**Board of County Commissioners** 

# Chapter 15, Article X Wetland Conservation Areas Ordinance

**Policy Discussion Work Session** 

April 11, 2023



Background
Key Recommendations
Summary
Next Steps





- December 2021: Work session on current wetland permitting and review processes
- Fall/Winter 2022: Wetland tours
- December 2022: Work session on Regulatory Framework Study
  - -Article X outdated; out of sync with policy and procedures
  - -Numerous regulations and policies at the State and other counties may be of benefit for consideration in a new Orange County code
  - During interviews with staff, consultants and NGOs, important feedback and ideas for consideration in the ordinance update were received



#### Stakeholder Feedback Received during Regulatory Framework

#### **Counties**

- Exemptions or a General Permit for minimal impact activities
- One-step review process (no CAD)
- Staff issue most permits
- Reasonable use criteria and avoidance/minimization
- UMAM functional assessment
- Buffers ~25-50 ft, but some greater along specific system types
- Most have addtl. requirements for env. sensitive zones, connectivity

#### Consultant

- Implement exemptions or streamlined processes
- Consolidate CAD/CAI processes
- Remove classification system
- Allow for/prioritize urban in-fill
- No cumulative wetland impact review criteria
- Recommend similar upland buffers as State (min. 15 feet, avg. 25 feet)
- Adopt additional upland buffers to protect rare habitat

#### NGOs

- All wetlands should be protected
- Allow EPD staff to authorize most applications
- Include avoidance/minimization
- Strengthen listed plant species protections
- Do not assume State permitting authority
- Minimal amendments to existing conservation easements
- Adopt additional buffers



## January 2023: Work session on State of the Wetlands Study

- Approx. 5.6% loss of wetland acreage County-wide from 1990-2020 (excluding Lake Apopka North Shore restoration area)
- Most acreage loss in wet prairies (37%) mixed wetland forested/hardwoods systems (19%)
- Moderate decline in contiguity and increased fragmentation for freshwater marshes and wet prairies; most wetland types showed increases in fragmentation
- Many onsite mitigation sites showed functional losses after 10 years: these were highest for shrub systems, followed by freshwater marshes and mixed hardwoods
- Exotic vegetation was often observed in the edges of the systems (initial 25')
- Higher level of assessment is needed when considering preserving/planting an upland buffer

# February 2023: Focus group with County staff to discuss initial recommendations



#### Goals of today's work session

- -Present initial draft recommendations
- -Receive input from the Board on concepts and initial direction of the wetland ordinance update
- Post Work-session (next 3-4 mos)
  - **—Discuss Board direction with stakeholder groups**
  - –Integrate feedback and refine recommendations
  - -Develop draft ordinance



## Background

- Key Recommendations
- Summary
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#### APPLIED ECOLOGY **Key Recommendations Key Focus Areas CURRENT CODE** Wetland Does not In-County One permitting function not Lack of stipulate any mitigation is process for all represented by predictability upland buffer not impacts classification requirements incentivized system Develop a Protect the most CODE Ь defined process More Better wetland valuable OBJECTIVE predictable Incentivize infor very minor, protection (functional) REVISED routinely outcomes that through County wetland systems approved, or aid planning and specified upland mitigation regardless of beneficial buffers review size impacts

#### 8



Major Recommendation Topics

- 1. Tiered Permitting Approach
  - a. Noticed General Permits
  - b. Standard Permits
- 2. Additional Special Protection Areas
- 3. Establishing Upland Buffers
- 4. Mitigation Approach



**1a. Tiered Permitting Approach (NGPs)** 

#### What is a Noticed General Permit (NGP)?

- ACOE, State, and some municipalities have developed GPs
- For small wetland impacts
- Applicable to specific types of activities
- Criteria must be met by activity type
- Activity causes minimal individual and cumulative impacts
- Requires application submittal, review, and approval

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proponent agency is CECW-CO-R. Expires: 30-SEPTEMBER-2015	U.S. ARMY CORPS OF ENGINEERS APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proponent agency is CECW-CO-R.	Form Approved - OMB No. 0710-0003 Expires: 30-SEPTEMBER-2015
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#### RIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

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STATEMENT OF AUTHORIZATION											
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ENG FORM 4345. DEC 2014 PREVIOUS EDITIONS ARE OBSOLIETE Page 1 of 3											

#### 1a. Tiered Permitting Approach (NGPs)

#### **Benefits of NGPs**

- Very clear and transparent guidelines enhance the process and build trust with customers
- Captures common activities typically approved by the County; facilitates reduction of time and costs to customers and staff
- Simplified application process using a checklist
  - Reduces Requests for Additional Information (RAIs)
- Allows for appropriate allocation of staff resources to those projects with more significant impact on natural resources

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			SI	CTION 3				
YES	NO	STATEMENT (If no, yo	our project will not	qualify for an	Orange NGP.)			
		is rence located entirely within applicant's parcel?						
		is rence located entir	rely within wetlan	asr				
		Is any portion of the fence proposed in a lake or river?						
		Can installation of fe	nce be achieved v	without filling	wetlands?			
		Is the parcel located	within an OFW o	RHPZ or RHI	PA?			
		Does the fence cons	ist of metal posts	with horizon	al metal wire	attached to the	metal posts?	
		Is the distance between each post at least eight (8) feet apart?						
		Is the fence comprise of materials other than vinyl, wood, stockade or chain link?						

#### 1a. Tiered Permitting Approach (NGPs)

### **Additional Information on NGPs**

- Can provide additional streamlined review process by combining CAD and CAI for single-family home GPs
  - One site visit instead of two
- Certain factors (modifiers) eliminate the ability to use NGPs



**1a. Tiered Permitting Approach (NGPs)** 

## **NGP** Categories by Activity

**Fill for Single-Family Homesites\*** 

Fill for Non-Single-Family Projects\*

**Fill Isolated Artificial Surface Water or Pond** 

**Fill Upland Cut Drainage Ditch** 

**Maintenance Activities** 

**Urban Redevelopment/Infill\*** 

**Fence Installation** 

\*Small impacts only

**Exotic Plant Removal** 

**Wetland Enhancement** 

Water Quality Enhancement

**Utility with Temporary Impacts** 

Intake/Outfall Structures

**Certified Affordable Housing Projects\*** 

**1a. Tiered Permitting Approach (NGPs)** 



#### 1a. Tiered Permitting Approach (NGPs)



1a. Tiered Permitting Approach (NGPs)





Major Recommendation Topics

- 1. Tiered Permitting Approach
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#### **1b. Standard Permits (SP)**

#### **SP Levels**

- Level 1: smaller impacts for activities that don't qualify for a noticed general permit; two levels of review; avoidance and mitigation required
- Level 2: larger wetland impacts, depending on wetland function; additional level of review
- Level 3: largest impacts/highest functioning wetlands; require BCC oversight; requires indepth Cumulative Impact and Secondary Impact Analysis and Alternative Analysis

#### **SP Level Determination**

- Functional score
- Wetland area acreage to be impacted
- Type of impact activity
- A list of other factors (modifiers)

#### **1b. Standard Permits (SP)**

#### **SP Matrix**

- Size of impact and wetland functionality determine level of review, type and depth of impact analyses, and approval requirements
- Other factors (modifiers) impact the permitting level

Permit Levels	
SP Level 1	
SP Level 2	
SP Level 3	

		Wetland Impact (Acres)					
		≤ 2.0	> 2.0-10.00	> 10.00-25.0	>25.00		
	10						
	9						
Ð	8						
UMAM Scor	7						
	6						
	5						
	4						
	3						
	2						
	1						
17-1							

#### **1b. Standard Permits (SP)**



#### **1b. Standard Permits (SP)**

CIA

#### Cumulative Impact Analysis (CIA) and Secondary Impact Analyses (SIA)

SIA

- Combined, incremental effects of an activity as it poses a threat to the environment
- ACOE requires for standard permit
- Impacts may be direct, indirect, and/or cumulative
- Robust CIA is difficult to prepare due to complexity and lack of information
- Must include reasonable, predictable, and practical considerations

- Looks at effects on a resource that do not result from direct impact of dredge/fill
- Complete Secondary impacts would include changes in:
  - Wetland Size
  - Hydrology
  - Vegetation composition
  - T&E
  - Habitat Fragmentation
- Indirect impacts can reduce ability of wetland function

#### **1b. Standard Permits (SP)**

#### Added Requirement for SP L3 – Alternatives Analysis (AA)

- Includes No Action/No Work Alternative as well as additional reasonable and practicable alternatives
- NEPA established framework
- ACOE requires for standard permit
- Requires demonstration of two presumptions
- Different level of detail required commensurate with scale of impact
- Least Damaging Alternative
- Avoidance and Minimization
- Compensatory Mitigation

#### Alternative Analysis Framework



**1b. Standard Permits (SP)** 

## Modifiers for Consideration

- T&E wetland species nesting
- Wetland vulnerability
- Lots or infrastructure 100% within wetlands

- Hydrological connection to impaired systems or OFWs
- Wildlife crossings/corridors
- Special Protection Areas

## Onsite features

## Landscape features

#### Affordable housing projects

 Overriding public benefit projects (e.g., mass transit, utilities, etc.)

# Future use (activity)

#### **1b. Standard Permits (SP)**

#### Modifiers (incentives or/and deterrents for ease of permitting)

- Certified affordable housing projects
- Urban infill
- Provides wildlife corridor or crossing
- Bridge project
- Projects with large Pollutant buffers (e.g., >200' or 300')

- Projects w/clear public benefit
- Water quality enhancement
- Nuisance/exotic plant removal
- Wetland enhancement
- remediation



- Project located adjacent to OFW
- T/E wetland species nesting
- Wetland functional assessment > 0.8
- Project proposes impacts to CE
- Project proposes impacts to wildlife corridor

- Project located within RHPZ/RHPA (current or additional)
- Vulnerable habitat

#### **NGP Processing Example**



#### **SP Level 3 Processing Example**







BCC

**Review &** 

Approval



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#### **2. Additional Special Protection Areas**

#### **Existing Special Protection Areas**

- Wekiva River Protection Area
- Wekiva River Study Area
- Econ River Protection Area
- Innovation Way Environmental Land Stewardship Program Area



#### **2. Additional Special Protection Areas**

#### Development of New Special Protection Areas

- Potential additional areas to consider as SPAs
  - Shingle Creek
  - St. Johns River
- Potential use as permitting modifier
- Increased upland buffer requirements
- Other requirements to be defined





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#### **3. Establishing Upland Buffers**

#### **Research on Buffer Distances -Contamination Removal**

- Buffers should be established based on objective:
  - Direct human impact (trash, destruction)
  - Climate regulation
  - Wildlife
  - Pollutants
  - Flood mitigation
  - Others
- Wildlife protection typically requires larger minimum buffers
  - Species dependent, extremely variable



McElfish, J.M., et al. (2003). Setting buffer sizes for wetlands. National Wetlands Newsletter. Volume 30:2

**3. Establishing Upland Buffers** 



**Research on Buffer Distances -Contamination Removal** 

- Maximum removal of P and N was typically with <u>164 ft</u> buffer
- Buffers with >80% vegetation of 100-200 ft effective (Haukos, 2016)



Haukos, D. (2016). Effectiveness of vegetation buffers surrounding playa wetlands at containment and sediment amelioration. Elsevier.

**3. Establishing Upland Buffers** 

#### **Research on Buffer Distances -**Wildlife

- Biological interdependence between aquatic and terrestrial habitats is essential
  - Aquatic buffer: approx. 100-200 ft
- Large areas of terrestrial habitat surrounding wetlands are critical for maintaining biodiversity
  - Core habitat: approx. 460 950 ft
  - Terrestrial buffer: additional 150ft!



SEMLITSCH, R.D. AND BODIE, J.R. (2003) Biological Criteria for Buffer Zones around Wetlands and Riparian Habitats for Amphibians and Reptiles





#### **3. Establishing Upland Buffers**

Minimum Buffer Distance Recommendations



#### Research on Buffer Distances

- Metanalysis with over 130 studies
- Focus on Florida wetlands
- Data plotted based on distribution of <u>minimum</u> buffer distance

#### **3. Establishing Upland Buffers**

#### Recommendations

- A minimum of 100-ft natural and undisturbed buffer for all sites except:
  - NGPs and SP Level 1 projects on small lots
  - All cases: minimum 25-ft, average 50-ft
- If required buffer cannot be provided, mitigation and other measures (e.g., wildlife-friendly fencing, native hedge plantings, signage) are required
- Larger buffer width based on modifiers such as OFW, location (SPAs), habitat, and protected species nesting onsite





### Major Recommendation Topics

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#### 4. Mitigation Approach

#### Recommendations

- Conservation Easements (CEs) Policy:
  - Codify that small CEs for offsetting impacts in NGPs or SP Level 1 projects on small parcels are not acceptable
  - For larger developments and parcels, allow CEs only with monitoring and maintenance requirements in perpetuity
  - Maintenance and monitoring (in perpetuity):
    - Monitoring requirements: minimum 5 years and subsequently every 2-3 years thereafter
    - Maintenance requirements:
      - <5% exotic/nuisance species presence</p>
      - CE signage and fencing
      - Trash removal



#### **Benefit Recommendation Summary**

- Level of review for wetland impact requests will be based on function using UMAM, not just size and connectivity
  - Promotes protection of higher quality wetlands
  - Provides better protection for some systems that are typically small in size and appear currently vulnerable (e.g., Wet Prairies, Freshwater Marsh)
- Ensures clear, consistent, and transparent approach with best available science driving the review process
  - More staff time dedicated to protecting critical natural resources
- Requires rigorous data analysis and review for more significant wetland impacts: detailed CIA, SA, and newly added AA

Vision 2050 Tool

- SOTW mapping efforts provided OC the inputs to initiate development of guidance tools.
- OCEPD identified "important wetlands and surface waters" to be included in the Comp Plan update (Vision2050).
- Follows the core of the proposed wetland permitting system: provide protection of highest functioning wetlands.
- C4.1.3 The County <u>shall discourage impacts</u> to wetlands or surface waters that have significant value and shall incorporate regulations into County Code that limit impacts to these systems.



- Background
- Key Recommendations
- Summary
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- Permitting processes/workflow:
  - Utilize Noticed General Permit and Standard Permit processes in lieu of a single permit type (CAI)
  - Eliminate Class I, II, III wetland classification system. Utilize UMAM to determine wetland protections, not just size and connectivity factors
  - Size of impact and wetland functionality, with other factors (modifiers), will determine level of review, type and level of impact analyses, and approval level (staff, EPO, or BCC).



#### Recommended SPAs for Shingle Creek and St. Johns River:

- Protect sensitive areas with increasing development pressure
- Additional upland buffer widths
- Other criteria to be defined
- Upland Buffers:
  - Best available science suggests minimum 100' buffer necessary for pollutant removal and wildlife life cycles
  - Larger or smaller buffers may be appropriate in some cases
- Mitigation:
  - Incentivize in-County mitigation
  - Accept only larger CEs as mitigation
  - Require maintenance in perpetuity



- Background
  Technical Study
  Summary
- Next Steps





- Meetings to be held through mid-summer 2023
- Provide opportunity for feedback on policy recommendations prior to draft ordinance
- Stakeholders include the local development industry, NGOs, governmental agencies and municipalities, and the general public





- April 2023 June/July 2023: Stakeholder meetings
- April 2023 September 2023: Internal draft ordinance meetings
- April 2023 November 2023: LPA/EPC/DAB/SAB work sessions
- September 2023: BCC work session on draft ordinance
- December 2023: BCC ordinance adoption hearing

## Summary Key Recommendations

#### **SPAs for Shingle Creek Upland Buffers Mitigation Tiered Permitting** Approach and St. Johns River Noticed General Permit Minimum 100' buffer with Sensitive areas with and Standard Permit **Incentivize in-County** increasing development exceptions for small processes in lieu of a mitigation parcels pressure single permit type (CAI) Eliminate Class I, II, III wetland classification system. Assess wetlands Increased upland buffer Larger or smaller buffers Accept only larger CEs as based on quality and widths may be appropriate in mitigation functionality using some cases UMAM, not just size and connectivity Base the level of review, type and level of impact Other criteria to be analyses, and approval Require monitoring and level (i.e., EPD staff, EPO, defined maintenance in perpetuity BCC) on size of impact, wetland functionality, and modifiers