I. Nomination Information
Nomination Category (please check only one box): □ Program (Department/Division) □ Project
Company Name: Marion County Office of the County Engineer - Stormwater Section
(Note: Nominee must be a member of FSA and only 1 submittal per organization per category)
Title of Nomination: Marion County - Stormwater Section Program Excellence
(as you would like it to read on the award certificate- please be reasonable with the length of the title)

II. Nominator Information
Person Completing the Nomination Form: Richard V. Busche, P.E., CFM
Phone: 352.438.3000 Email: richard.busche@kimley-horn.com

III. Program/Project Contact Information (Nominee)
Contact FName: Gail LName: Mowry, PE Title: Stormwater Section
Company: Marion County Office of the County Engineer
Address: 412 SE 25th Avenue City: Ocala State: FL Zip: 34471-2687
Telephone: 352.620.7270 Email: gail.mowry@marioncountyfl.org

III. Description
Please provide a brief description (not to exceed 500 words) of the program or project being nominated. Descriptions exceeding 500 words will have points deducted from total score. The description must include the following information in this order:

A. The population of the host jurisdiction (i.e. county, city, etc.)
B. Personnel included in the Stormwater department, division, project, etc.
C. Budget and funding sources for the stormwater department or project
D. A statement of existing goals for the department or the objectives of the project

IV. Supporting Information
Supplemental, supporting information and photos demonstrating that the program or project has succeeded in achieving or surpassing stated goals or objectives may be attached to the nomination form. Supporting information must not exceed 5 pages. Supporting information that exceeds 5 pages will have points deducted from the total score.

V. Submittal
Include this form and all supporting information on a compact disc or flash drive and mail to FSA at the address below, or PDF your submittal and email to annf@ksanet.net. Submittal deadline is Friday, February 27, 2015.

FSA Excellence Award - 719 East Park Avenue - Tallahassee, FL 32301
Questions? Call 888-221-3124
The Marion County Stormwater Section (MCSS) serves a population of 340,000 and covers more than 1,660 square miles. Marion County is the 5th largest County in the state, and contains significant freshwater resources such as Silver Springs and the Silver River, the Rainbow River, the Ocklawaha River Basin, and numerous other springs and recharge areas for the upper Floridan aquifer. Marion County’s water resource issues are somewhat unique for the state because very little of the rainfall leaves the County in the form of surface water. Groundwater recharge, and the removal of pollutants harmful to the aquifer and springs, is the primary concern for the MCSS.

To deal with these issues MCSS has developed a targeted mission plan, and created a well-staffed, well-funded division that continues to perform with excellence and achieve the goals set forth to address the stormwater issues that face Marion County.

- Improve the quality of our water resources through the development of the watershed management program and subsequent implementation of structural and non-structural best management practices (BMPs) throughout Marion County
- Improve stormwater issues associated with transportation network and work to increase proactive maintenance and level of service
- Educate the community about BMPs they can implement to reduce nonpoint source and personal pollution and encourage a sense of stewardship for Marion County’s natural resources.

The MCSS is staffed by 12 personnel overseen by Tracy Straub, P.E. and Gail Mowry P.E., both of whom have been with MCSS for more than 10 years. The current funding of the five-year Stormwater Implementation Plan is over $18 million and is funded through a consistent application of non-ad valorem assessments, and a robust record of obtaining cooperative funding and grants. Of the $16 million spent since 2004 on WMP studies and BMP capital improvements, over 35% has been funded through grants and partnerships. MCSS oversees every stormwater and water resource related program within the County, including:

- Watershed Management Basin Studies
- NPDES Compliance
- Flooding and LOS Capital Projects
- Pond and Conveyance System Maintenance
- BMAP creation and TMDL programs
- Water Quality Capital Projects
- Public Outreach and Education
- Development Review and Land Development Regulation Ordinances

As part of the efforts described above to comply with regulations, the Stormwater Section implements a watershed management approach to identifying water quality and quantity needs throughout the County’s stormwater infrastructure. The watershed management approach results in the identification of capital retrofit projects that work to reduce pollutant loading to water resources and improve flooding and drainage issues along the transportation network.

Finally, a proactive scheduling approach is used to address operation and maintenance needs for the significant drainage infrastructure throughout the County.

This nomination is proffered because the MCSS is expertly fulfilling its mission and addressing the County’s water resource needs in a comprehensive and effective manner, as demonstrated over successive years of service and by establishing a comprehensive implementation program to ensure that the program continues to fulfill its mission in future years.
Supporting Information
Marion County Office of the County Engineer
Stormwater Section

Program Excellence
1. Program Excellence in Watershed Management Programs

**Watershed Management Program**

In the Stormwater Section, Marion County is developing a comprehensive master plan through the completion of the watershed management studies. The results of the studies include identification of capital improvement projects to be implemented addressing stormwater quality issues and flooding problems based on an established level of service. **Capital projects completed or under construction within the last year are valued at approximately $2 million.** And, over the next several years, $1.5–$3 million will be budgeted annually to construct capital improvements targeting water quality treatment projects such as the recently completed Paddock Park Acres (SW 85th Street), Rainbow Park Unit 8 and Rolling Hills Stormwater Retrofits, the ongoing project in Villages of Rainbow Springs subdivision, and the recently bid project on Sand Mine Road.

A primary tool utilized by the Stormwater Section to comply with the NPDES permit and TMDL requirements is the implementation of a watershed management approach. **A watershed management program (WMP) has been implemented county-wide and provides a holistic view of water quality and quantity problems.** The WMP provides mapping of the stormwater management system, allowing staff to know where stormwater runoff flows, what type of land uses the runoff flows over (indicating the potential pollutant load), and where the runoff discharges (whether to surface water or groundwater). Key documents generated from the WMP are the Floodplain Level of Service (LOS) Report, the Surface Water Resource Assessment (SWRA) Report, and the Capital Projects Report. The Floodplain LOS Report identifies floodprone areas throughout the County and assigns a LOS based on the storm event at which a road floods. The SWRA Report provides water quality and quantity trends within the watershed and identifies areas of concern based on discharge locations, pollutant load, etc. The Capital Projects Report identifies corrective actions to mitigate locations of concern found in the SWRA.

Projects are ranked in the Capital Project Prioritization Report (CPPR). Flooding issues on major roads began to be incorporated into this prioritization process in 2013. However, due to the extent of flooding and number of roads that flood at various storm events, a preliminary ranking was developed for water quantity projects. Water quantity projects are then scored with the water quality projects in the CPPR. The top-ranked projects are then incorporated into the Stormwater Implementation Program (SIP) or five-year plan and updated annually as updates to the CPPR occur. Areas prioritized in the SIP include those influencing critical waterbodies in the County—whether through land use, aquifer connectivity, or proximity to the waterbody.
There are 22 watersheds on the Southwest Florida Water Management District (SWFWMD) side of the County and 10 planning units on the St. Johns River Water Management District (SJRWMD) side of the County. To date, $10,132,144 has been contracted, of which $8,534,911 has been completed. Grants for the SWFWMD side have been received for a total of $2,669,705. An estimated $6 million of work will be done in-house (primarily on the SJRWMD side) and involves generation of the Floodplain LOS, SWRA, and Capital Project Reports. Watershed work, including the aforementioned three reports, is estimated to be complete by FY 14/15 for the SWFWMD side of the County and FY 20/21 for the SJRWMD of the County.

2. Program Excellence in Groundwater and Springs Protection

Marion County is home to one of the largest first-magnitude artesian springs in the world—Silver Springs. In addition, the Rainbow Springs and Silver Glen Springs are significant water resources in the County. Marion County maintains an aggressive program to scientifically identify the root causes of pollutants to these resources, and implement a program designed specifically to address issues associated with groundwater and aquifer quality.

Ongoing efforts include the following:
- Regulatory efforts to protect springs, including Resolution 05-R-106 pertaining to springs protection—the first in the state of Florida
- Incorporation of springs protection zones in the County’s Comprehensive Plan, ensuring that all goals and policies must comply with protection measures
- Updated Land Development Regulations in 2013 that provide rules for water quality and pollutant source discharge reductions for all new development and redevelopment within the County
- Identification of 10-year and 100-year travel zones to the two largest springs formations in the County
- Public awareness campaigns and education efforts regarding fertilizer usage and ways that residents can help impact water quality improvements to the groundwater and aquifer

Water Quality Projects

From projects identified in the County’s WMP efforts, Marion County maintains an aggressive Capital Improvement Program of projects that are specifically designed to address water quality treatment improvements. In the current five-year plan, over $13 million dollars is allocated to capital projects that specifically address groundwater quality. Recent projects include:

**Completed Stormwater Quality Projects**
- SE/SW 31st Street
- Silver Springs/River Pollution Reduction Project
- CR 484 Phases 1-3 (Dunnellon)
- Sateke Village
- Rainbow Springs Country Club Estates
- SW 85th St/SW 40th Avenue
- Rainbow Park Unit 8
- Ocala Highlands
- Rolling Hills Unit 5
- Village of Rainbow Springs

**Funded Stormwater Quality Projects**
- SW 66th Street at CR 475
- Silver Springs Shores Unit 26
- Country Gardens
- Lake Weir Heights
- Smith Lake
- W HWY 316 (w of NW 119 Avenue)
- W HWY 316 @ CR 225
SE-SW 31ST STREET STORMWATER RETROFIT

- Water Quality Project
  - Provide treatment for 32 acres of historically untreated discharge into a sinkhole and the Floridan Aquifer.
- Constructed Wetland System
- Performance: 76% treatment efficiency of nitrate
- Construction Cost: $330,000
- Project Funding:
  - Marion County Stormwater Assessment: $225,000
  - FDEP: $110,000
  - SJRWMD: $115,000

Silver Springs/River Stormwater Retrofit

- Performance in 1st Year:
  - 4 tons of sediment
  - 500 lbs of phosphorus
  - 1,700 lbs of nitrogen
- Construction Cost: $600,000
- Project Funding:
  - Marion County Stormwater Assessment: $325,000
  - FDEP: $110,000
  - SJRWMD: $115,000

SW 85TH ST/SW 40TH AVE STORMWATER RETROFIT PROJECT

- Construction Cost: $330,000
- Project Funding:
  - Marion County Stormwater Assessment: $225,000
  - Southwest Florida Water Management District: $105,000
- Performance:
  - Reduction of Total Nitrogen ~70%
  - Reduction of Total Kjeldhal Nitrogen ~80%
  - Nitrate-Nitrogen being denitrified through Bold & Gold layer.
WATER RESOURCES IN MARION COUNTY

Lakes/Ponds/Reservoirs: 16,424 Acres
Swamps/Marshes: 33,171 Acres
Streams/Rivers: 180 Miles
Springs: 32
First Magnitude Springs: 3
Silver Springs
Rainbow Springs
Silver Glen Springs
Second Magnitude Springs: 3
Blue Springs
Fern Hammock
Juniper
Salt
Sweetwater

Summary of Waterbodies in Marion County

<table>
<thead>
<tr>
<th>Waterbody Type</th>
<th>Acres/Miles</th>
<th>First Magnitude Springs</th>
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</thead>
<tbody>
<tr>
<td>Lakes/Ponds/Reservoirs</td>
<td>16,424</td>
<td>3</td>
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<tr>
<td>Swamps/Marshes</td>
<td>33,171</td>
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<tr>
<td>Streams/Rivers</td>
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<tr>
<td>Springs</td>
<td>32</td>
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</tbody>
</table>

Silver Springs/River Stormwater Retrofit

- Construction Cost: $1,766,828
- Project Funding
  - Florida Department of Environmental Protection: $595,927
  - St Johns River Water Management District: $670,901
  - Florida Department of Transportation: $500,000
- Performance in 1st Year:
  - 4 tons of sediment
  - 500 lbs of phosphorus
  - 1,700 lbs of nitrogen
3. Program Excellence in Sustainable, Funded Stormwater Program

**Current Staffing/Annual Budget**

The current staffing level of the Stormwater Section is 10 full-time employees. The FY 14/15 budget proposes 11.5 positions. Annual revenue is typically $3.6 million, funded through non-ad valorem property assessments.

**Five-Year Stormwater Implementation Program**

Marion County maintains a continuously updated five-year Stormwater Implementation Program (SIP) that provides a reliable funding mechanism for the cost of maintenance programs, watershed management studies, capital projects, and operations. The SIP includes both structural and non-structural projects that are prioritized according to influence on critical water bodies in the County. Grants are sought for all types of work and reliable funding partners include SWFWMD, SJRWMD, Florida Department of Environmental Protection (FDEP), Florida Department of Transportation (FDOT) and others.

<table>
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<tr>
<th>Table 2</th>
<th>Stormwater Assessment Funding Summary</th>
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<tr>
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<td>Project Year</td>
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<tr>
<td>Interest</td>
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<td>Grants</td>
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<td>Other Miscellaneous Revenue</td>
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<td>Less 5% ($205,207)</td>
<td>($187,839)</td>
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<td>Revenues(^2)</td>
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<td>Beginning Fund Balance</td>
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<td>Revenues</td>
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<td>Total Maintenance Cost</td>
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<td>Total Watershed Management Program, Study, Water Quality Cost</td>
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<td>Total Capital Project Cost</td>
<td>$2,287,339</td>
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<td>Total Operation Cost(^4)</td>
<td>$818,784</td>
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<td>Total Projected Expenditures</td>
<td>$5,666,308</td>
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<td>Ending Fund Balance (Reserve for Cash &amp; Contingency)</td>
<td>$8,656,119</td>
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\(^2\) Expected Revenue for FY 2014-2015 through FY 2018-2019 as identified in GovMax by the Finance Department.

\(^3\) Revenue shown for FY 2014-2015 through FY 2018-2019 are less 5% as identified in GovMax by the Finance Department.

\(^4\) Operation Costs for FY2014-2015 through FY2018-2019 are also estimates at 1% increase.

Marion County Office of the County Engineer