

Practical Implication of the New Rule on Private Development and Redevelopment



Marcy Frick, REM

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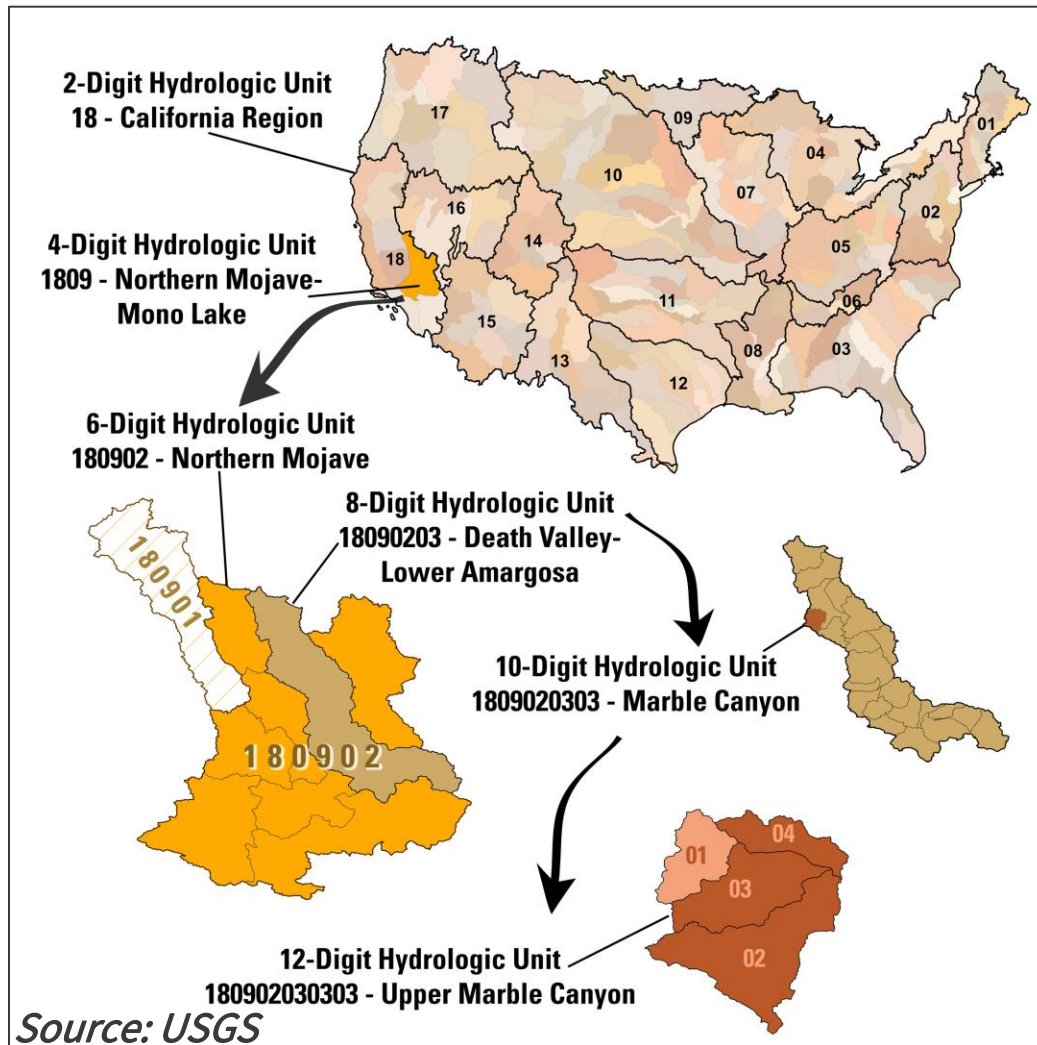


Topics

- Hydrologic Unit Code (HUC) 12 Watersheds
- Event Mean Concentration (EMC) Process to Calculate Loading
- Grandfathering of Conceptual Approval Permits
- Impacts on Private Owners and Operators



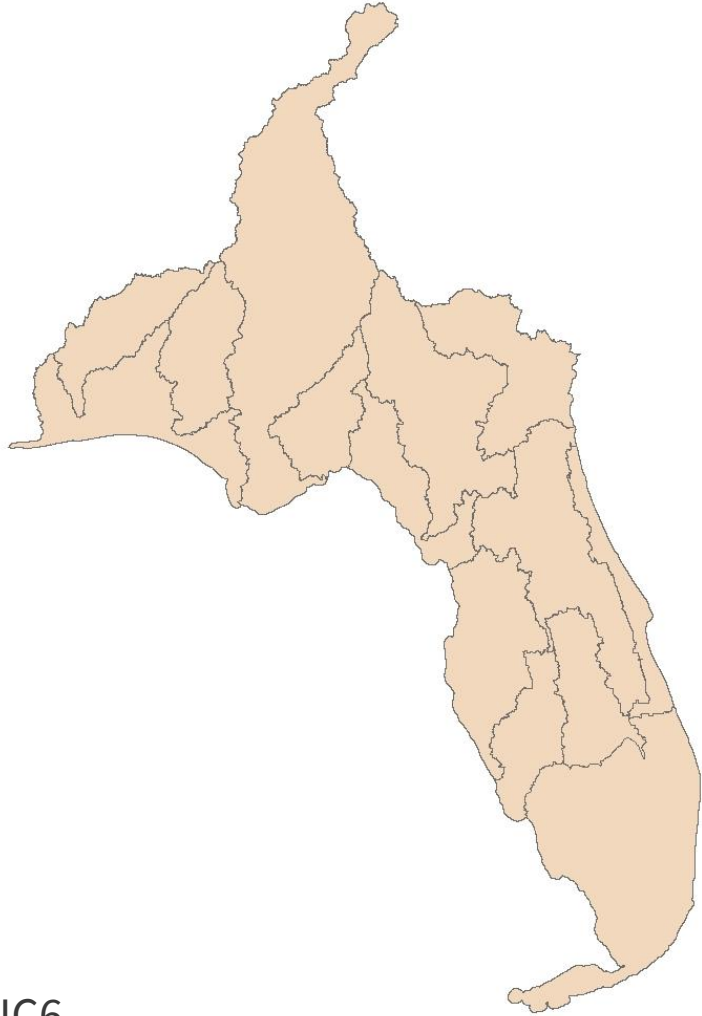
What the HUC?



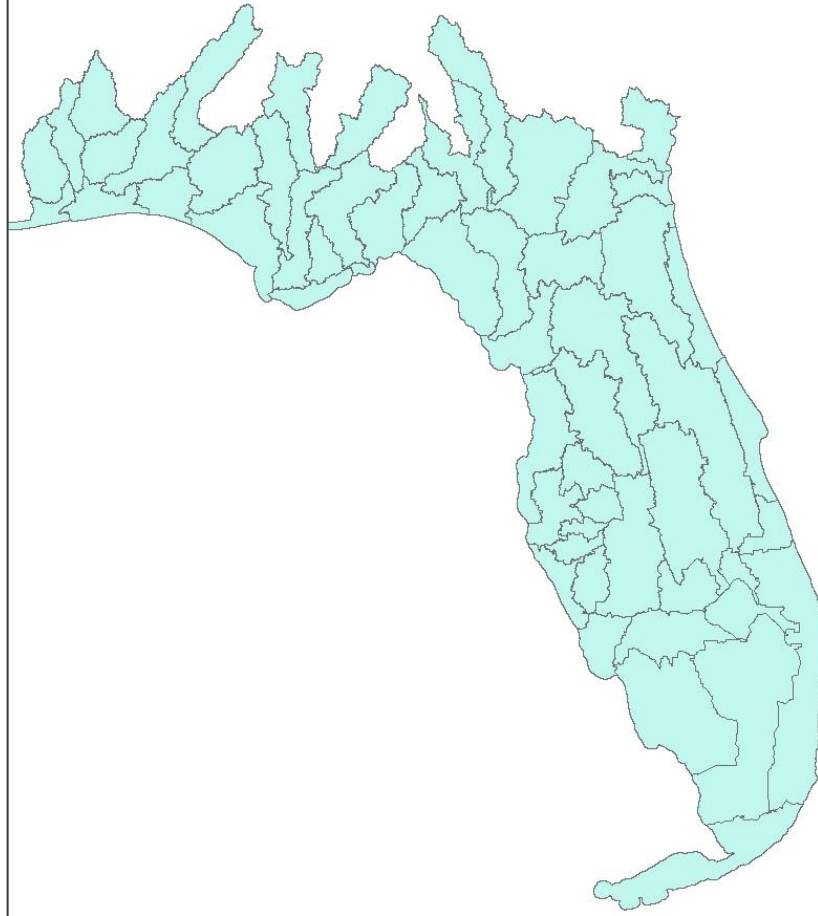
Name	Level	Digits
Region	1	2
Subregion	2	4
Basin	3	6
Subbasin	4	8
Watershed	5	10
Subwatershed	6	12

Coverage on FDEP's website at: <https://fdep.maps.arcgis.com/apps/mapviewer/index.html?webmap=ef1fbbf08fec46de8b1acaa8a8abcfae>

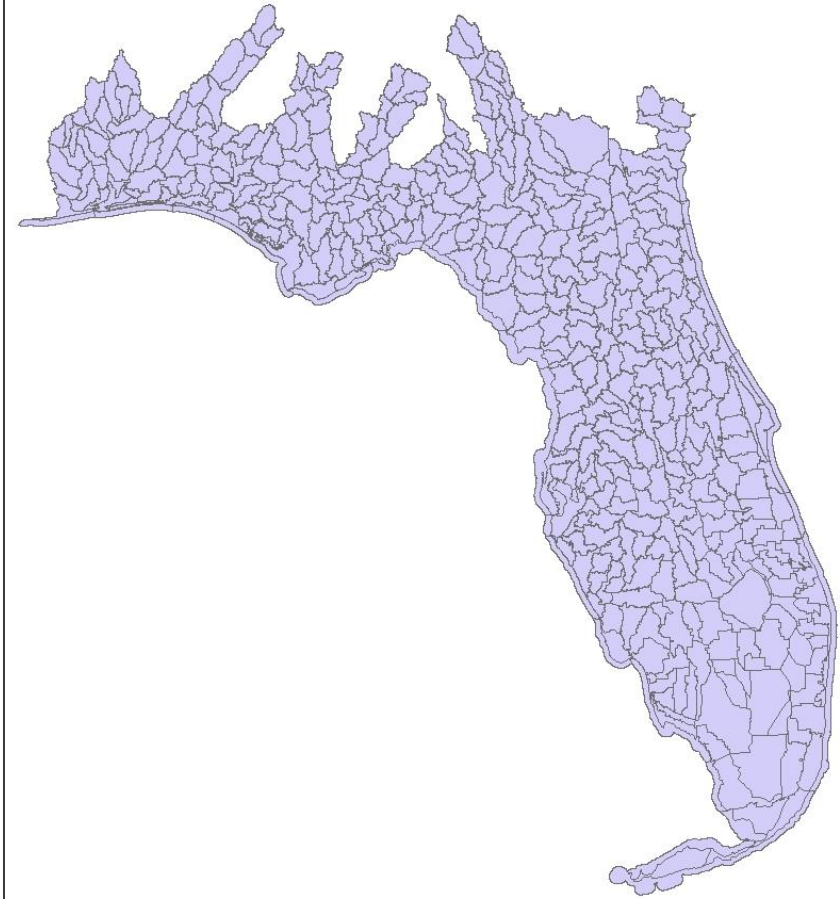
Different HUC Scales



HUC6

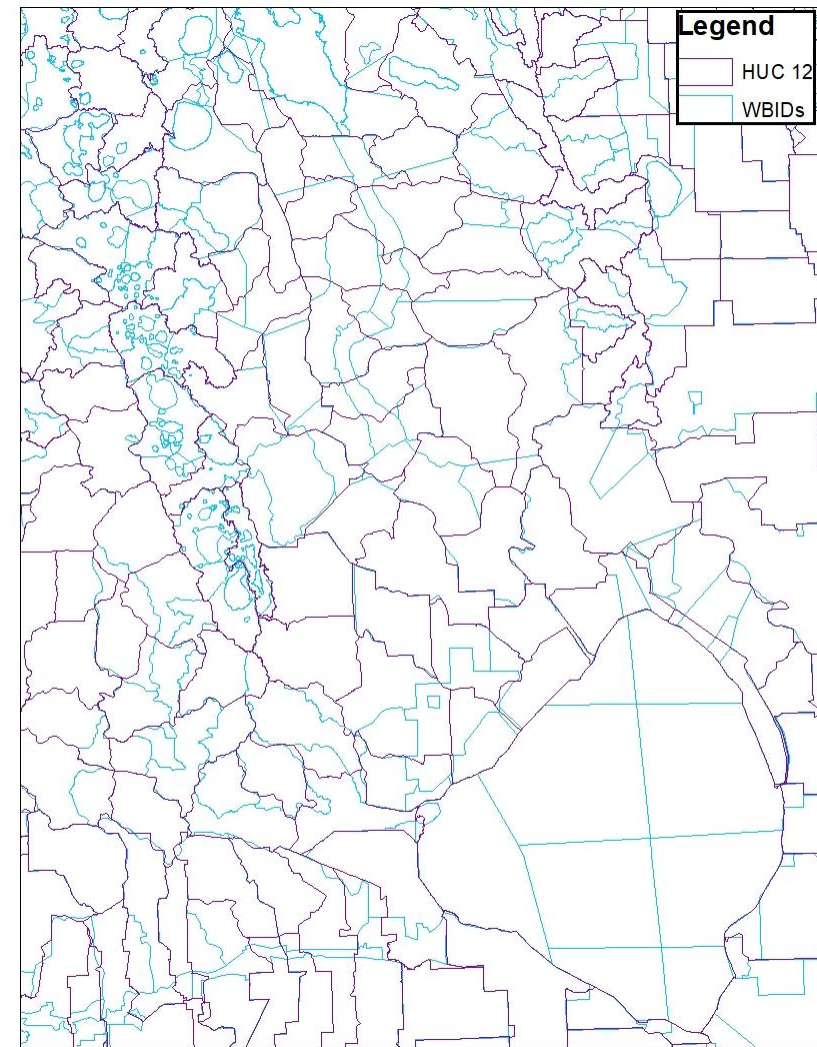
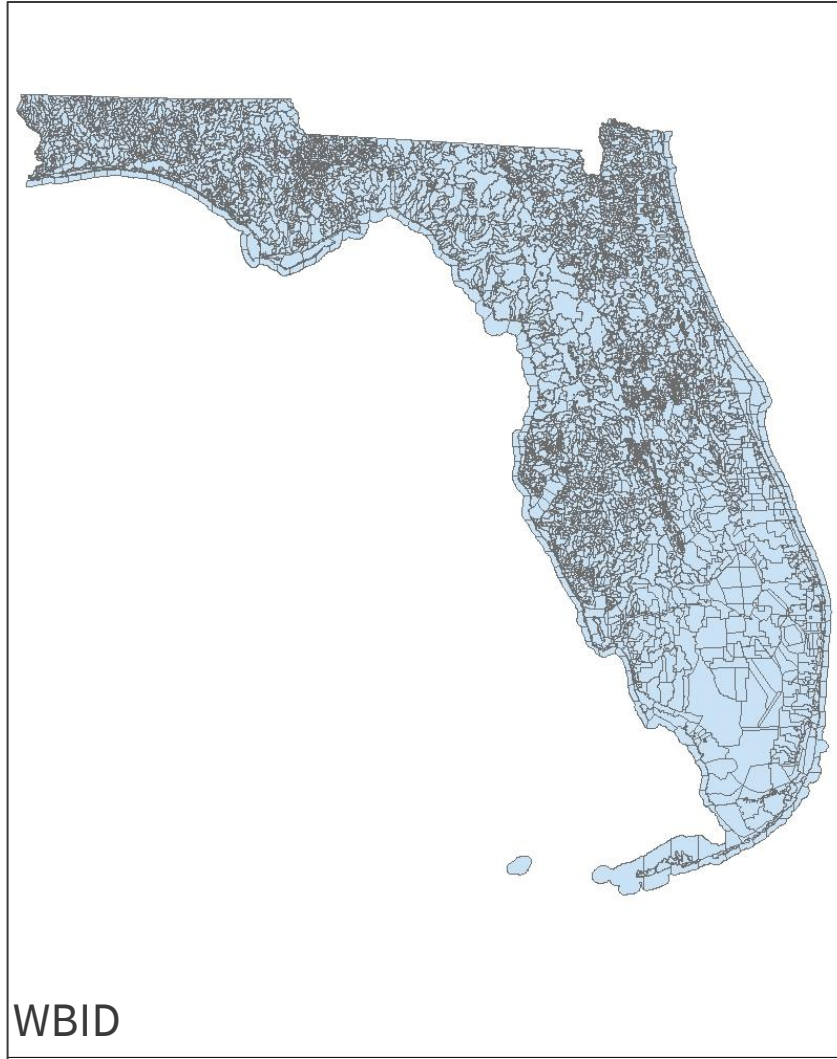
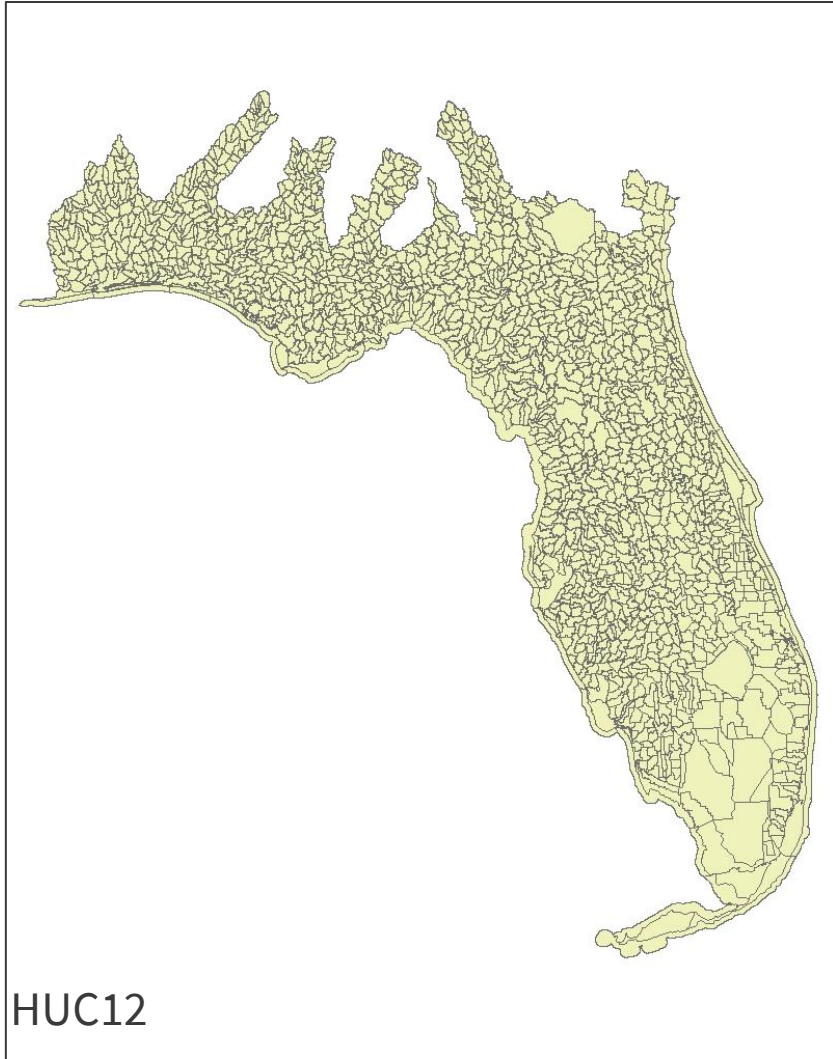


HUC8



HUC10

HUC12 versus WBID



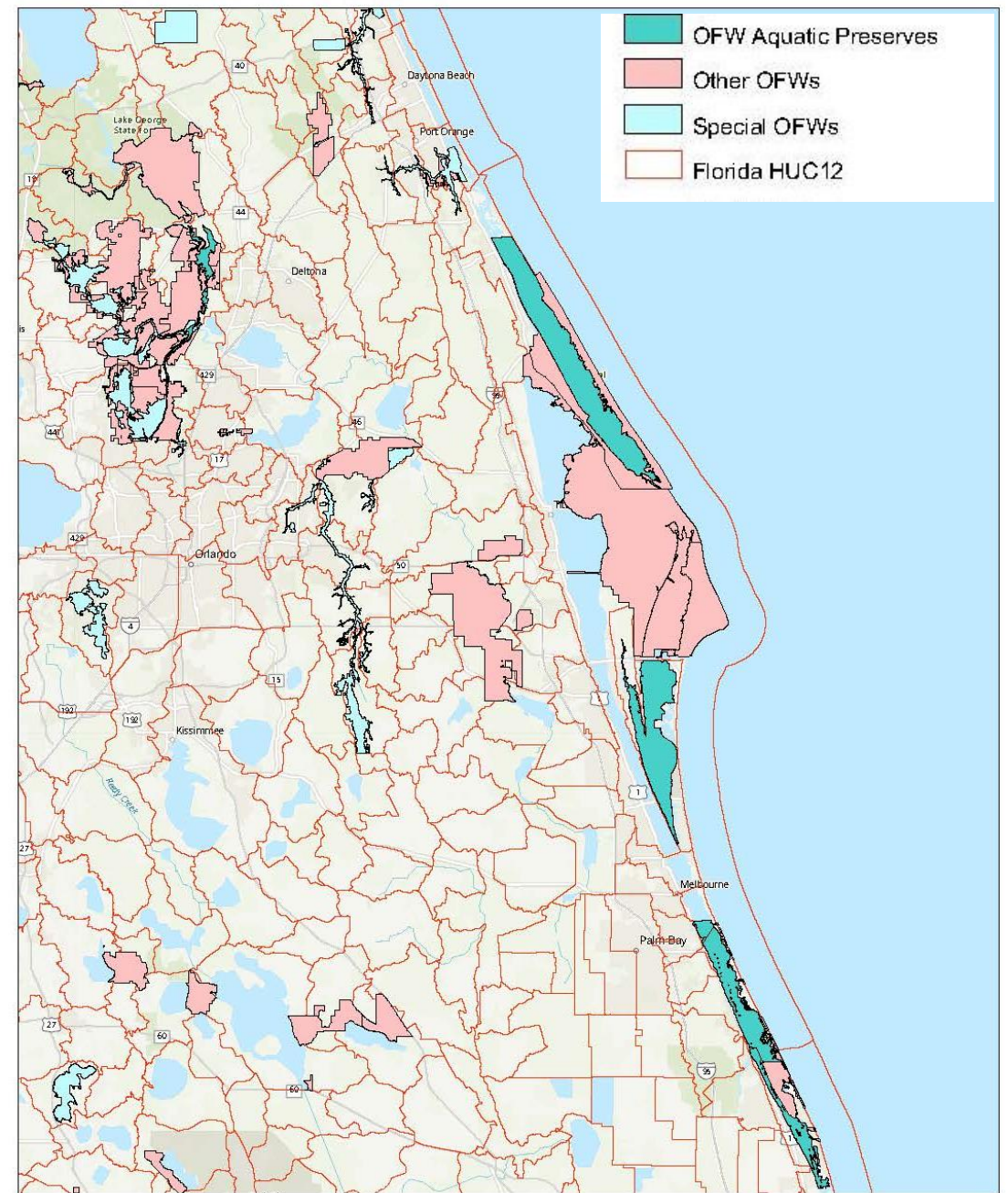
Net Improvement

- Where a waterbody does not meet standards and the proposed activity will cause or contribute to the impairment, mitigation can include water quality enhancement that achieves a net improvement
- Demonstrate net improvement whenever the activity is located:
 - In a HUC 12 with an impaired water and project is upstream of impaired waterbody
 - Located adjacent to a HUC 12 with an impaired water that is hydrologically downstream



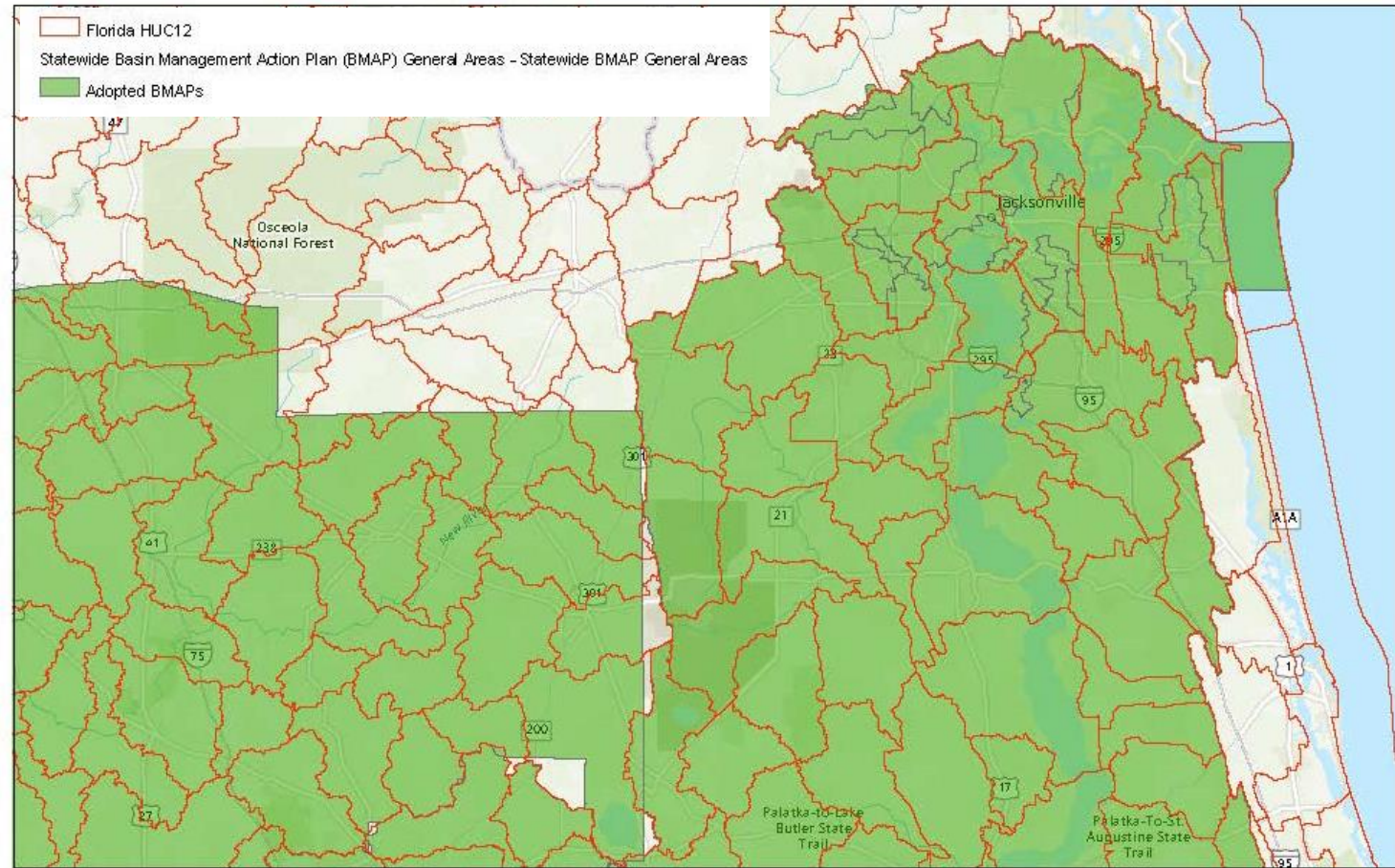
Outstanding Florida Water (OFW)

- Proposed projects within a HUC 12 containing an OFW and located upstream of that OFW
- Achieve a 95% reduction of the average annual post-development TSS load
- Provide a level of treatment to achieve the greater of:
 - 90% TP reduction and 80% TN reduction
 - Reduction so that the post-development does not exceed pre-development loading
- Redevelopment projects must provide a 90% TP reduction and 60% TN reduction



Impaired Waters

- Stormwater treatment systems within a HUC 12 with an impaired water and upstream of the impaired water:
 - 80% reduction of TP and TN or 95% for OFW
 - Reduction such that the post-development does not exceed predevelopment loading
 - Post-development pollutants not meeting standards are less than pre-development
- Stormwater treatment system upstream of and within a HUC 12 with an impaired water with basin-specific criteria:
 - Level of treatment to meet the basin-specific design and performance criteria
 - Post-development pollutants not meeting standards are less than pre-development



Standardized Statewide Stormwater Nutrient EMC Values

- Determine the pre- and post-development average annual average TN and TP loading through modeling or calculations using EMCs

Land Use Category	TN (mg/L)	TP (mg/L)	Land Use Category	TN (mg/L)	TP (mg/L)
Low Density Residential	1.650	0.270	Scrubby Flatwoods	1.155	0.027
Single Family	1.770	0.327	Upland Hardwood	1.042	0.346
Multi-Family	1.840	0.520	Upland Mixed Forest	0.606	1.166
Low Intensity Commercial	0.930	0.19	Wet Flatwoods	1.213	0.210
High Intensity Commercial	2.400	0.345	Wet Prairie	1.095	0.015
Light Industrial	1.200	0.260	Xeric Scrub	1.596	0.156
Highway	1.250	0.173	Rangeland/Parkland	1.150	0.055
Dry Prairie	2.025	0.184	General Agricultural	2.290	0.381
Marl Prairie	0.684	0.012	Pasture	3.030	0.593
Mesic Flatwoods	1.087	0.043	Citrus	2.110	0.180
Ruderal/Upland Pine	1.694	0.162	Row Crops	2.500	0.577

Alternative EMC Approach

- Option to use TN and TP EMCs from regional or local government studies
- Study results must be submitted to and approved by FDEP for use
- Data collected must include:
 - Representative variety of rainfall depths
 - Minimum of 10 rainfall events
 - Minimum of one year of data with seasonal variation
 - Use of autosamplers
 - Volume or time weighted composite samples
 - Sampling at point of discharge upstream of all on-site stormwater treatment
 - Three or more sites for the land use category depending on the variability
 - Representative of site conditions
 - All land use EMCs for the region



Alternative EMC Approach Considerations

- Contributing area to the sample site should represent a single land use type
- Study results should be reasonably consistent with other similar scientific studies and watershed plans
- Study only applicable for the region specified, not to exceed a HUC 8 area
- EMC values from a more recent approved study can be used if applicant demonstrates that the EMCs are applicable to the project area

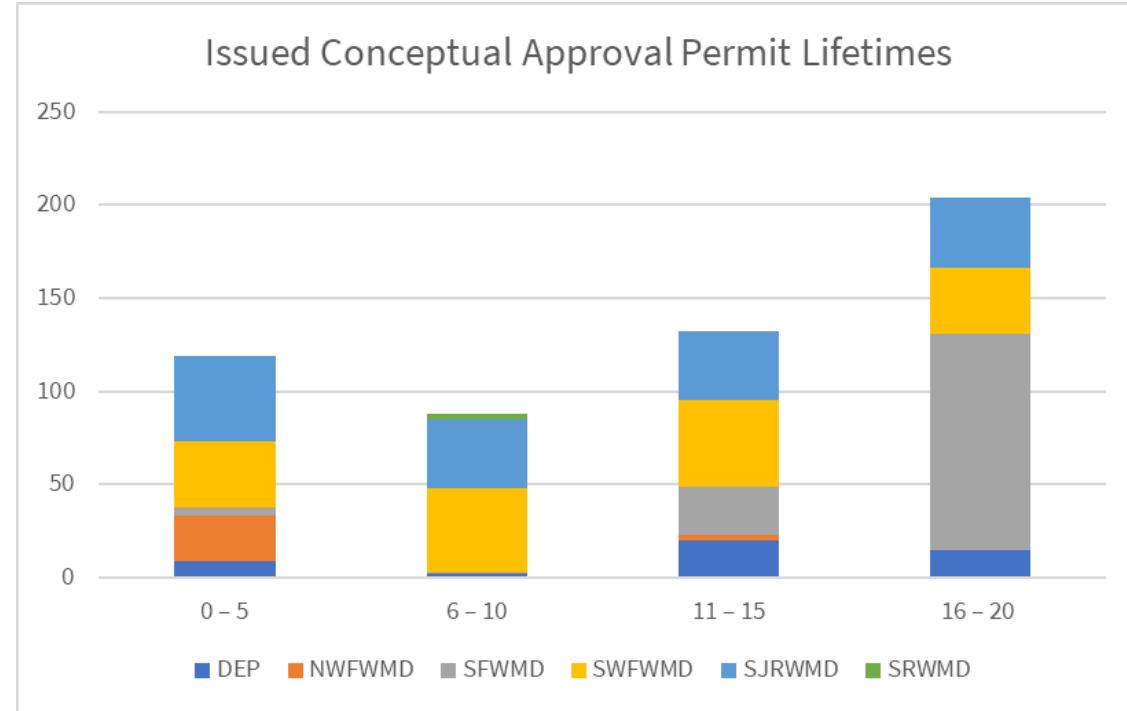


Conceptual Approval Permits

- Available for activities occurring in phases or over a large land area
 - Provides a determination that conceptual plans are consistent with applicable rules at the time of issuance
- New provision under “Grandfathered Activities” for projects and activities approved by an unexpired conceptual permit issued prior to the effective date
- Applies to:
 - Permit modification that is not a major modification or that does not cause substantially different water resource impacts
 - Subsequent permits to construct and operate the future phases consistent with an unexpired conceptual approval permit
 - Transfers of such permits, or conversion of such permits to the operation phase

Conceptual Approval Permit Counts

Agency	Permit Expiration Time Frames, Years				
	0 – 5	6 – 10	11 – 15	16 – 20	Total
DEP	9	2	20	15	46
NFWWMD	24	0	3	0	27
SFWMD	5	1	26	116	148
SWFWMD	35	45	46	35	161
SJRWMD	46	37	37	38	158
SRWMD	0	3	0	0	3
Total Conceptual Approval Permits	119	88	132	204	543
Estimated Individual ERPs	14,034	14,925	15,817	16,708	61,484

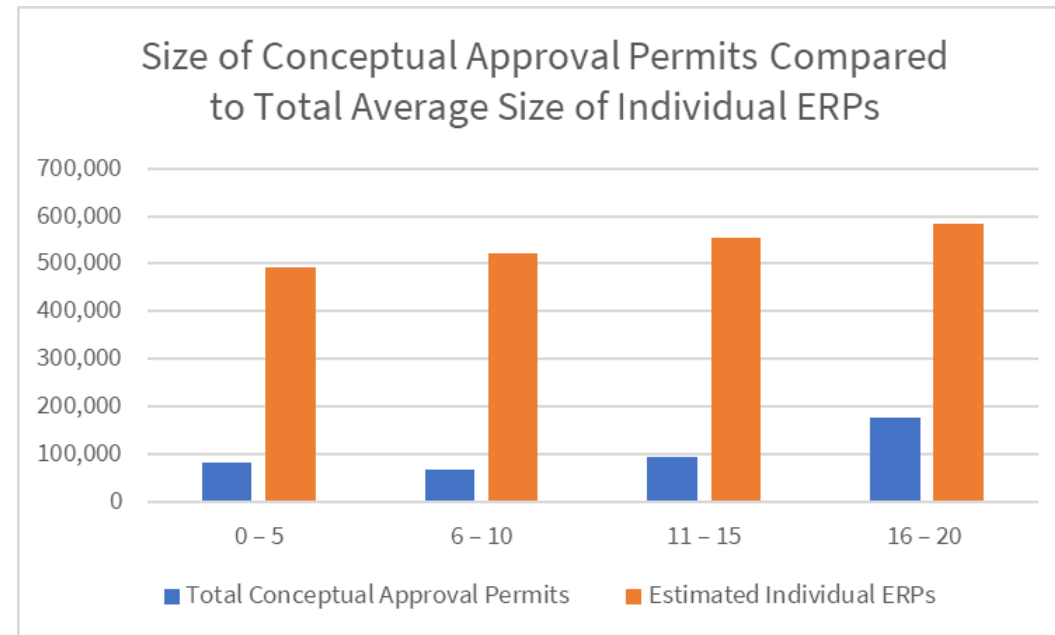


Note: Data provided by FDEP

Conceptual Approval Permit Coverage in Acres

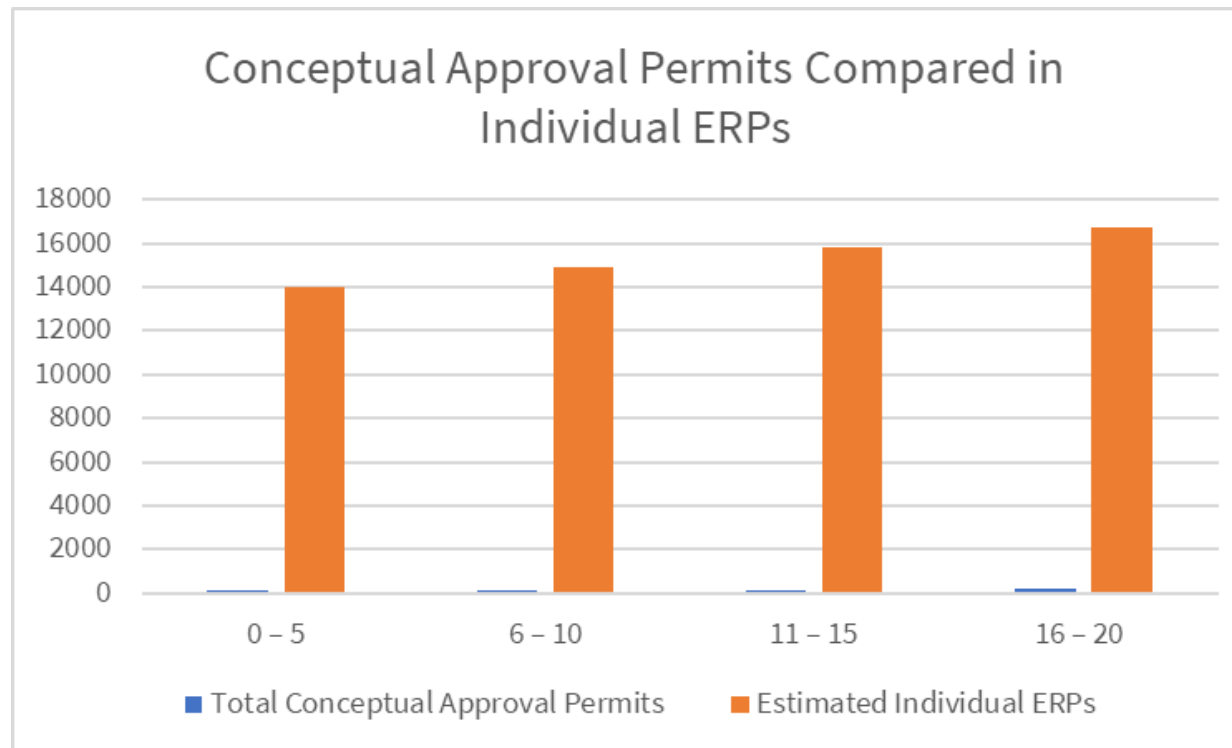
Agency	Permit Expiration Time Frames, Years				
	0 – 5	6 – 10	11 – 15	16 – 20	Total
DEP	1,091	1,712	5,617	26,289	34,709
NFWWMD	3,620	0	306	306	4,231
SFWMD	2,117	510	13,866	87,536	104,028
SWFWMD	32,410	21,569	31,418	32,435	117,831
SJRWMD	42,583	40,305	42,909	28,748	154,544
SRWMD	0	2,990	0	0	2,990
Total Conceptual Approval Permits	81,821	67,085	94,114	175,314	418,334
Estimated Individual ERPs	491,570	522,779	554,023	585,233	2,153,605

Note: Data provided by FDEP



What Does This Mean?

- Existing 543 active conceptual approval permits will fall under the old rule
- Future approval conceptual approval permits will be required to follow the new rule
- Language “[effective date] + 12 months” does not apply to conceptual approval permits, only general or individual permit applications

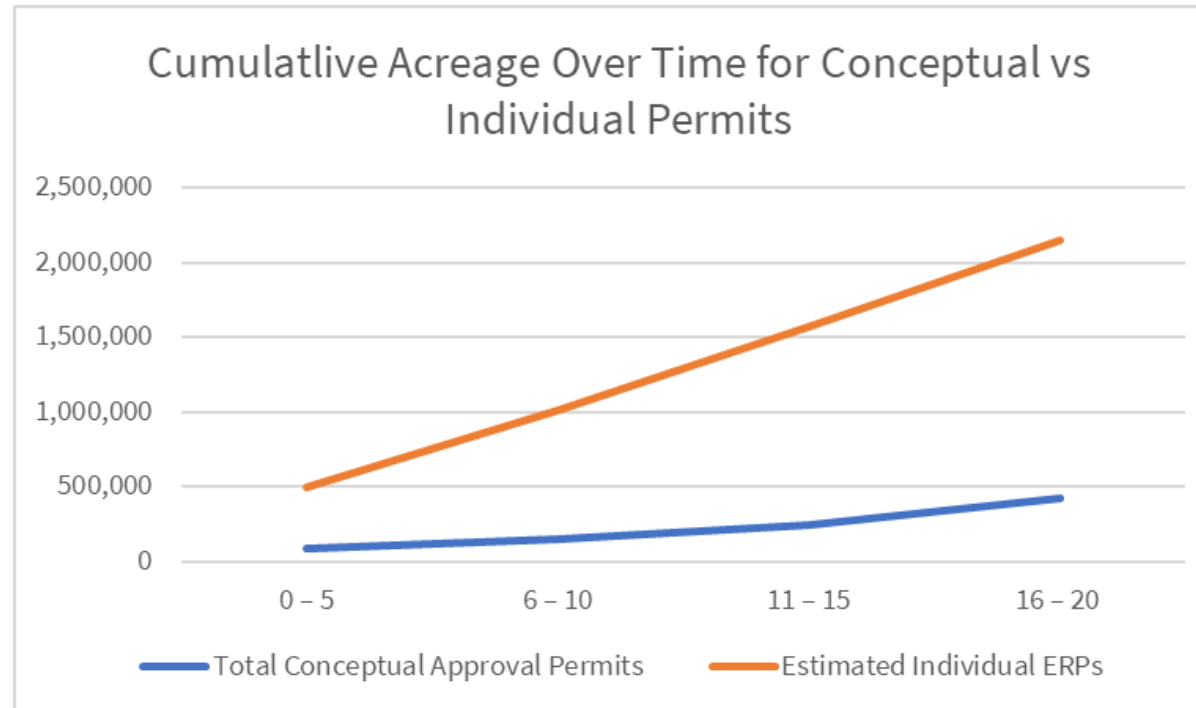


What Occurs with a Modification?

- Major modification requires that new rule be followed
- A major modification includes:
 - Anything not listed as a minor modification as described in Rule 62-330.315, F.A.C.
 - Change in state water quality standards for a stormwater pollutant
 - Substantive change in site characteristics that would affect design concepts, including designating a waterbody as impaired
 - HUC12 is impaired for a stormwater pollutant, a pre- and post-development analysis to prevent any additional loading, even for a construction phase permit

What About the 20-year Timeline?

- Based on permit timelines, 38% and 62% of permits will expire in 10 and 15 years, respectively
- Only 204 permits are eligible to continue in the 15- to 20-year window
- As water quality standards change, grandfathered conceptual permits will be required to follow the new rule criteria due to the major modification



Additional Impacts – Operations and Maintenance

- Show that the operation and maintenance entity has the financial, administrative, and legal capability to access, monitor, operate, and maintain the permitted project
 - Must provide for the perpetual operation and maintenance
 - Assess members for the cost of operating and maintaining the system and enforce collection
- Provide a cost estimate for the perpetual operation and maintenance
- Provide documentation of legal authorization to have and maintain sufficient access for operation and maintenance of the stormwater treatment system
- Provide and implement a written operation and maintenance plan



Additional Impacts – Inspections

- Employ a qualified registered professional or qualified inspector to inspect the stormwater treatment system
 - Ability to read construction drawings, plans, specifications and modeling of recovery timeframes
 - Understand principles of traditional BMPs for stormwater treatment
 - Understand potential causes of failure or malfunction, replacement needs, and reduction in treatment efficiency for traditional BMPs
 - Understand purpose, design, and function of manufactured devices or non-traditional BMPs and ability to ensure device meets manufacturers' specifications and maintenance
 - Perform inspections, including field inspection experience and completion of required reports and documentation

Type of System	Inspection Frequency
Dry Retention Basins	Once every 3 years
Exfiltration Trenches	Once every 2 Years
Underground Retention	Once every Year
Sand or Media Filters	Once every Year
Underdrain System	Once every 2 Years
Underground Vault/Chambers	Once every Year
Pump Systems	Twice every Year
Swales (treatment)	Once every 3 years
Wet Detention Systems	Once every 3 years
Wet Detention Systems with Littoral Zones	Once every 2 years
Vegetated Natural Buffers	Once every 5 years
Manufactured Devices	As manufacturer recommends, minimum once a year
Dam Systems	Once every Year
All Other	Once every Year

Additional Impacts – Reporting

- Operation and maintenance entities, other than an MS4 Entity, responsible for a stormwater management system shall submit an inspection report
 - Describe and certify results of the inspection
 - Certified by qualified inspector
- Reports also include:
 - Form 62-330.311(3) “Inspection Checklists”
 - Updated operation and maintenance cost estimates
 - Summary of updates to the operation and maintenance plan
 - Monitoring reports as may be required by a specific permit condition





Questions?