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## **Monroe County Stormwater Regulation Updates**

Florida Keys National Marine Sanctuary  
Water Quality Protection Program  
September 23, 2020

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# Monroe County Stormwater Regulation Update

## Working Group Recommended Strategies

**4-2.** Support planning, development and implementation of the Monroe County Stormwater Master Plan. Develop best management practices for stormwater within Monroe County, including a consideration of better solutions to treat stormwater in the Keys' environment. In addition to treatment options, prevention of stormwater runoff via a reduction in impervious surfaces should also be considered.

**4-1.** Design and build more effective stormwater projects, to include stricter stormwater management and project permitting.



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## Rationale for Selection

The working group identified Stormwater among the top contributors to water quality stress in FKNMS, and both strategies identified here ranked as Very High/Priority 1 items and were thus selected for inclusion in this recommendation. Stormwater is a locally significant source of pollution within the Sanctuary, but has not been addressed in the same comprehensive way as wastewater. Monroe County is currently working on updating their Stormwater Low Impact Development Manual to include best management practices, and the working group recognized that the WQPP should play a leading role in the review, development and implementation of that plan.



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To review the proposed amendments to the Land Development Code as well as the Draft Stormwater Manual and Layman's Brochure, please see:

<http://www.monroecounty-fl.gov/707/Pending-Applications>

[2019-183 Chapter 114-LDC](#)

- [Draft Monroe County Layman's Brochure - Stormwater](#)
- [Draft Monroe County Stormwater Manual](#)



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# Monroe County Stormwater Regulation Update

## Summary of Technical Changes proposed:

We updated the county's presumptive stormwater management criteria, so that these would meet current state standards. The existing presumptive criteria that are referenced in the land development code are about 30 years and don't represent our current understanding of stormwater management and water quality.

Within the state we have seen a move towards more performance-based standards for stormwater treatment rather than the presumptive standards that have previously been used.

Some of the key advantages of this are that it ensures that water quality objectives are being met, while also giving engineers and designers more flexibility in how they achieve these goals.



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## Summary of Technical Changes proposed:

- Treatment and disposal facilities shall be designed to meet the design and performance standards established in the current edition of the County's *Manual of Stormwater Management Practices* and either demonstrate that post development total nitrogen and total phosphorous loads are less than pre-development loads to the receiving water body (net improvement) or demonstrate a ninety five percent (95%) reduction in stormwater total nitrogen load and total phosphorus load. Treatment and disposal facilities must be ~~and~~ designed and operated so that off-site discharges meet State water quality standards.



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Summary of Technical Changes proposed:

Reduce the post-development annual average stormwater for both total nitrogen load and total phosphorus load by 95%.



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## Stormwater Manual update:

As part of these updates we focused the manual on wet detention, dry retention, and low impact development stormwater treatment system.

Wet detention and dry retention are two traditional stormwater practices, while low impact development is a newer approach to stormwater management.

The updated manual provides guidance on sizing these systems to meet the new water quality criteria, while also providing flexibility by allowing engineers to demonstrate through more modern stormwater design tools that a system meets the County's performance standards.





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## Layman's Brochure update:

- This brochure focuses on providing guidance to individual homeowners and builders on how they can meet the County stormwater treatment goals on individual lots and provide the required stormwater management.
- These updates included revising permitting guidelines
- We also updated the stormwater treatment sizing criteria stated in the brochure to meet the proposed new performance standards. We have included examples sizing calculations in the brochure that help show that the new treatment requirements are doable on a single-family lots in the County.



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# Monroe County Stormwater Regulation Update

First Community Meeting to review the proposed amendments is TONIGHT beginning at 5:30:

**Please click the link below to join the webinar:**

<https://mcbocc.zoom.us/j/96637089812>

Webinar ID: 966 3708 9812