

Board of County Commissioners

Chapter 15, Article X Wetland Conservation Areas Ordinance

Policy Discussion Work Session

April 11, 2023



Presentation Outline

- Background
- Key Recommendations
- Summary
- Next Steps





Background

Board Policy Discussions

- **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 - Article X outdated; out of sync with policy and procedures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

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Background

Board Policy Discussions

▪ 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

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Background

Board Policy Discussions

- **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**

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Background

Objectives

- **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

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Presentation Outline

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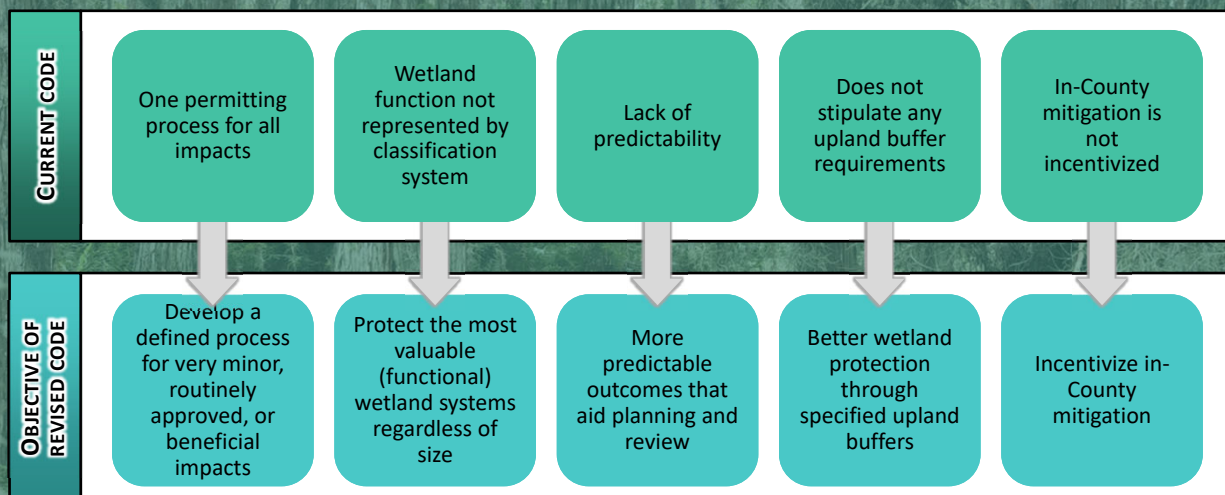


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Key Recommendations



Key Focus Areas



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Key Recommendations



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



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Key Recommendations

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

U.S. ARMY CORPS OF ENGINEERS APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proposed project is: <input type="text"/>				Form Approved OMB No. 0770-0002 Expires: 30 SEPTEMBER 2015	
<small>Public reporting burden for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and reviewing the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to the Department of Defense, Paperwork Reduction Project (0770-0002). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT fill in this form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.</small>					
<small>PRIVACY ACT STATEMENT Authority: Rivers and Harbors Act, Section 10; 33 USC 402; Clean Water Act, Section 404; 33 USC 1344; Marine Protection, Research, and Sanitation Act, Section 103; 33 USC 1415; 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 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.</small>					
<small>ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS</small>					
1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE		
<small>ITEMS 5 BELOW TO BE FILLED BY APPLICANT</small>					
<small>5. APPLICANT'S NAME</small> First - Middle - Last - Company - E-mail Address -			<small>6. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)</small> First - Middle - Last - Company - E-mail Address -		
<small>7. APPLICANT'S ADDRESS</small> Address - City - State - Zip - Country -			<small>8. AGENT'S ADDRESS</small> Address - City - State - Zip - Country -		
<small>9. APPLICANT'S PHONE NO. (w/AREA CODE)</small> a. Residence b. Business c. Fax			<small>10. AGENT'S PHONE NO. (w/AREA CODE)</small> a. Residence b. Business c. Fax		
<small>STATEMENT OF AUTHORIZATION</small> I, I hereby authorize _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. SIGNATURE OF APPLICANT _____ DATE _____					
<small>NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY</small> 12. PROJECT NAME OR TITLE (see instructions)					
<small>13. NAME OF WATERBODY, IF KNOWN (if applicable)</small> Address -			<small>14. PROJECT STREET ADDRESS (if applicable)</small> Address -		
<small>15. LOCATION OF PROJECT</small> Latitude - N Longitude - W City - State - Zip -			<small>16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)</small> State Tax Parcel ID Section - Township - Range -		

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Key Recommendations

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

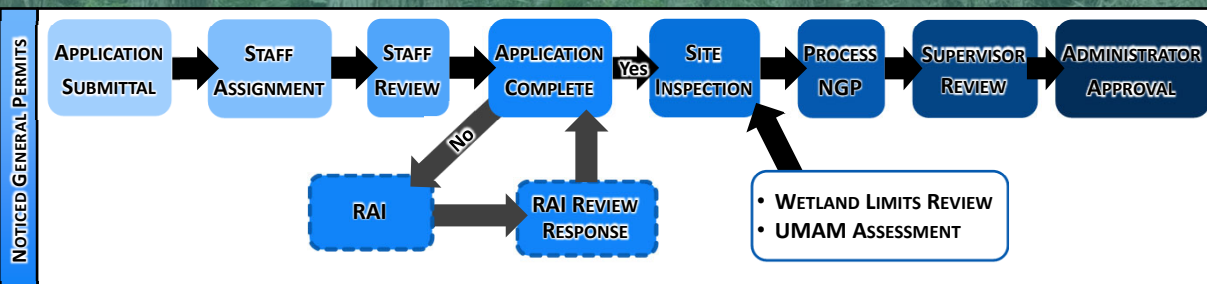
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Key Recommendations

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



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Key Recommendations

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

Exotic Plant Removal

Wetland Enhancement

Water Quality Enhancement

Utility with Temporary Impacts

Intake/Outfall Structures

Certified Affordable Housing Projects*

**Small impacts only*

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Key Recommendations

1a. Tiered Permitting Approach (NGPs)

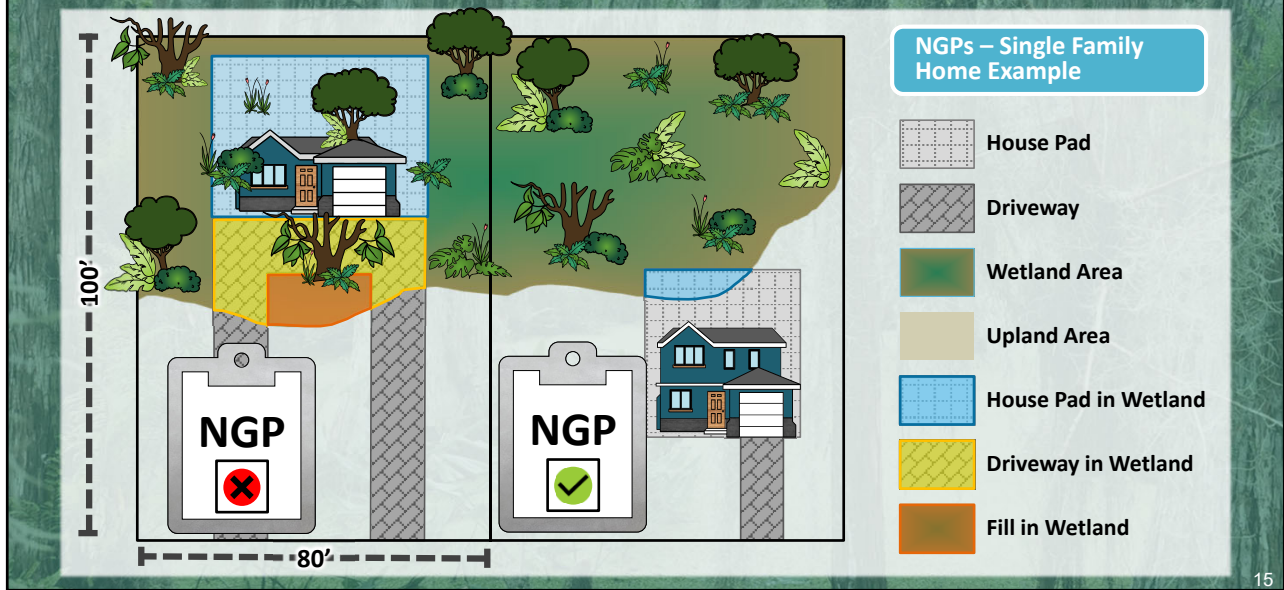
NGP - Fence Activity Example



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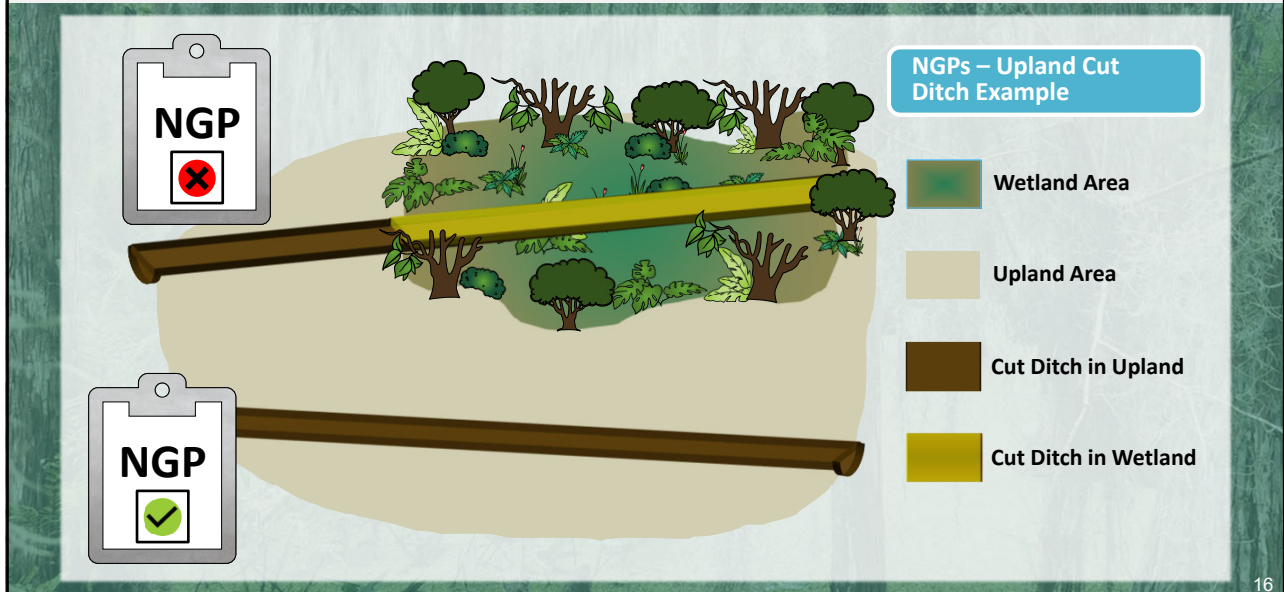
Key Recommendations

1a. Tiered Permitting Approach (NGPs)



Key Recommendations

1a. Tiered Permitting Approach (NGPs)



Key Recommendations



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



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Key Recommendations

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 in-depth 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)

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Key Recommendations

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
UMAM Score	10				
	9				
	8				
	7				
	6				
	5				
	4				
	3				
	2				
	1				

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Key Recommendations

1b. Standard Permits (SP)

SP Level Comparison

SP Level 1

Approval by EPD Assistant Manager

Two Levels of Review

Limited Cumulative Impact Analysis (CIA) if mitigation is out-of-County

Avoidance and Minimization

SP Level 2

Approval by EPD Manager

Three Levels of Review

Limited CIA and Secondary Impact Analyses (SIA)

Avoidance and Minimization

SP Level 3

Approval by BCC

Four Levels of Review

Alternative Analysis (AA)

Detailed CIA and SIA

Avoidance and Minimization

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Key Recommendations

1b. Standard Permits (SP)

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

CIA

- 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

SIA

- 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

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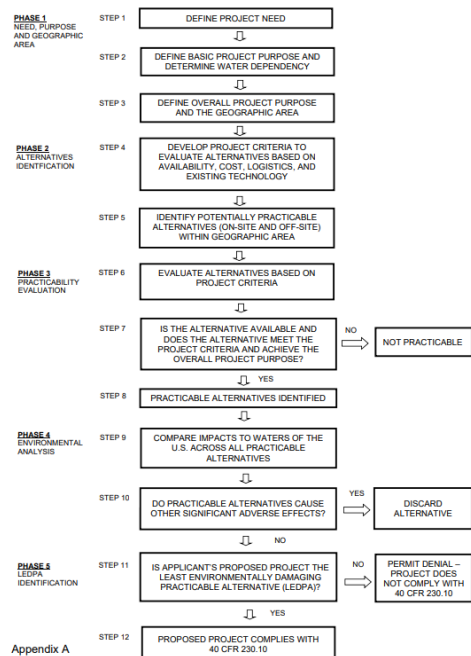
Key Recommendations

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



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Key Recommendations

1b. Standard Permits (SP)

Modifiers for Consideration

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

Onsite features



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

Landscape features



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

Future use (activity)

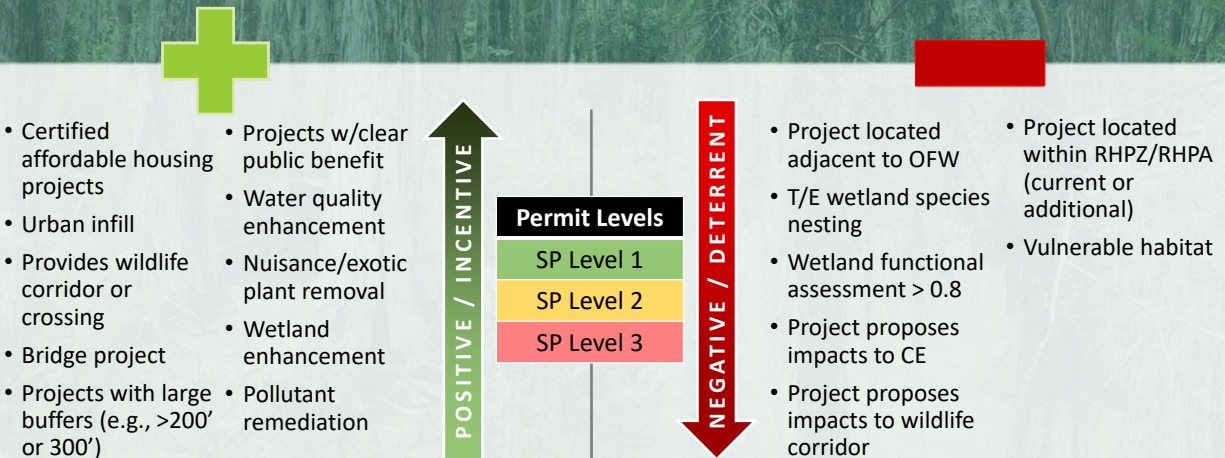


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Key Recommendations

1b. Standard Permits (SP)

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



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Key Recommendations

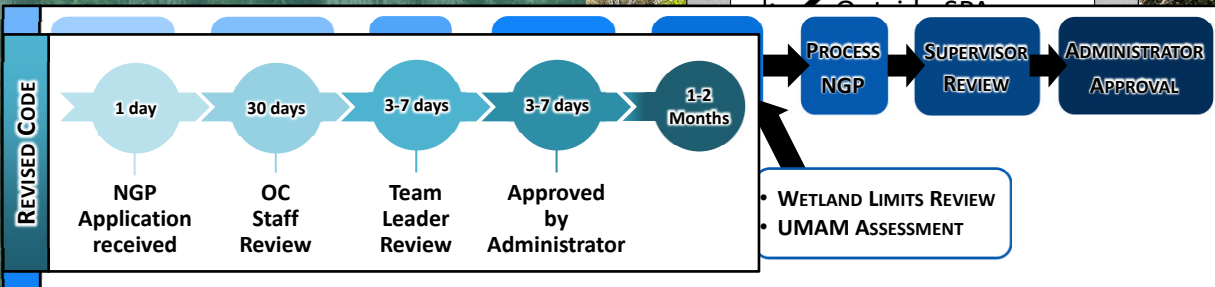
NGP Processing Example

East Orlando Area Single Family Homesite

- Class III Impact
- 0.17 acres
- Wetland Forested Mixed

NGP Fill for SFH

☒ No vulnerable wetland type



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Key Recommendations

SP Level 3 Processing Example

East Orlando Area Multifamily Residential

- Class II Impact
- 11.95 acres
- Freshwater Marsh/Hydric Pine
- + 4.85 ac. RHPZ impact

Modifiers

- ☒ Vulnerable wetland type
- ☒ Inside SPA



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Key Recommendations



Major Recommendation Topics

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4. Mitigation Approach



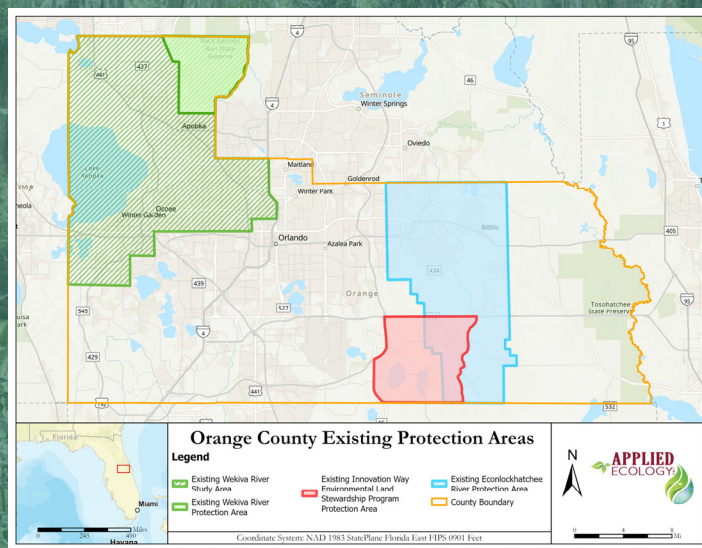
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Key Recommendations

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



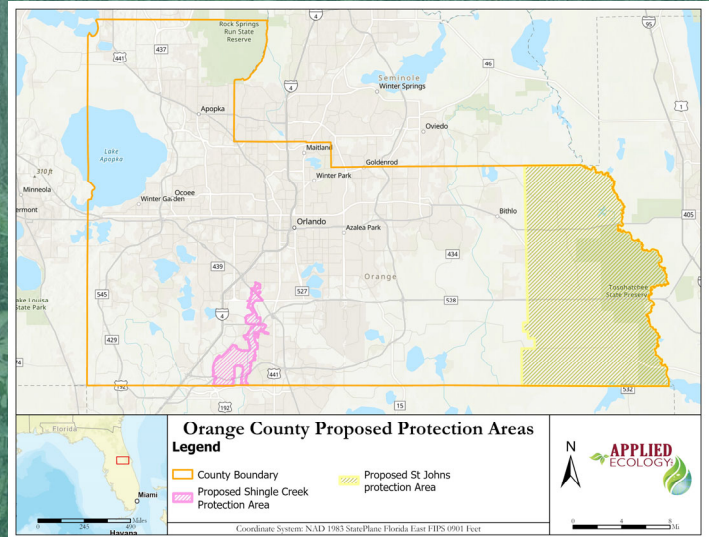
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Key Recommendations

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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Key Recommendations



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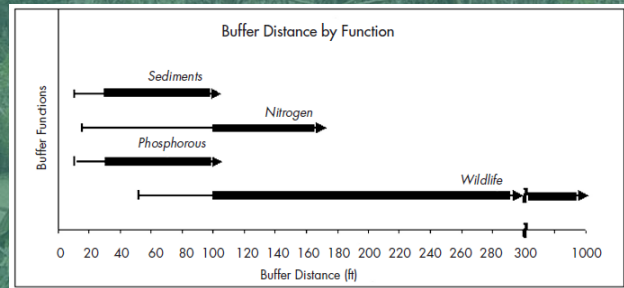
Key Recommendations

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

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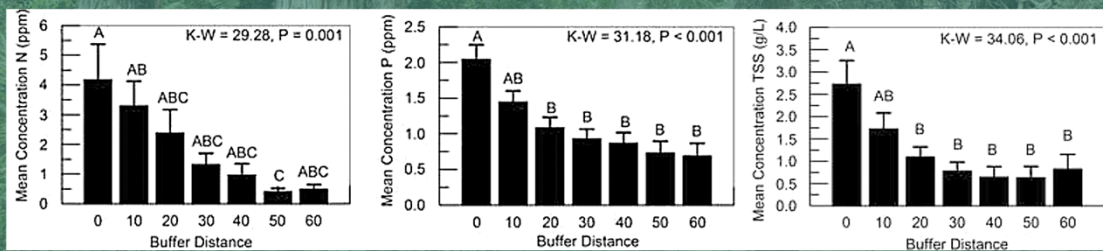
Key Recommendations

3. Establishing Upland Buffers



Research on Buffer Distances - Contamination Removal

- Maximum removal of P and N was typically with **164 ft** 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.

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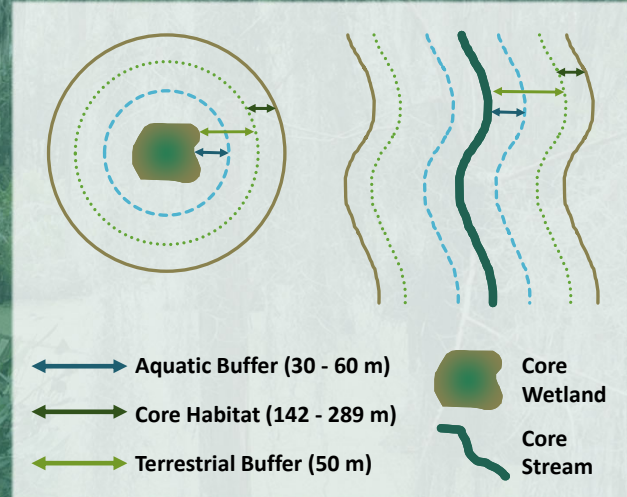
Key Recommendations

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!



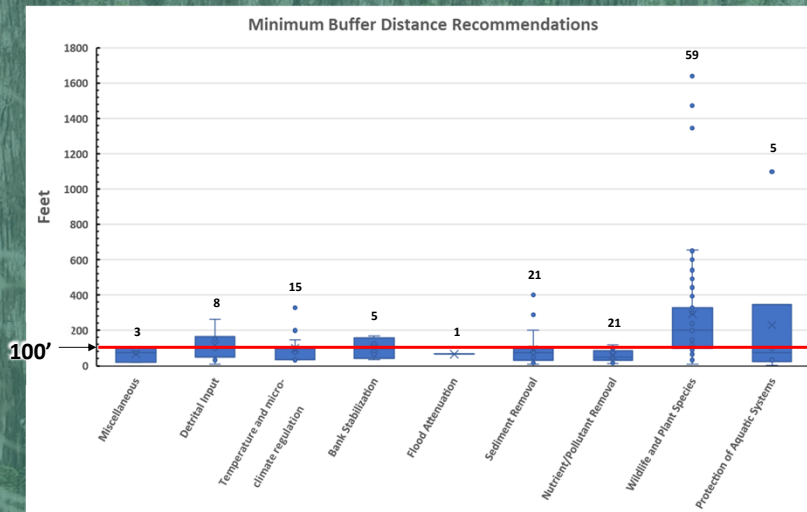
SEMLITSCH, R.D. AND BODIE, J.R. (2003) Biological Criteria for Buffer Zones around Wetlands and Riparian Habitats for Amphibians and Reptiles

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CLO

Key Recommendations

3. Establishing Upland Buffers



Environmental Law Institute (2003). Conservation Thresholds for Land Use Planners.

Research on Buffer Distances

- Metanalysis with over **130** studies
- Focus on Florida wetlands
- Data plotted based on distribution of minimum buffer distance

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Slide 34

CLO Can you add something that highlights this is hitting around 100 ft on the y axis?

Claudia Listopad, 2023-03-30T11:11:24.634

Key Recommendations



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



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Key Recommendations



Major Recommendation Topics

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Key Recommendations

4. Mitigation Approach

Recommendations

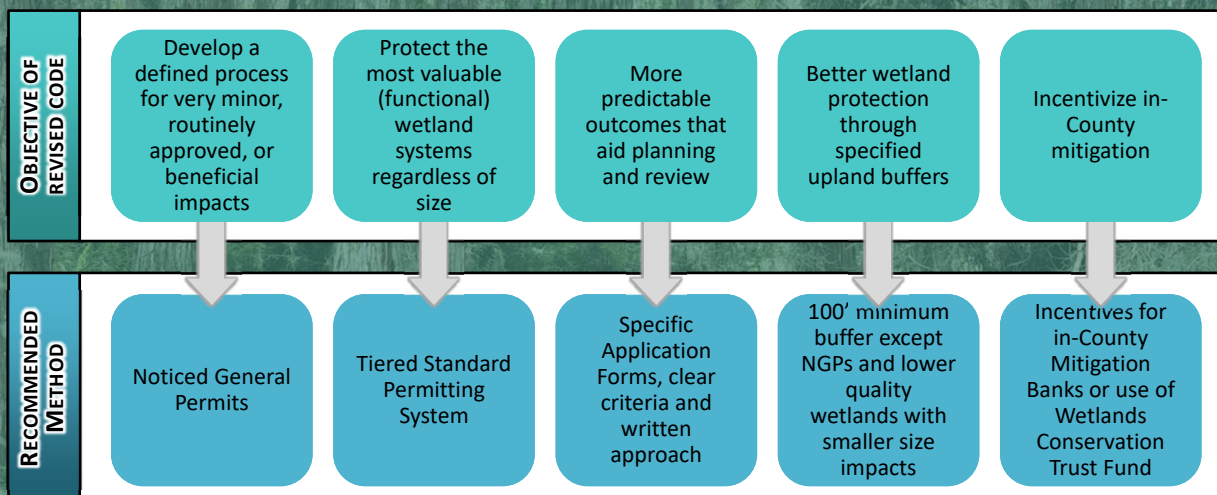
- Conservation Easements (CEs) - Policy:
 - Codify that small CEs for offsetting impacts in NGPs or SP Level 1 projects on small parcels are not acceptable
 - For larger developments and parcels, allow CEs only with monitoring and maintenance requirements in perpetuity
 - Maintenance and monitoring (in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

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Key Recommendations



Proposed Methods



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Key Recommendations

Benefit Recommendation Summary

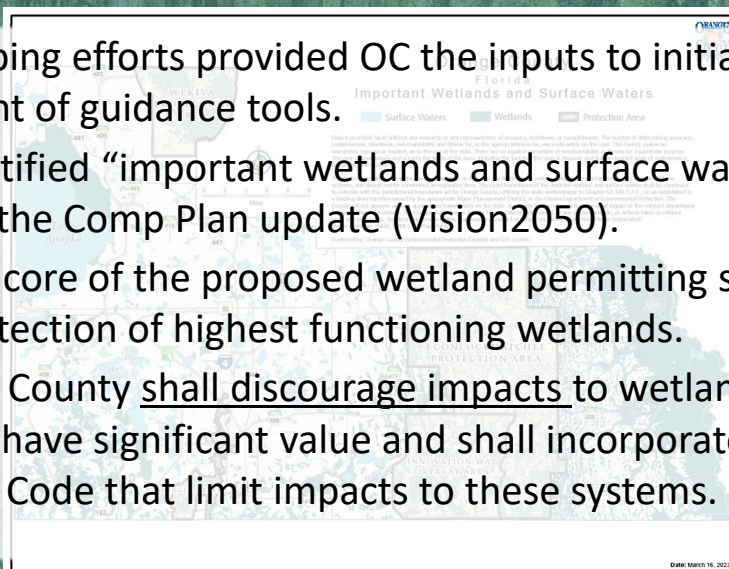
- Level of review for wetland impact requests will be based on function using UMAM, not just size and connectivity
 - Promotes protection of higher quality wetlands
 - Provides better protection for some systems that are typically small in size and appear currently vulnerable (e.g., Wet Prairies, Freshwater 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

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Key Recommendations

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 shall discourage impacts to wetlands or surface waters that have significant value and shall incorporate regulations into County Code that limit impacts to these systems.



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Summary

Key Recommendations

- 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).

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Summary

Key Recommendations

- **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

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Presentation Outline

- Background
- Technical Study
- **Summary**
- Next Steps



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Next Steps

Integrating Stakeholder Feedback

- 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



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Next Steps

Drafting the Ordinance

- 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

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Summary

Key Recommendations

Tiered Permitting Approach

Noticed General Permit and Standard Permit processes in lieu of a single permit type (CAI)

Eliminate Class I, II, III wetland classification system. Assess wetlands based on quality and functionality using UMAM, not just size and connectivity

Base the level of review, type and level of impact analyses, and approval level (i.e., EPD staff, EPO, BCC) on size of impact, wetland functionality, and modifiers

SPAs for Shingle Creek and St. Johns River

Sensitive areas with increasing development pressure

Increased upland buffer widths

Other criteria to be defined

Upland Buffers

Minimum 100' buffer with exceptions for small parcels

Larger or smaller buffers may be appropriate in some cases

Mitigation

Incentivize in-County mitigation

Accept only larger CEs as mitigation

Require monitoring and maintenance in perpetuity