

# Habitat Conservation Plan Update

A large, stylized graphic in the background features a yellow sun with rays on the left and several green leaves of varying shades on the right, all set against a light blue curved base.

Community Services  
Parks and Natural Resources Division

**\*\*Change, Updated slides:  
4, 6, 9, 10, 12-13 (new  
slides), 19 (previously slide  
16), 6/11/21\*\***



**CHARLOTTE COUNTY**  
FLORIDA

# Overview

- Habitat Conservation Plan Implementation Status
- Density Model Timeline
- Population Viability Analysis Results
- Options

# Habitat Conservation Plan Implementation

- The implementation of the County's Habitat Conservation Plan (HCP) has multiple facets to be implemented over the 30-year permit term and include:
  - 8 biological goals and objectives
  - Active land acquisition, management and restoration
  - Monitoring
  - Reporting

# HCP Target Objectives

## **Objective 1: Maintain and manage existing County-owned scrub**

Scrub lands will be restored and managed in the long-term to ensure the optimum scrub habitat structure for scrub-jays is achieved and maintained.

Status: Land management activities are ongoing on County-owned scrub

Challenges: Optimal scrub habitat management utilizes prescribed fire as the primary management technique; ongoing challenges implementing the prescribed fire program include increasing urban interface and limited weather windows

Recommendations: None

## **Objective 2: Acquire a minimum of 1300 acres as identified in the Reserve**

The scrub habitats that have been identified in the Reserve were arrived at based on a spatial configuration that optimizes population viability within the County.

Status: Staff has worked with Real Estate Services to acquire/conservate approximately ±375 acres of the Reserve

Challenges: The willing seller nature of the program

Recommendations: None acquisition is ongoing; recently acquired 2 larger parcels (82.5 acres and 40.9 acres)

# HCP Target Objectives

## **Objective 3: Coordinate with other public lands**

Implement a plan for working with other public conservation entities (Florida Forestry Service [FFS], Florida Fish and Wildlife Conservation Commission [FFWCC], Southwest Florida Water Management District [SWFWMD], Florida Department of Environmental Protection [FDEP], etc.) to ensure proper management, monitoring, and communications will occur to assist in maintaining optimum scrub structure to sustain or increase scrub-jay populations.

Status: County staff is a member and participant in the Southwest Florida Scrub Working Group, an interagency group focused on the management of scrub and scrub species; staff coordinates with FDEP staff regarding management of state lands adjacent to County lands; staff works with FFS for prescribed burning

Challenges: Due to changes in staff and administratively within SWFWMD, coordination of the management of the SWFWMD-owned Reserve lands has waned

Recommendations: Explore a Memorandum of Understanding (MOU) allowing County staff to assist in land management activities on SWFWMD-owned Reserve lands

# HCP Target Objectives

## **Objective 4: Increase the baseline population of scrub-jays within the Reserve**

The target will be to maintain at least 30 scrub-jay groups within the Reserve 15 years after permit approval (2029), and maintain 60 scrub-jay groups by 30 years after the approval of the HCP (2044).

Status: There are currently 20 family groups within the Reserve; this is an increase of 10 groups since 2018

Challenges: Scrub-jays require between 15-25 acres of scrubby habitat per group for ongoing viability; restoration and management of acquired habitat can take approximately 5 years to be viable for scrub-jays

Recommendations: Pursue additional acquisitions within the entire Reserve

## **Objective 5: Conduct scrub-jay translocations as appropriate**

When and where sufficient acreage of unoccupied scrub-jay habitat in optimal condition is available within the Reserve, translocation to these areas will take place, following USFWS Florida Scrub-Jay Translocation Guidelines.

Status: No translocations have been scheduled at this time

Challenges: None, initial restoration of newly acquired parcels began in 2019; habitat may be suitable for translocation within 5 years

Recommendations: None

# HCP Target Objectives

## **Objective 6: Conduct scrub-jay population monitoring**

USFWS-approved scrub-jay survey guidelines will be used to conduct annual scrub-jay censuses on the parcels identified within the Reserve.

Status: Annual scrub-jays surveys as outlined in the HCP are being conducted on Reserve parcels annually

Challenges: Staff resources if alternative restoration lands are acquired

Recommendations: None

## **Objective 7: Implement vegetation monitoring program**

A program to monitor the structure and composition of vegetation within the Reserve will be developed and implemented.

Status: The vegetation monitoring program has been established and implementation has begun on Reserve parcels annually

Challenges: Staff resources if alternative restoration lands are acquired

Recommendations: None

# HCP Target Objectives

## **Objective 8: Implement Long-Term Management Plan**

The long-term management plan, described in Section 4.5, will be implemented for all lands existing and acquired within the Reserve to ensure vegetation structure and composition is maintained in perpetuity such that optimal conditions for scrub-jay persistence is achieved.

Status: Land management activities are ongoing on County-owned scrub and restoration of lands acquired in the Reserve began in 2019

Challenges: Staff resources if alternative restoration lands are acquired

Recommendations: None



# Implementation Status: Acquisition and Permitting

- February 2015 to 4/30/2021
  - Parcel Acquisition: 375.9 acres
    - 375.9 acres acquired / 1,336 acres needed = 28.14%
  - Building Permit Tracking: 1,767 permits
    - 1,764 permits issued / 18,000 total lots = 9.81 %
  - Total fees collected: \$3,212,678
  - Total expended on land acquisition: \$2,267,136
  - Current fund balance: \$700,147

# Density Model Timeline

- February 2016: Natural Resources Staff submittal of density modification
- August 2016: U.S. Fish and Wildlife Service (FWS) provides initial comments/ requests additional information (RAI)
- October 2017: Local Vero Beach office submits density modification to the Atlanta regional office for review, Solicitor's review and Headquarters' review
- May 2018: County requests a determination from FWS of alternative parcel as a suitable Reserve Design alternative
- July 2018: FWS staff informs the County that the density amendment will need to be processed as a major amendment and not a minor amendment and requested additional information regarding our amendment

# Density Model Timeline

- September 2018: FWS responds to the County's alternative parcel determination request with a request for additional information
- January 2019: County Staff contracts with an environmental consulting firm to perform the requested Population Viability Analysis (PVA)
- March 2019 – October 2020: County staff and consultant work with FWS staff to determine appropriate modeling and data for the PVA
- March 2021: Consultant submits PVA results to the County

# Alternative Reserve Parcel

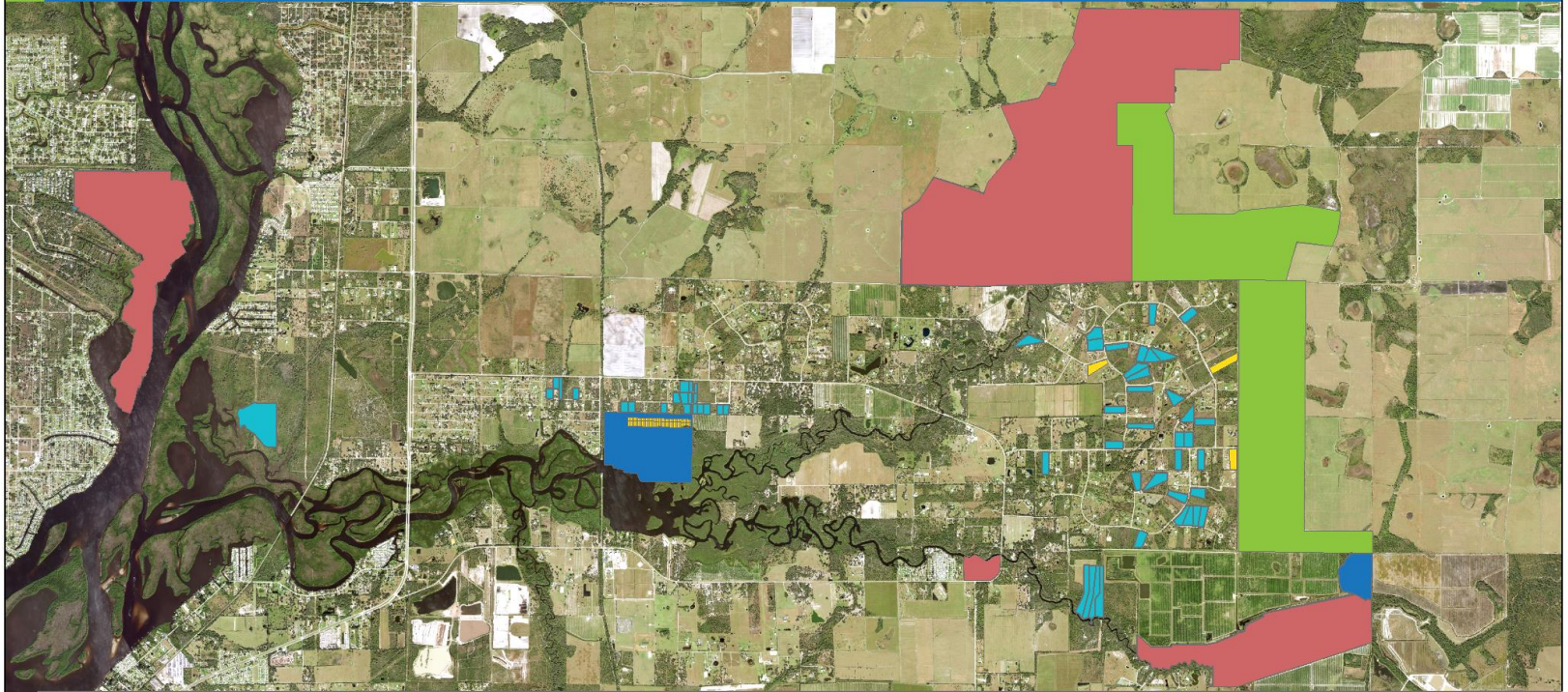
- The proposed alternative parcel is adjacent to Prairie Creek Preserve
- The parcel is approximately 1,342 acres of converted agricultural land, of which approximately 1,092 acres would be restored to scrub habitats
- After accounting for the minimization criteria's on-site preservation on parcels within the Reserve, this alternative would completely meet the acquisition requirements of the HCP and allow the County to issue all permits within the Plan Area
- Restoration of agricultural lands to scrub is more expensive and time consuming than management/restoration of existing habitat

# CHARLOTTE COUNTY

## Habitat Conservation Plan Alternative Reserve Parcel



CHARLOTTE COUNTY  
Community Development



Stateplane Projection  
Datum: NAD83  
Units: Feet  
Source: Community Development.

Metadata available upon request

-  County Conservation Lands
-  Pre-existing Conservation Easements
-  HCP Conservation Easement Acquisitions
-  Proposed Alternative Reserve Parcel
-  HCP Acquisitions



# Population Viability Analysis

- The County contracted with Quest Ecology to conduct a Population Viability Analysis as requested by FWS as part of their review of the density amendment request.
- Quest Ecology ran the population model for 3 scenarios, as approved during discussions with FWS
  1. The HCP Reserve as currently permitted and approved
  2. The HCP Reserve under the density proposal
  3. The HCP Reserve under the density proposal with the alternative restoration lands

# Population Viability Analysis

- The Probability of Extinction for of the HCP when it was modeled for the original Incidental Take Permit was 26%
- The model used for new PVA included modeling of the current approved HCP Reserve to provide comparable results

	HCP Reserve as Currently Permitted and Approved	HCP Reserve w/Density Proposal	HCP Reserve w/Density Proposal and Restoration Alternative
Probability of Extinction	22%	73%	17%

# Population Viability Analysis

- The PVA results show that without the alternative restoration lands the extinction probability for the County's HCP increases significantly under the density model
- Additionally, there were factors that the model was unable to account for that FWS may also take into consideration when reviewing the PVA:
  - the geospatial configuration of the Reserve
  - the loss of connecting corridors under the two new scenarios
  - management challenges for Reserve parcels that are in close proximity to developed parcels.



# Options

- Submit PVA results to FWS with a request to:
  - Continue to pursue the density model amendment without alternative parcel option
  - Continue to pursue the density model amendment with alternative parcel option
  - Withdrawal of density model amendment efforts

# Options

- Submit PVA results to FWS with a request to:
  - Continue to pursue the density model amendment without alternative parcel option
    - Based on the PVA results it is unlikely FWS would approve the density model request

# Options

- Submit PVA results to FWS with a request to:
  - Continue to pursue the density model amendment with alternative parcel option
    - Real Estate Services is working on an appraisal to purchase a conservation easement over the alternative restoration lands
    - Will require
      - Additional restoration costs above current HCP
      - Additional staffing and equipment above current HCP

# Options

- Submit PVA results to FWS with a request to:
  - Withdrawal of density model amendment efforts
    - Continued implementation of the HCP as-is with the acreage based fee schedule

# Questions