

# Marion County Stormwater

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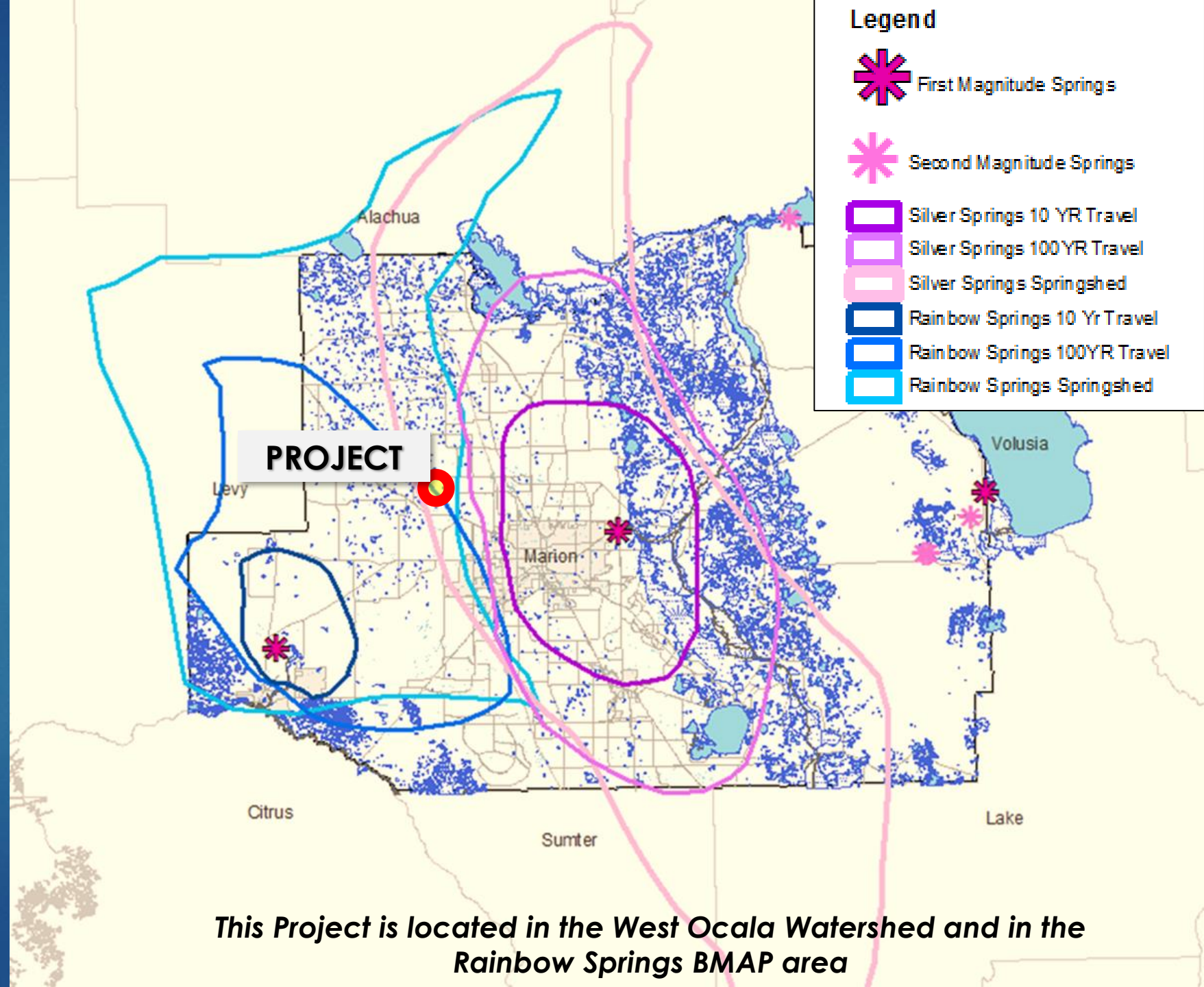
FY2023 FDEP SPRINGS FUNDING PROJECTS





# NW 44<sup>th</sup> Ave Innovative Stormwater Retrofit

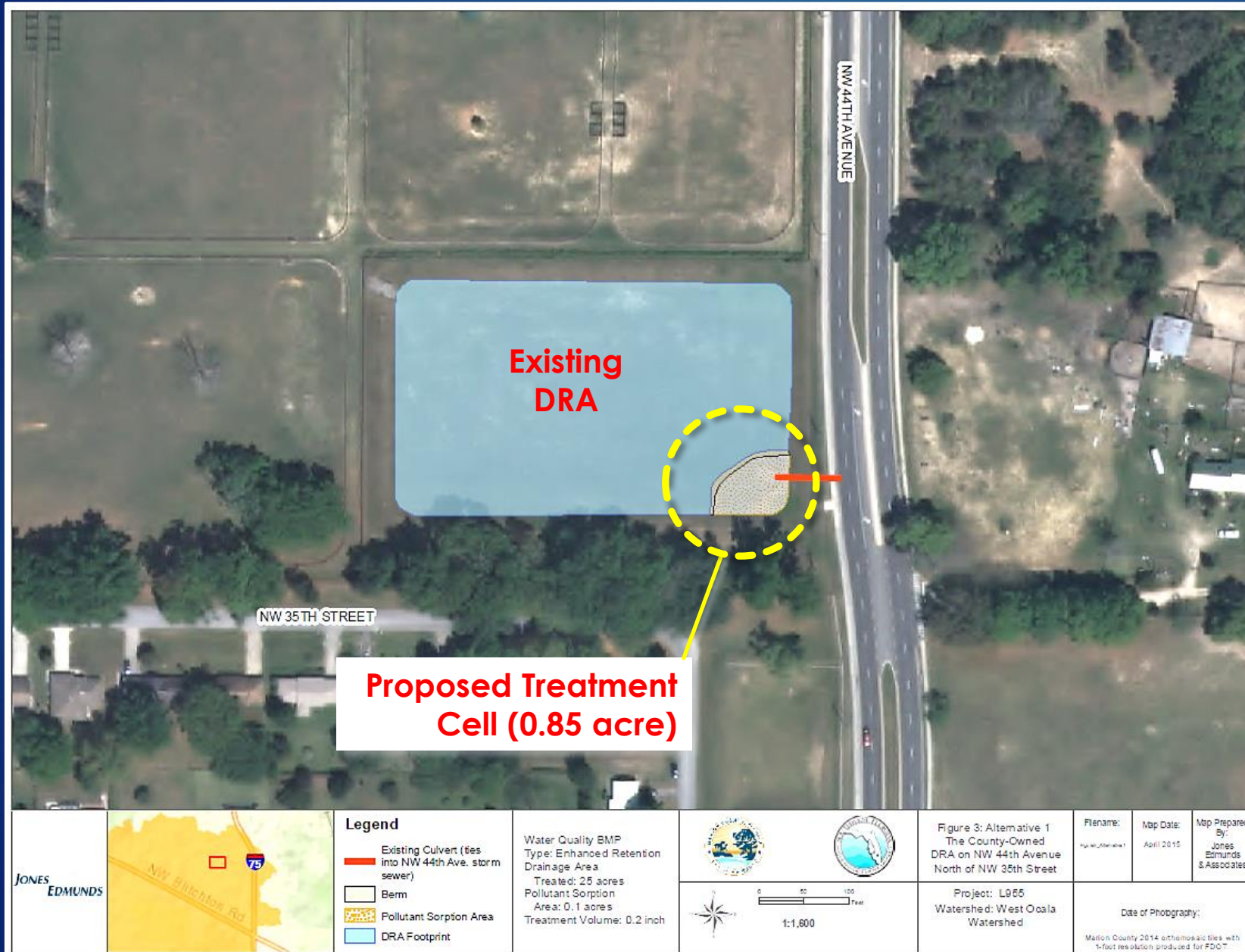
- ▶ This project is part of an ongoing **Program** of retention pond improvements
- ▶ Projects are identified in Marion County's **Watershed Improvement Plans**
- ▶ The Program is targeted to the **BMAP** areas of Marion County





# Main Project Objectives

- ▶ Support the BMAP goals by reducing nitrogen loading in the Rainbow Springs BMAP
- ▶ Project is identified in the West Ocala Watershed Management Plan (WMP)
- ▶ Increase treatment of infiltrated runoff above existing base level (approx 5% removal; 3.90 lb TN/yr)

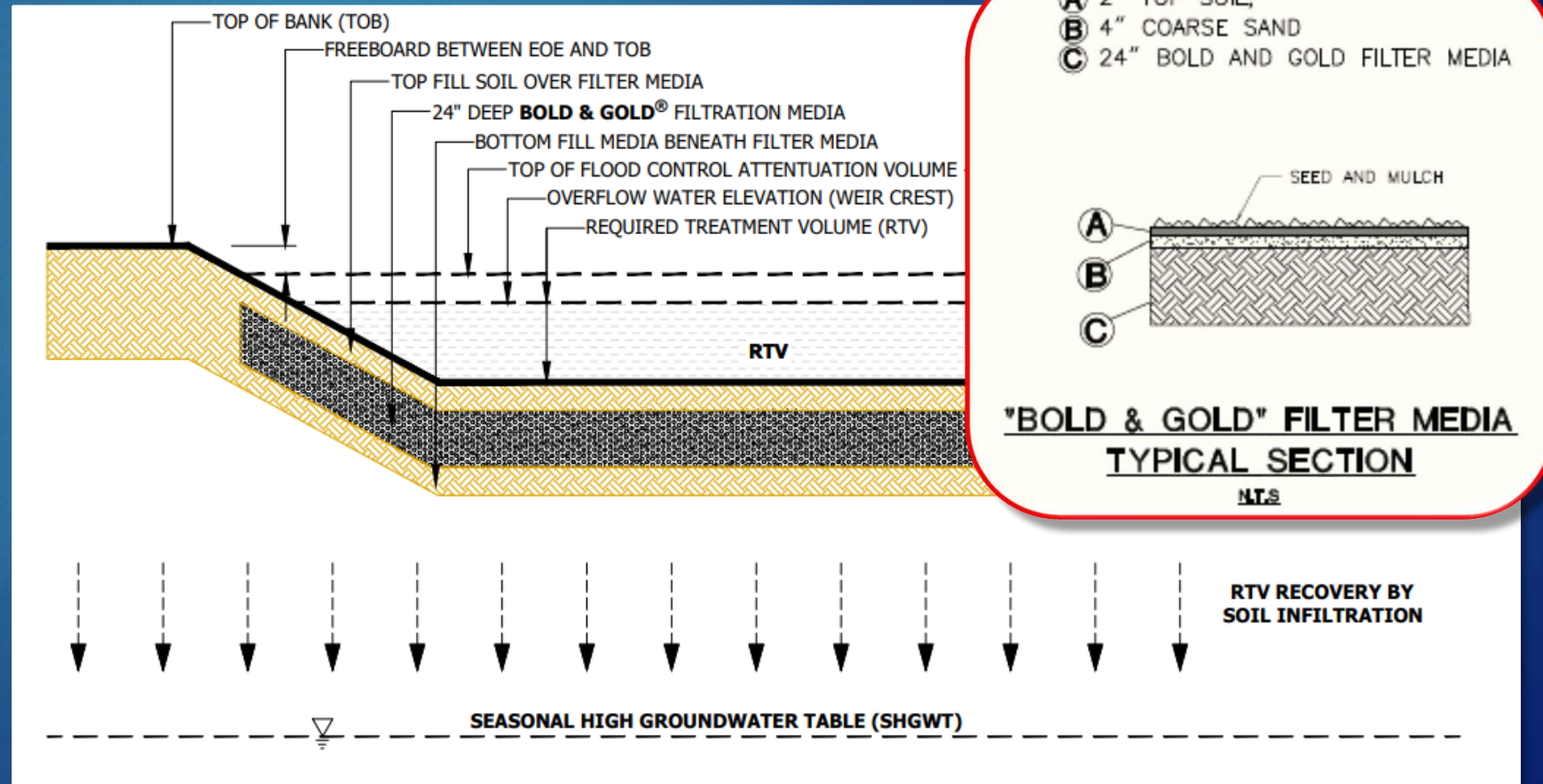


# Main Project Design Elements

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DRA cell removal efficiency is based on 24" layer **Bold & Gold** soil amendment

- ▶ Modification of the existing DRA bottom x-section.
- ▶ Create a **Treatment Cell** to capture initial 0.32 inches of runoff entering the pond.
- ▶ Increase TN removal rate of infiltrated runoff:
  - from **3.90 lbs** TN/yr
  - to **54.51 lbs** TN/yr
- ▶ Provides **46.3%** treatment to catchment area





# Project Timeline

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- ▶ **Design (01/03/2022 – 09/30/2022)**
  - ▶ Survey & 30% Design – 3 months
  - ▶ 60% Design – 2 months
  - ▶ 90% Design – 2 months
  - ▶ Proposed Final Design & Permitting – 2 months
- ▶ **Request for Bids (10/03/2022 – 02/13/2023)**
  - ▶ RFB Advertisement
  - ▶ RFB Evaluation and Award – 3 months
  - ▶ NTP to Contractor – 1.5 months
- ▶ **Construction (02/27/2023 – 06/02/2023)**
  - ▶ Commence Construction
  - ▶ Substantial Completion – 2 months
  - ▶ Construction Complete – 1 months

## Project Funding

**Total Project Cost = \$814,761**

**Construction Cost = \$754,761**

- ▶ **MCU Share** (Design + 50% Construction)
  - ▶ Prior Funding = \$0
  - ▶ FY2022 Funding = \$60,000
  - ▶ FY2023 Proposed Funding = \$377,380.50
- ▶ **FDEP State Springs Funding** (50% Construction)
  - ▶ FY2023 Proposed Funding = \$377,380.50



# Project Benefits

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- ▶ Net Nitrogen Reduction of Infiltrated Runoff: **50.61** lbs/ TN/yr
- ▶ Nutrient Reduction with FDEP Recharge Factor: 45.55 lbs/ TN/yr
- ▶ Cost effectiveness: **\$331/** lb of additional TN removed (50 year lifespan of B&G)
- ▶ Marion County is committed to the **Program** and to the **successful completion of this project**





# Thank You



Presented by  
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