



# Smart Pond Technology for Improved Water Resource Benefits

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# Nutrient Management Water Conservation Improved Development

# Why Smart Ponds?

Conventional Systems provide...



- *Water Quality*
- *Flood Control*
- *Aesthetics*
- *Water Reuse*
- *Groundwater Recharge*
- *Floodplain Storage*



**Smart Ponds are optimized for multiple benefits...**



## Resilience & Innovation

### Real-Time Control Systems

Current innovations include the use of real-time control systems that leverage complex modeling, cloud computing, data storage, and predictive analysis. Large datasets can be used to optimize the capacity of stormwater conveyance, storage and treatment systems, investments in O&M activities, and other costs. The affordability of sensors has also improved, expanding the potential

Finally, some areas employ a regional approach to stormwater management through volume and nutrient trading within watersheds. This can economically incentivize stormwater innovation.

2021

**REPORT CARD**  
**FOR AMERICA'S INFRASTRUCTURE**

<https://infrastructurereportcard.org/cat-item/stormwater-infrastructure/>

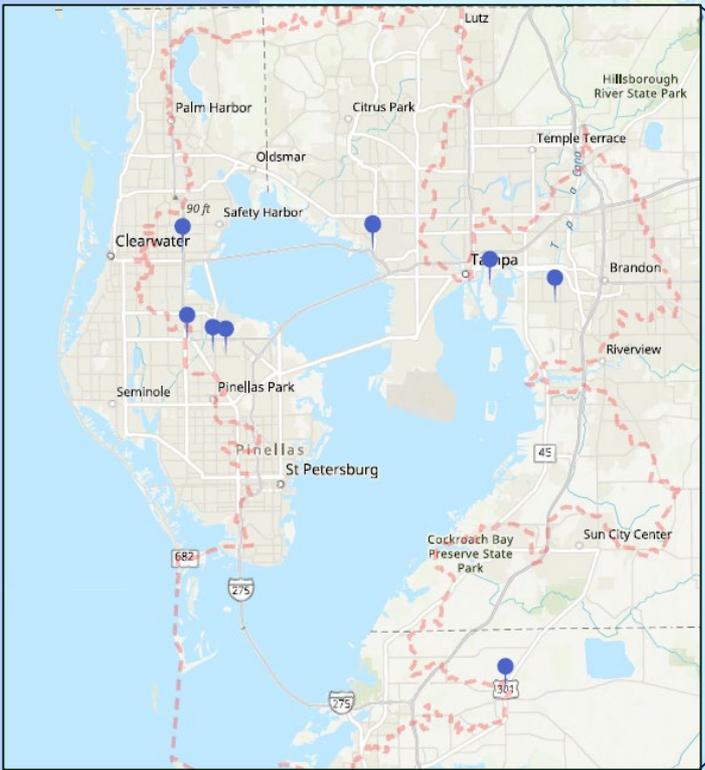
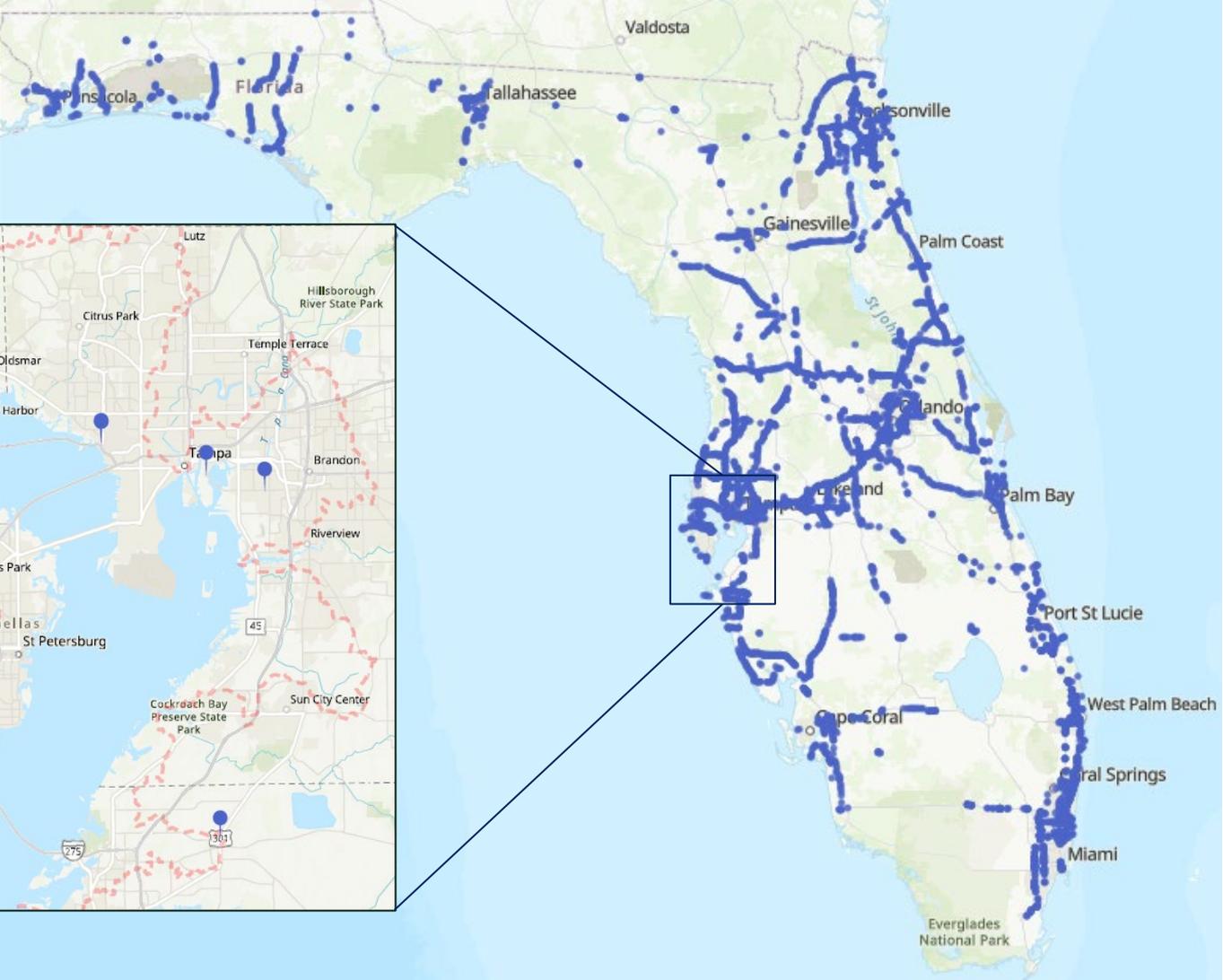
# One Control System, Multiple Benefits



Babcock Ranch

- ❑ ***Water Quality***
- ❑ ***Groundwater Recharge***
- ❑ ***Flood Control***

# Regional Stormwater Management Systems



# Smart Watershed Management

