Corkscrew Road;
- 14. Accommodates water treatment of any additional surface water flow that enters the property prior to any offsite discharge;
- The project water management system is designed to **reduce** discharges at the existing outfall, which is located in the southwest corner of the property. Reduced discharges will be a benefit to the single family homes located to the south of the property;
- 16. Preserves future opportunities for further wildlife corridor connections in addition to wetland restoration/flowway connections;
- 17. Project results in a **more compatible use** with adjacent single-family homes.
- 18. Provides Enhanced Lake Management Plan to reduce nitrogen and phosphorus loading;

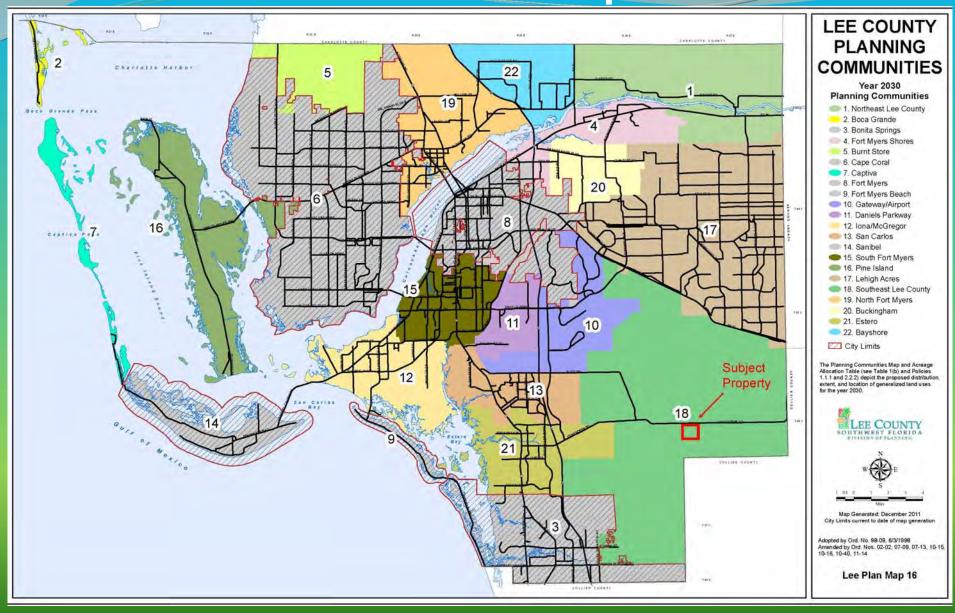
- Install monitoring wells and coordination of ground and surface water monitoring and monitoring wells with Lee County Natural Resources;
- 20. Requires **centralized irrigation** system **controlled** by **homeowner's association** with complete control of duration and timing;
- 21. Includes **central management** of **fertilizers** and **pesticides** with **prohibition** of **application** by individual **homeowners**;
- Restores 55% of site in conservation easement with restoration without 20/20 or tax dollars. (In 2012 the property north of this proposed project was reviewed as a 20/20 nomination (#496) at \$52,902/acre, which is comparable since this property is also tier 1 and agricultural. Given the subject property at that price, 55% of 637.5 acres (350.63 acres), the conservation value is an estimated \$18,548,763.75;

- 23. Florida Friendly **plants** with **low irrigation requirements** will be **utilized** in common elements.
- 24. Wildlife management & co-existence plans will be implemented;
- 25. Generates **Impact fees** in the **estimated** amount of  $\$6,194.88 \times 700 = \$4,336,416.00$ .
- Places portions of subject property, within Wellfield Protection Zone 1, into proposed conservation easement as indigenous upland restoration.
- 27. **Donation** of \$46,634.00 toward hard and soft costs in connection with construction improvements to the **Estero**Fire District buildings and other infrastructure without impact fee credits.
- 28. Donation of \$96,150.00 to Lee County EMS toward capital improvements necessary to support service delivery in the area without impact fee credits.

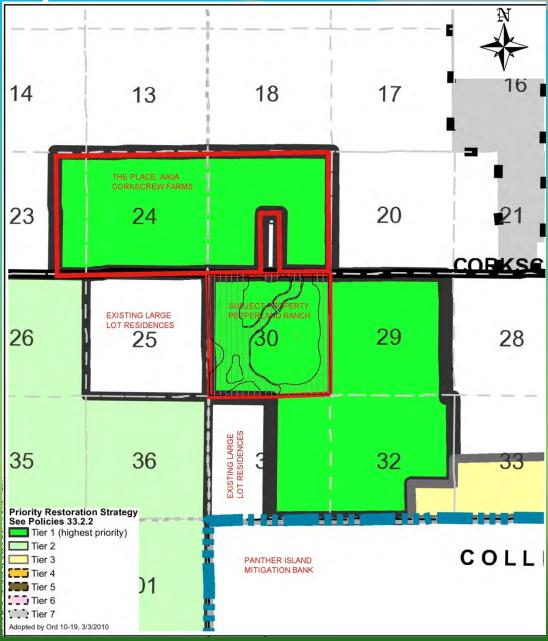
# Future Land Use Map



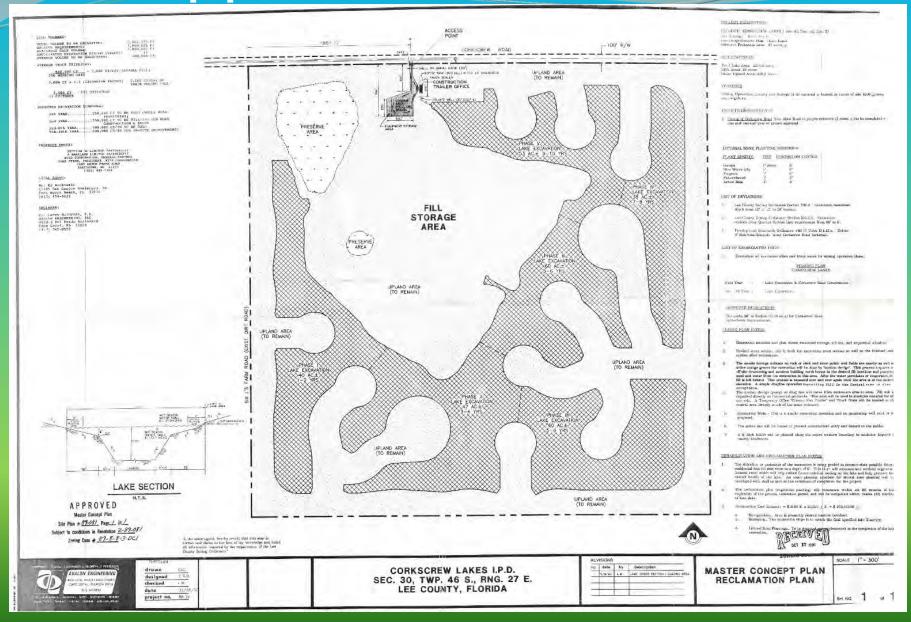
#### Lee Plan Map 16



Priority Restoration Strategy



### Approved Mine Plan:

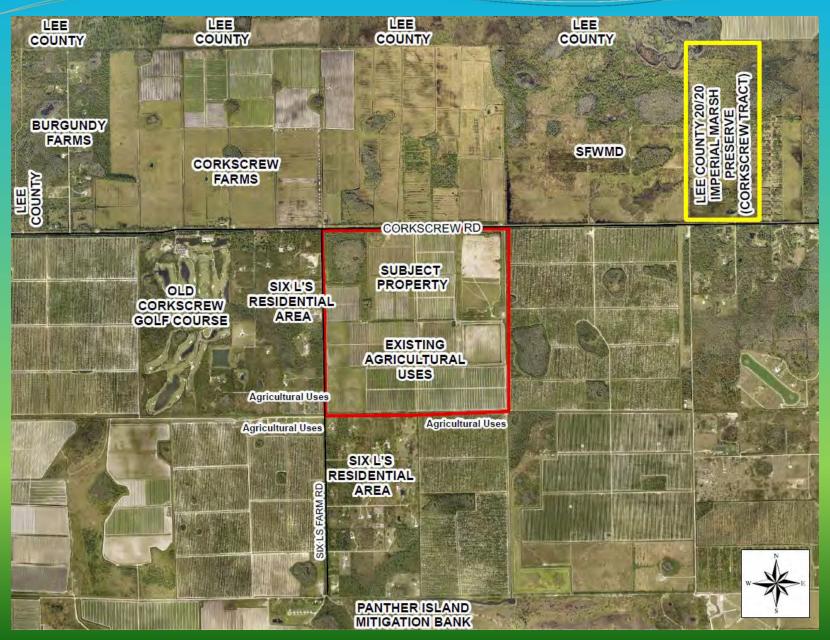


### Policy 33.3.4:

Properties that provide a significant **regional** hydrological and wildlife **connection** have the potential to **improve**, **preserve**, and restore regional **surface** and **groundwater resources** and indigenous **wildlife habitats**. These properties, **located** along **Corkscrew** and Alico Roads, can provide important **hydrological connections** to the Flint Pen Strand and the Stewart Cypress Slough as well as important wildlife habitat **connections between existing CREW and Lee County properties**. As an **incentive to improve**, **preserve**, **and restore regional surface and groundwater resources and wildlife habitat** of state and federally listed species **additional densities and accessory commercial uses will be granted** if the project is found consistent with and demonstrates through a Planned Development rezoning the following:

- 1. These lands are within the "Environmental Enhancement and Preservation Communities" overlay as designated on Map 17 of the Plan. Lands eligible for the Environmental Enhancement and Preservation Communities overlay must be consistent with one of the criteria below;
- a. Lands located west of Lee County 20/20 Imperial Marsh Preserve (Corkscrew Tract), and within one mile north or south of Corkscrew Road.
- b. Lands located west of the intersection of Alico Road and Corkscrew Road must be located north of Corkscrew Road and south of Alico Road.
- 2. The property is rezoned to a **Planned Development**

# Existing Uses



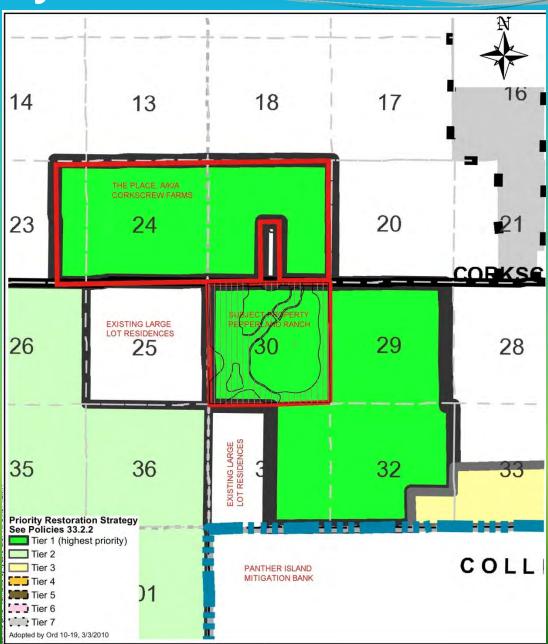
## Policy 33.3.4 Incentive Density:

In recognition of the preservation, enhancement, and protection of regional flowways and natural habitat corridors, the interconnection with existing off-site conservation areas, and the significant enhancement, preservation and protection of these lands, additional density may approved through **Planned Developments** 

## Policy 33.3.4 Density:

- a. **Tier 1** lands within the Priority Restoration Strategy will be permitted a **maximum density of 1 unit per acre**.
- od. Density in the Environmental Enhancement and Preservation Overlay will be based upon the acreage of the entire planned development (i.e. all areas within the boundary of the planned development whether uplands, wetlands, or lake will be calculated at the density provided above).
- e. Additional dwelling units may be approved in the Planned Development meeting the requirements above if transferred from other Southeast Lee County lands located outside of the Planned Development at the standard density of 1 unit per 10 acres for DR/GR lands and 1 unit per 20 acres for Wetlands future land use category if density rights are extinguished through an instrument acceptable to the County Attorney's Office.

## Priority Restoration Strategy



- Must include a minimum of 60 percent open
   space, not including previously mined lakes.
- Restore and accommodate existing and historic regional flowways where they currently or previously existed.
- Restore and accommodate existing and historic groundwater levels.
- Restore and preserve wetlands.
- Restore and preserve indigenous upland habitats.

- Provide critical wildlife connections to adjacent conservation areas.
- Provide 100 foot buffer along Corkscrew Road East of Alico Road.
- Includes an enhanced lake management plan, that:
  - 1. Applies best management practices for fertilizers and pesticides;
  - 2. Provides erosion control and bank stabilization; and
  - 3. Establishes lake maintenance requirements.

- Develop a site specific ecological and hydrological restoration plan.
- Record a Conservation Easement for a minimum of 55 percent of the planned development.
- Indigenous management plans must address human-wildlife coexistence.
- Uses Florida Friendly Plantings with low irrigation requirements in Common Elements.
- The stormwater management system must demonstrate through design or other means that water leaving the development meets state and federal water quality standards.

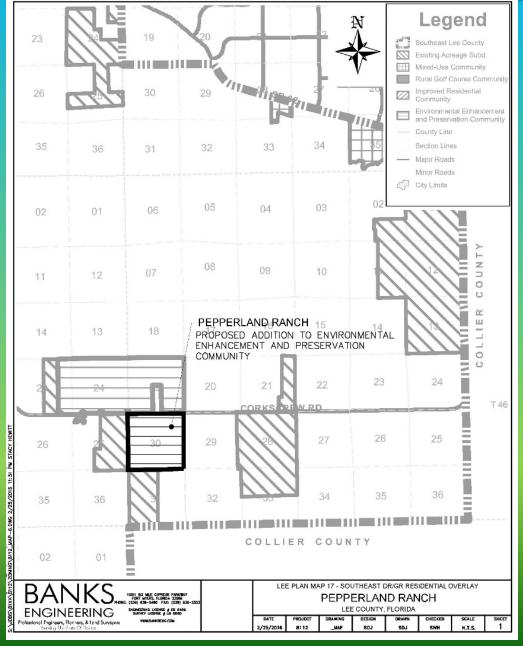
- Elimination of any agricultural row crop uses at time of first development order.
- Protects public wells through compliance with the requirements of the Well Field Protection Ordinance.
- Each Planned Development within the Overlay will be required to mitigate the traffic impacts of the Planned Development and provide its proportionate share of the needed roadway improvements in accordance with Administrative Code 13-16.
- Connect to public water and sewer service.
   Connect to reclaimed water if available at time of development order approval.

- Obtain written verification as to adequate public services for the Planned Development, from the sheriff, EMS, fire district, and Lee County School District.
- Demonstrate that the proposed rezoning will not result in significant detrimental impacts on present or future water resources.

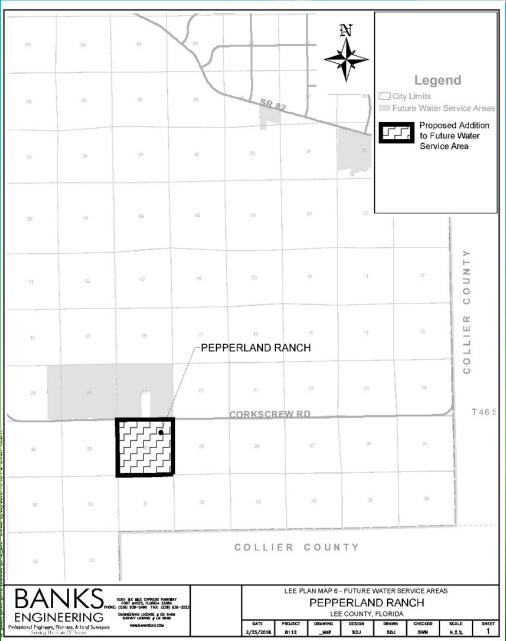
#### CPA2016-00003 - Pepperland Ranch

Overlay, to designate approximately 637+/- acres along Corkscrew Road as an "Environmental Enhancement and Preservation Community" and to amend Lee Plan Maps 6 and 7 to include the property within the Future Potable Water and Sewer Service areas in order to develop a residential community.

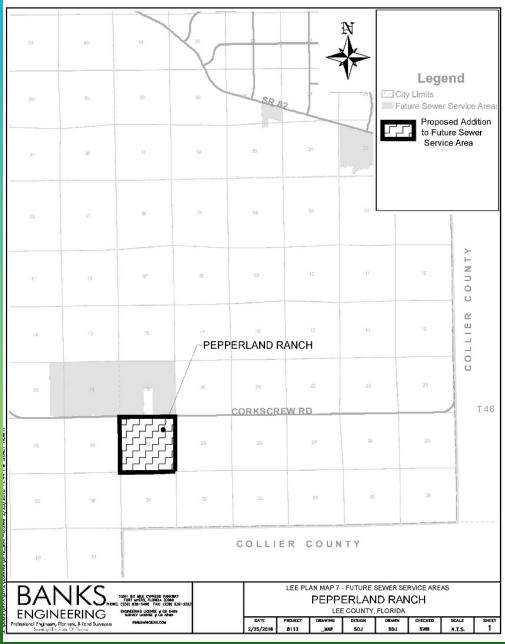
## Proposed Addition to Map 17



## Proposed Addition to Map 6



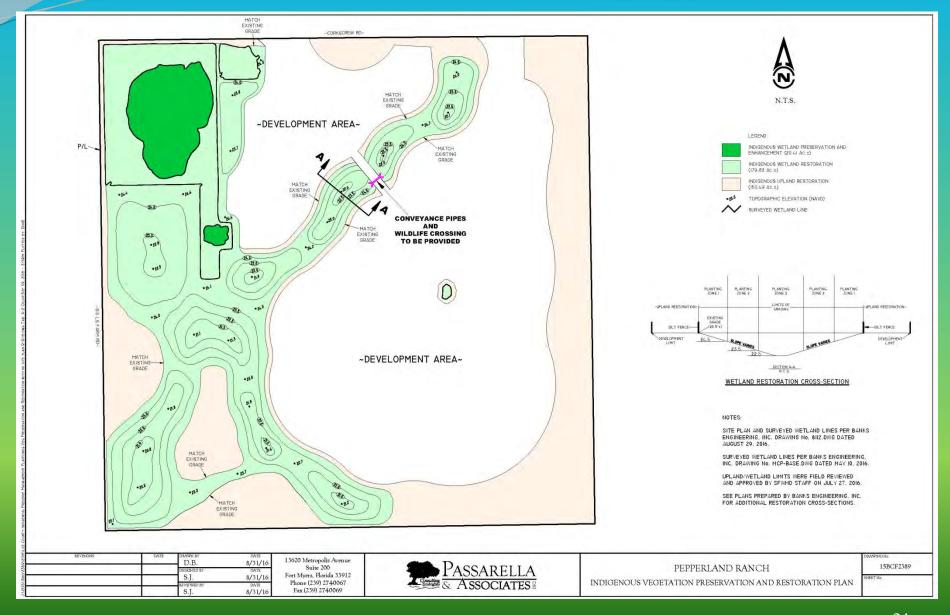
## Proposed Addition to Map 7



### Proposed Development Plan



### Restoration Plan



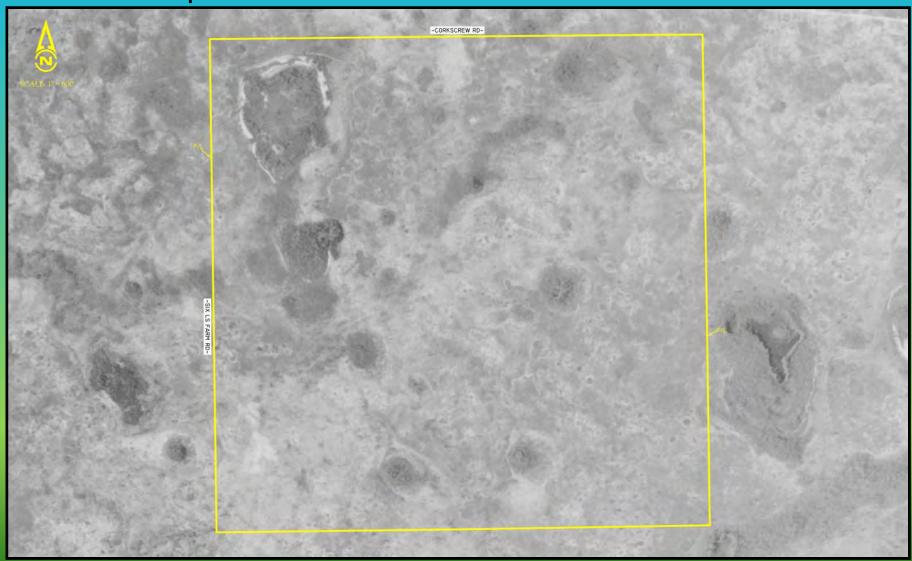
#### **ENVIRONMENTAL**

Shane Johnson, Senior Ecologist



# Historical Background

No Development in 1951



## Historical Background Intensive Row Crop Activities in Place by 1968



Highly disturbed

Intensive row crop

activities still in place

- Berm and ditch system around perimeter of site
- Severed historic sheet flow and hydrologic conditions
- Severed wildlife habitat





- 51± acres of wetlands (Green)
- Wetland habitats include:
  - Cypress
  - Willow
  - FreshwaterMarsh
  - Disturbed land
- 61% contain >75% exotic vegetation



- 564± acres of uplands (Orange)
- Upland land uses include:
  - Row crops
  - Berm
  - Disturbed land
- 100% of the existing uplands are non-native land uses.



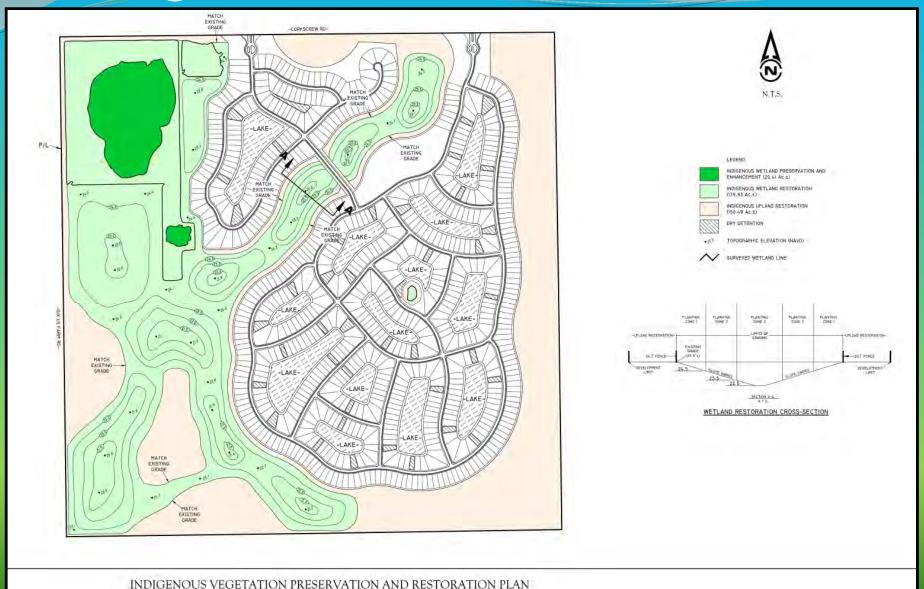
### Protected Species

PAI conducted a Lee
County PSS in February
and May 2016

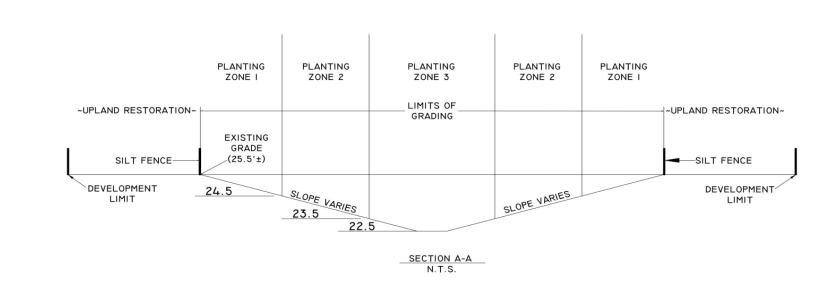
- The following species were observed:
  - American alligator
  - Crested caracara
  - Sandhill Crane
  - Little blue heron
  - Roseate spoonbill
  - Snowy Egret
  - Tri-colored Heron
  - Wood Stork
  - White Ibis



## Indigenous Restoration Plan



## Indigenous Restoration Plan

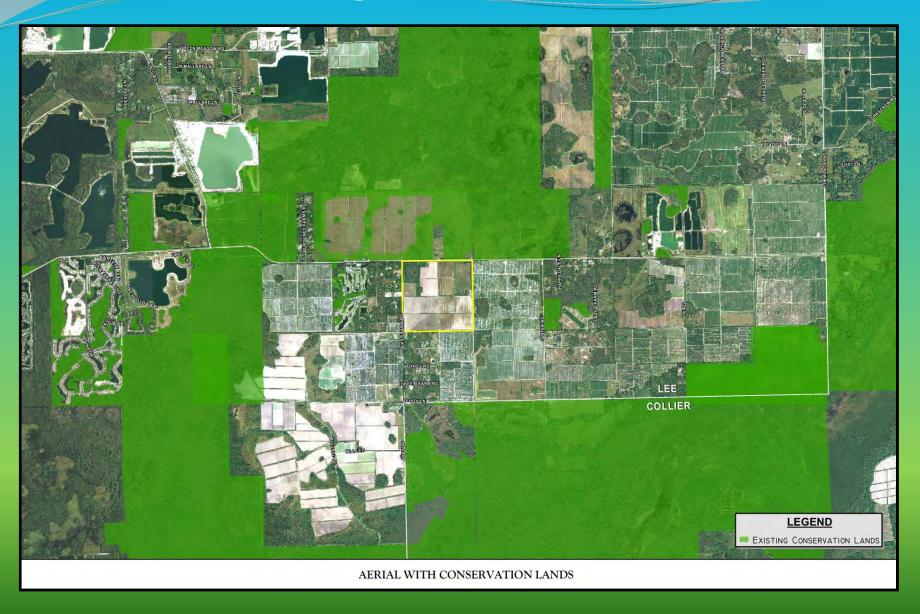


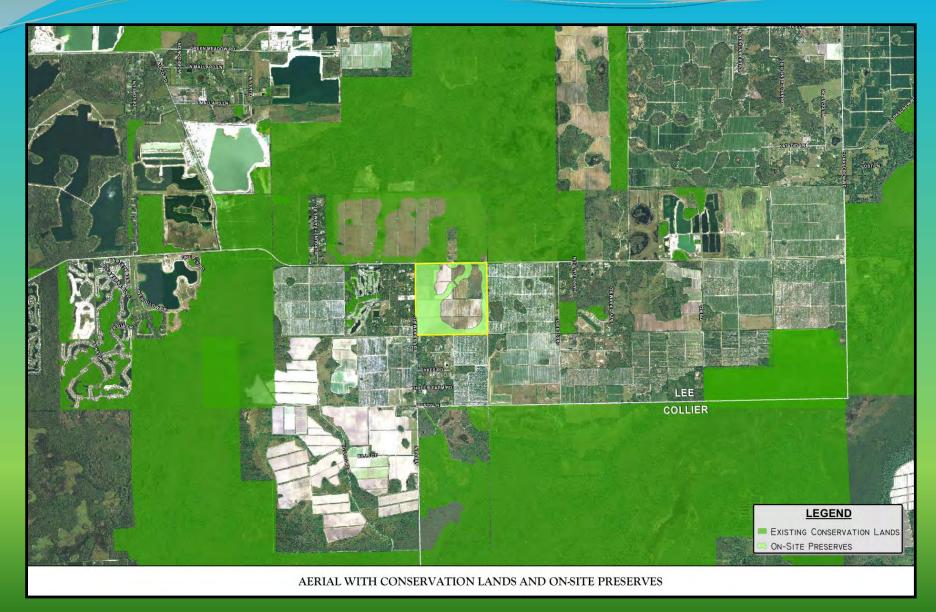
WETLAND RESTORATION CROSS-SECTION

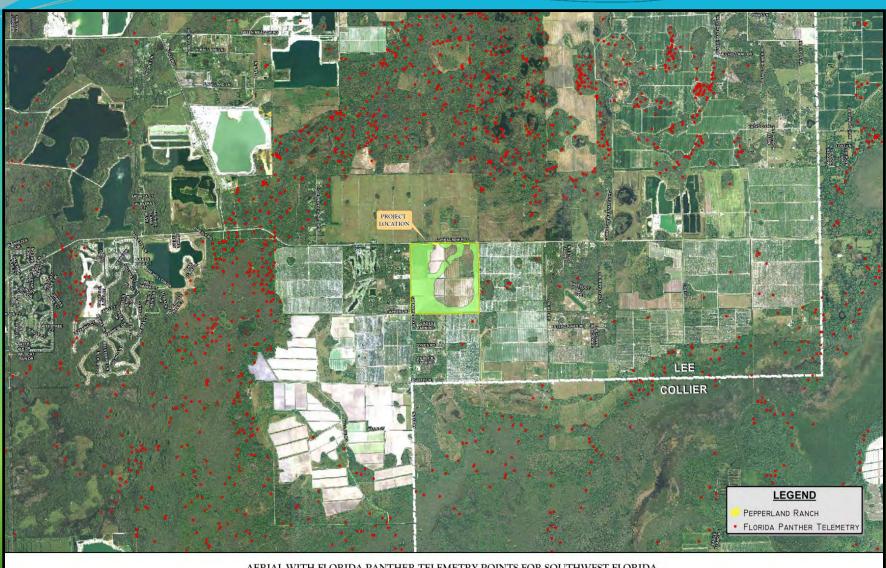


- Preservation, enhancement, and restoration of 350± acres of indigenous habitat
- Preservation of 100% of the Project's existing indigenous vegetation
- Restoration of historic hydrologic conditions to the greatest extent practicable
- Enhance and restore surface and ground water resources
- Eliminate farming activities
- Improve water quality
- 55% of the total Project area will be preserved and placed under conservation easement

- Restoration of historic flow-ways
- Provide increased wildlife habitat and connection to adjacent conservation lands
- Preservation of 100% of existing wetlands
- Long-term maintenance in perpetuity of preserve areas
- Restoration of historic ecosystems
- Increased foraging habitat for wading birds







AERIAL WITH FLORIDA PANTHER TELEMETRY POINTS FOR SOUTHWEST FLORIDA AND ON-SITE PRESERVES

#### **WATER RESOURCES**

Kirk Martin, PG, President

Water Science Associates

#### **Project Benefits**

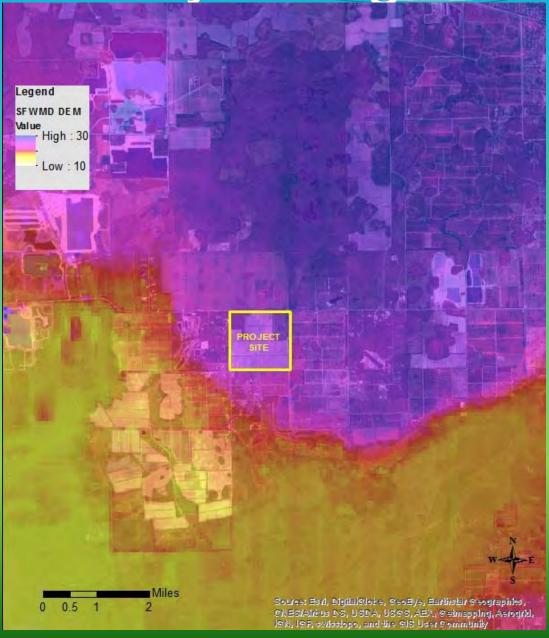
- The Pepperland Project will provide improvements to
  - Onsite water levels
  - Groundwater recharge
  - Surface water quality
  - Connectivity of regional water flow systems
- The Pepperland Project will result in major reductions in water use and chemical use on the property

#### Pepperland Ranch Meets Lee Plan Objectives

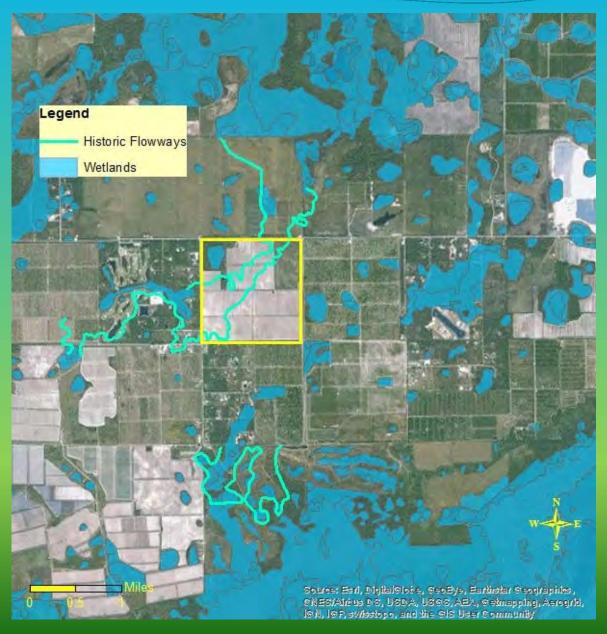
- Will maintain or improve surface and groundwater levels at their historic levels and result in increased storage capacity - Lee Plan Policy 1.4.5
- Will have no adverse impacts on water resources to properties located upstream, downstream, or adjacent to the site - Lee Plan Policy 1.4.5
- Will ensure water quality is maintained or improved for the protection of the environment and people of Lee County - Lee Plan Goal 115
- Will maintain high water quality, meeting or exceeding state and federal water quality standards pursuant to - Lee Plan Objective 115.1
- Will conserve, manage, and protect the natural hydrologic system to insure continued water resource availability - Lee Plan Goal 117
- Has insured water supplies of sufficient quantity and quality to meet the present and projected demands of consumers and the environment, based on the capacity of the natural system - Lee Plan Objective 117.1



## Regional Hydrologic Setting



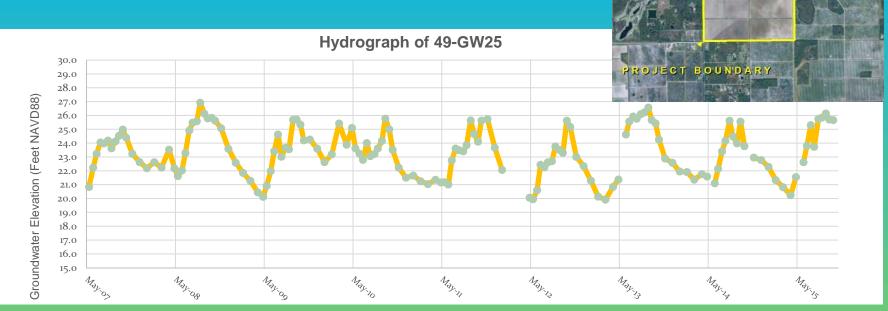
## Regional Hydrologic Setting

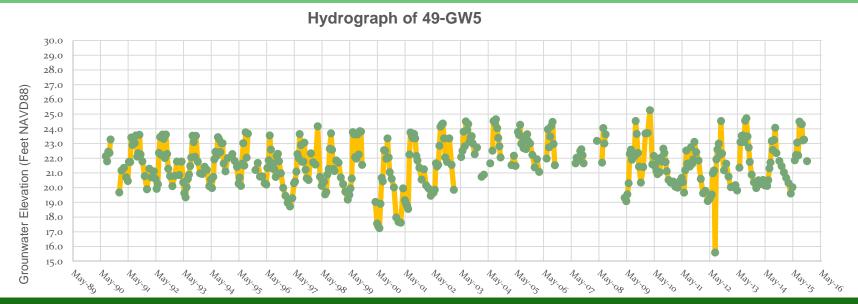


#### Water Levels



#### Water Levels





#### Water Levels

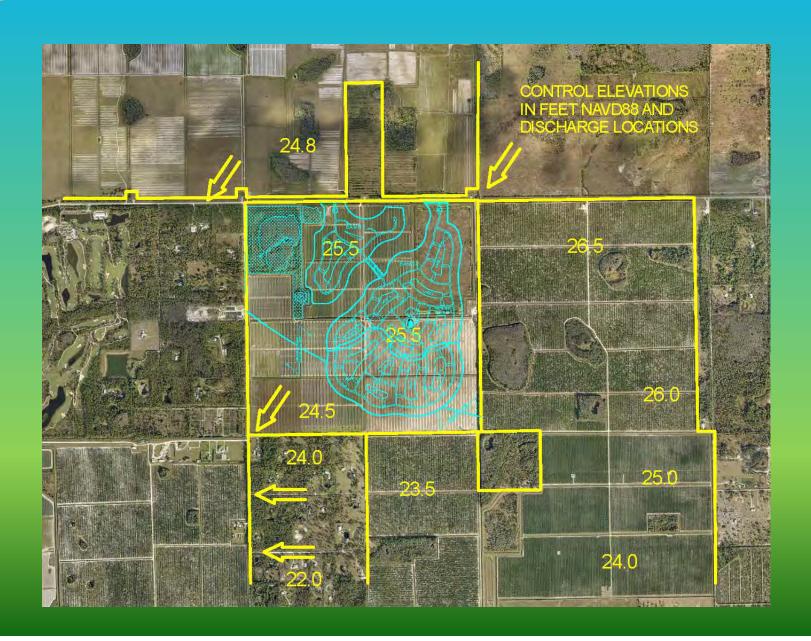


Wet Season

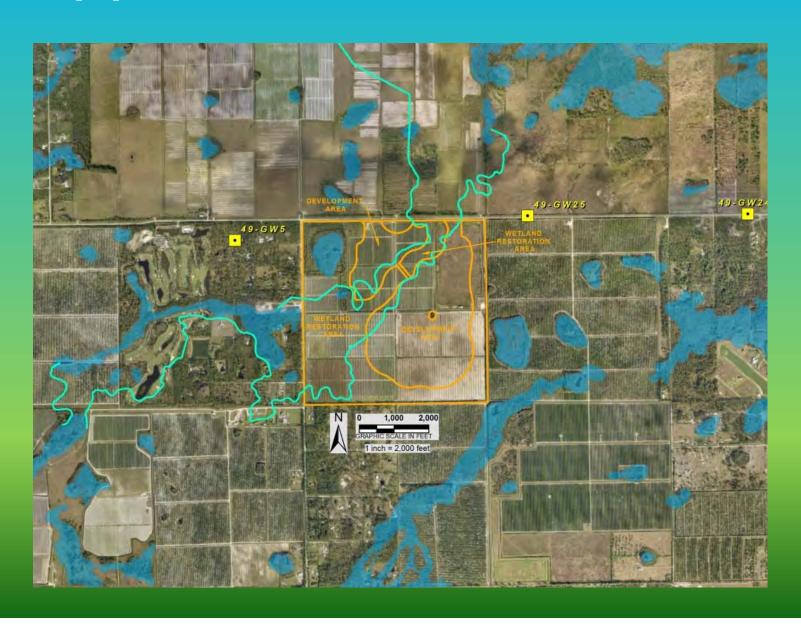
#### Dry Season



## Pepperland Ranch Site Plan



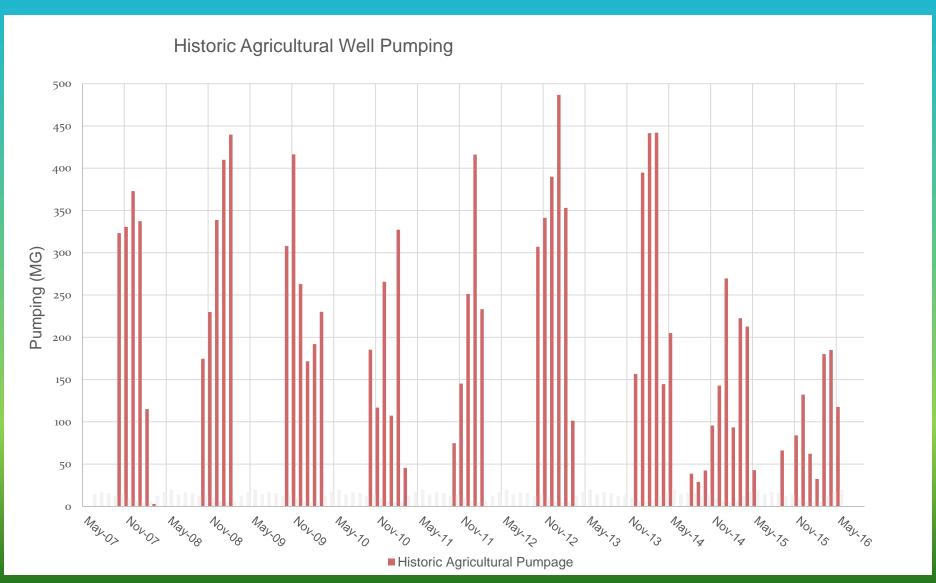
## Pepperland Ranch Site Plan



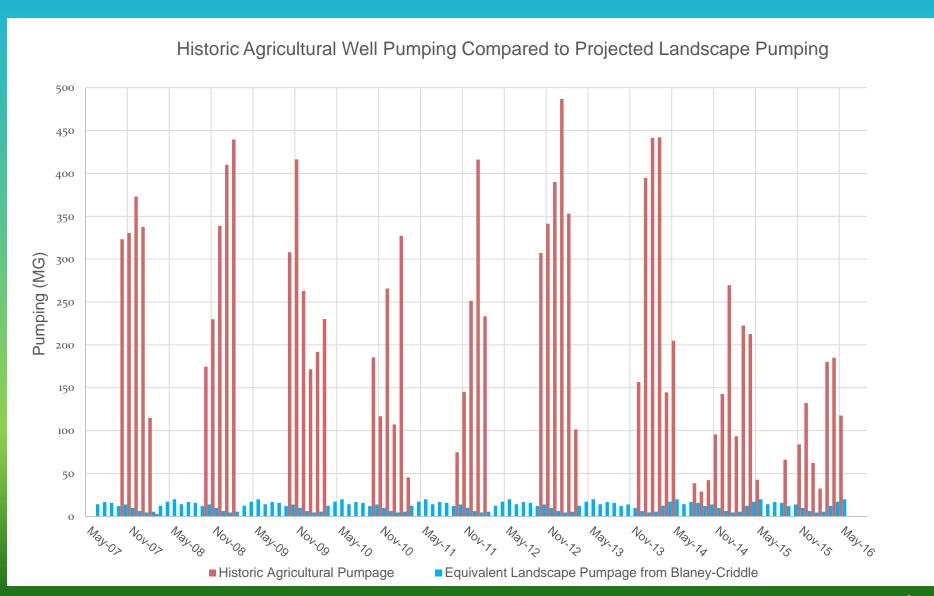
#### Current and Proposed Irrigation Allocations

Water Use Permit	Water Use Category	Irrigated Acreage	Annual Average Allocation (MG)	Maximum Monthly Allocation (MG)
Existing Agriculture	Agricultural Irrigation	482	421	110
Proposed Pepperland Ranch Project	Residential Landscape Irrigation	115	147	20
Net Changes to Allocations		367	274	90
Percentage Reduction to Allocations		-76%	-65%	-82%

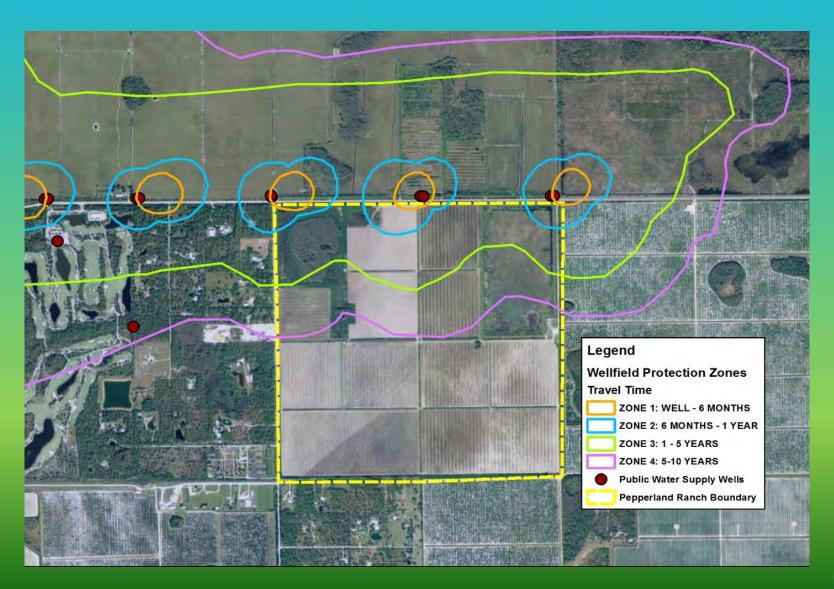
#### Historic Pumping vs Proposed Pumping



#### Historic Pumping vs Proposed Pumping



## Wellfield Protection



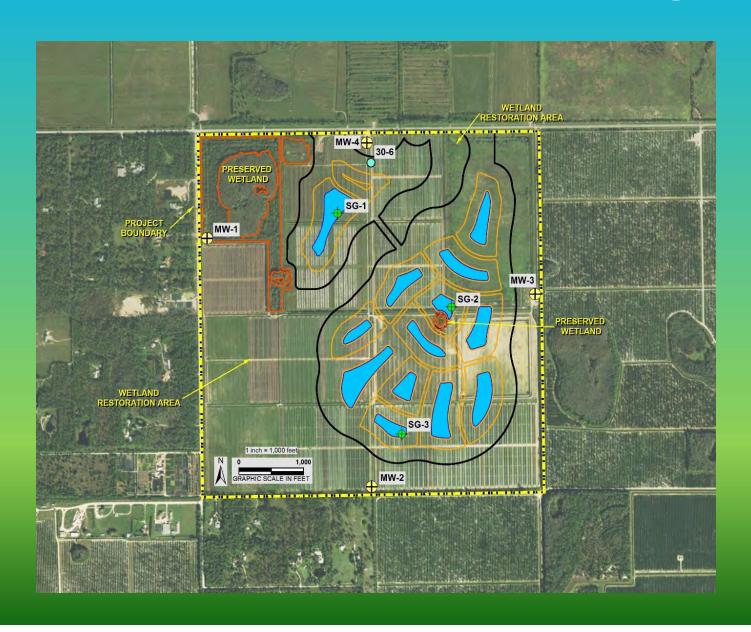
#### Wellfield Protection

- The Pepperland Project will not use, handle, produce, or store regulated substances
- The Project will not discharge any liquid or solid waste
- Irrigation water will have chloride concentrations below allowable limits
- Stormwater management system will be designed to exceed the water quality requirements of the SFWMD
- No earth mining proposed within 500 feet of Lee County Utilities wells
- The Project will meet or exceed all wellfield protection regulations and limits

#### Wellfield Protection

- Residential use will replace current agricultural use resulting in substantial reduction in the use of regulated substances (pesticides, herbicides, fungicides, rodenticides)
- Major reduction in water use proposed for the site will benefit Lee County Utilities wellfield operations and consumptive use permitting
- Proposed groundwater monitoring program will provide assurance of improved hydrology, water quality, and protection of LCU public water supplies

## **Proposed Monitoring**



#### Water Resources Summary

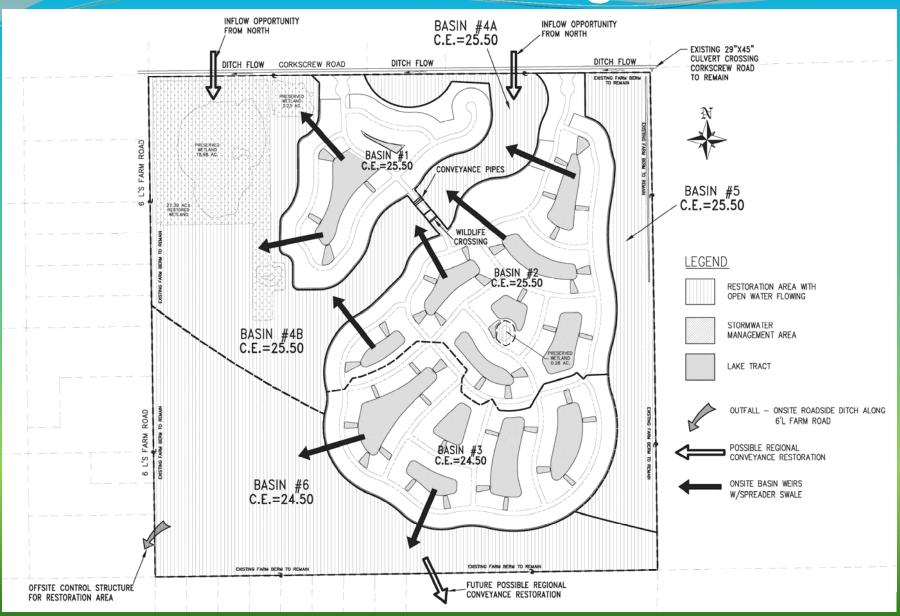
- Pepperland Project will result in substantial reduction in water use from the project site
- Pepperland Project will result in substantial reduction in the use of regulated substances on the project site
- Both of these reductions will provide direct benefit to nearby Lee
   County Utilities wellfields
- Water management plan will provide improved water levels on site that mimic regional conditions and increase groundwater recharge
- Water management plan will provide flexibility to receive and convey regional watershed flow with adjacent properties
- Project improvements will provide regional benefits to watershed connectivity, water level maintenance, and groundwater recharge

#### **ENGINEERING**

David R. Underhill, Jr., P.E.



#### Stormwater Drainage Exhibit



#### Stormwater Management

#### **Current Conditions**

- Existing SFWMD permit for ongoing farm operation
- Control elevation across entire project is 25.3'.
- Current peak discharge is 31cfs from the pumped farm system.

#### **Proposed Residential Development**

- Cascading control elevations to help enhance and restore regional water levels
- Interconnected lakes provide storage and treatment
- Pretreatment prior to lakes
- Discharge to Restoration areas provide additional storage and treatment.
- Reduces discharge by more than half, and provides perpetual ditch maintenance to help protect downstream areas.
- Reduces expected nutrient loading.

#### TRANSPORTATION

Ted B. Treesh

TRANSPORTATION CONSULTANTS, INC.

# Comprehensive Plan Consistency

- Traffic Study for Comprehensive Plan request shows consistency with the Lee Plan minimum Level of Service recommendations for Corkscrew Road with the density from this project
- Corkscrew Road projected to operate at LOS "B" in 2022 with the project and LOS "C" in 2040 with the project within the study area

# DRGR Transportation Study per Policy 38.1.9

- Requirement of Proportionate Fair Share Contribution of future road improvements
- Scope of Study is currently under development by County
   & Consultant
- Results of Study to be completed by July 1, 2017
- POLICY 38.1.9: Lee County will complete a study by July 1, 2017, with input from property owners, to determine the improvements necessary to address increased density within the Environmental Enhancement and Preservation Overlay (See Policy 33.3.4). The study will include a financing strategy for the identified improvements, including participation in a Proportionate Fair Share Program. (Added by Ordinance No. 15-13)

# Ordinance 15-13 and Lee Plan Policy 33.3.4:2.k:

- Policy 33.3.4:2.k Each Planned Development within the Overlay will be required to mitigate the traffic impacts of the Planned Development and provide its proportionate share of the needed roadway improvements in accordance with Administrative Code 13-16...
- Pepperland Ranch accepting proposed proportionate share conditions consistent with prior approvals.

#### **APPLICANT**

#### Brian F. Farrar, President



### Agreement with Staff Findings

- The Density Reduction/Groundwater Resources future land use category was adopted to protect groundwater resources.
- The Environmental Enhancement and Preservation Communities Overlay (the Overlay) targets critical restoration areas, requires enhanced development standards and provides predictable density incentives, furthering the County's goals for the Southeast DR/GR.
- The Overlay has previously been found to be consistent with Lee Plan Objective 107.1, Policy 107.1.1, Policy 107.2.8 and Policy 107.11.4.
- The subject property contains a historic flowway that has been impacted by decades of agricultural uses.

### Agreement with Staff Findings

- Restoration of the flowway can be accomplished using the standards provided in the Overlay.
- The density of the subject property, if added to the Overlay, will be limited to no more than one unit per acre, which is considered a non-urban density by the Lee Plan.
- Preservation of wildlife habitat on the subject property will help to connect large areas of publicly owned conservation and other areas of privately preserved and restored lands;
- The proposed amendment will provide continued protection of the DR/GR as an area that can provide substantial groundwater recharge to aquifers suitable for wellfield development.
- No significant impacts on present or future water resources will result from the change (as required by Policy 2.4.2 of the Lee Plan).

#### Summary

- 55% of 637.5 acres (350.63 acres) placed in conservation easement
- Reduces water utilization over 65% from current AG use
- Reduces discharge from agricultural 31 cfs over 50% the cfs as treated flowway discharge
- Reduces expected nutrient loading
- Provides regional benefits to waterway connectivity, water level maintenance, and groundwater recharge
- Provide increased wildlife habitat and connection to adjacent conservation lands
- Removes areas in wellfield protection zone from AG use to conservation

#### Community and Agency Outreach

- Florida Wildlife Federation
- Audobon Society
- Conservancy of Southwest Florida
- Corkscrew Road & 6 L's Farm Road Area Property Owners
- Estero Fire Rescue
- Florida Fish & Wildlife Conservation Commission (FWC)
- Army Corps of Engineers (ACOE)
- South Florida Water Management District (SFWMD)
- CREW Land and Water Trust
- Lee County Conservation 20/20 Staff

#### County & Regional Financial Benefits

```
    Comparison 20/20 conservation value $18,548,763.75

 Building Impact Fees
                                         $ 4,336,416.00

    Permitting Fees

                                             518,546.00

    LCU Connection Fees

                                         $ 3,570,000.00

    LCU Usage Fees (annual)

                                              80,941.00
                                        $ 46,634.00

    Donation to Estero Fire District

    Donation to Lee County EMS

                                              96,150.00

    Estimation of comparison restoration $ 1,980,000.00

  and maintenance of Flowways &
  wildlife corridors:
```

- Initial Total Financial Benefit: \$29,177,450.75
- Minimum Annual Benefit: \$ 80,941.00



