



Florida Department of Environmental Protection

Basin Management Action Plan (BMAP) Weeki Wachee and Aripeka Springs

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PFA



PFA Requirements

- Sub-Section 373.802, Chap. 2016-1 Laws of Florida:
 - Definition: Area or areas of a basin where the Floridan Aquifer is generally most vulnerable to pollutant inputs where there is a known connectivity between ground water pathways and an Outstanding Florida Spring (OFS).



PFA Requirements

- Sub-Section 373.803, Chap. 2016-1 Laws of Florida:
 - To be delineated considering factors that may lead to degradation of an OFS, such as:
 - Groundwater travel time to spring
 - Hydrogeology
 - Nutrient load to spring
 - Additional factors
 - Soil types
 - Pollutant sources
 - Identifiable boundaries

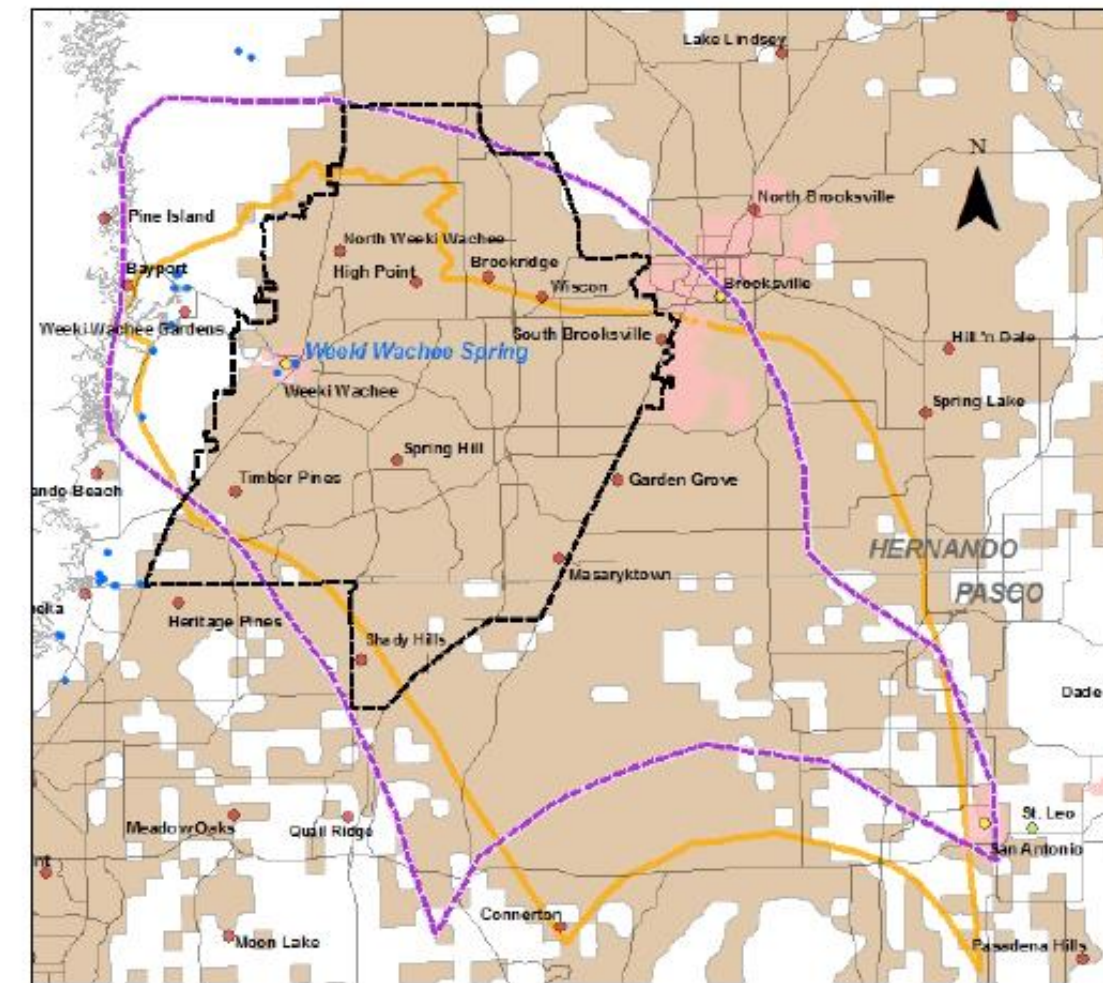


PFA Determination

- Establish groundwater **contributing area (CA)** for the spring.
- Identify regions within the CA where greatest **recharge** occurs.
- Identify regions within the CA where Floridan Aquifer is most **vulnerable**.
- Consider **nitrogen loading and travel time**.
- Consider groundwater travel time.
- Identify regions within CA to exclude or include based on **land use** and **potential occurrence of pollutant sources**.
- Create PFA boundary that corresponds with identifiable boundaries.



High Recharge Areas



0 2.5 5 10 Miles

Recharge 10 in/yr or Greater

Weeki Wachee PFA Boundary

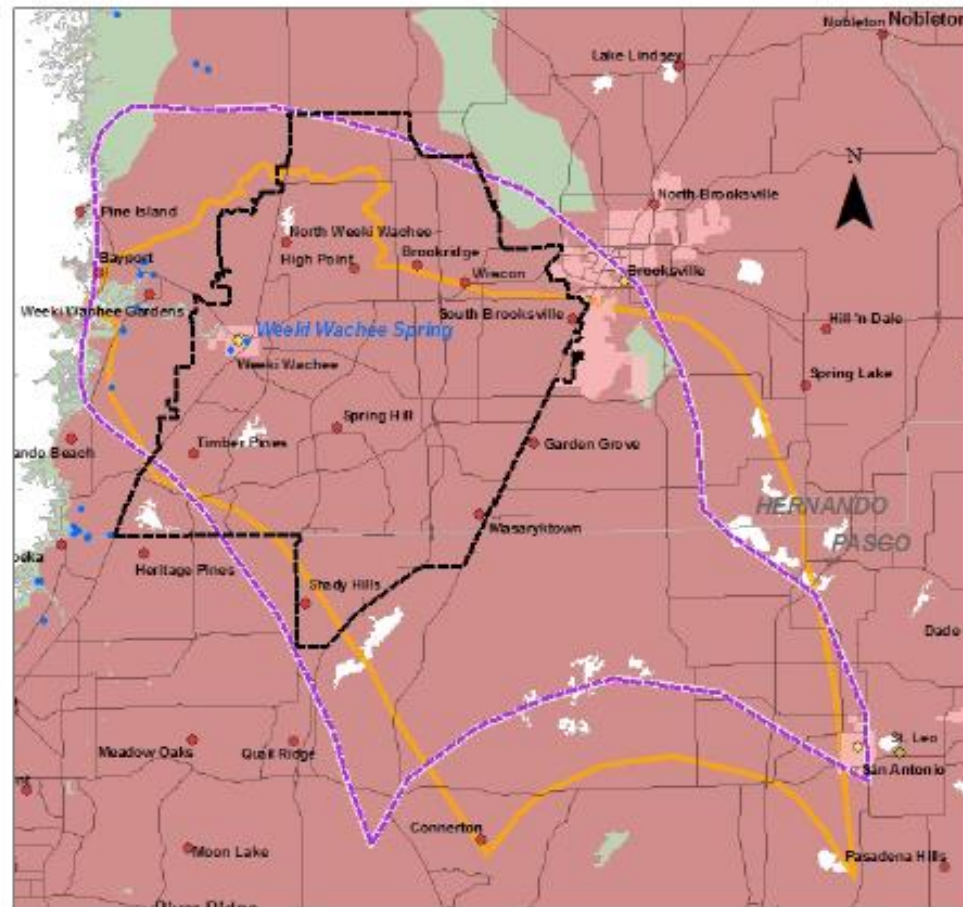
Weeki Wachee Springshed

Weeki Wachee BMAP Area

Spring



Aquifer Vulnerability



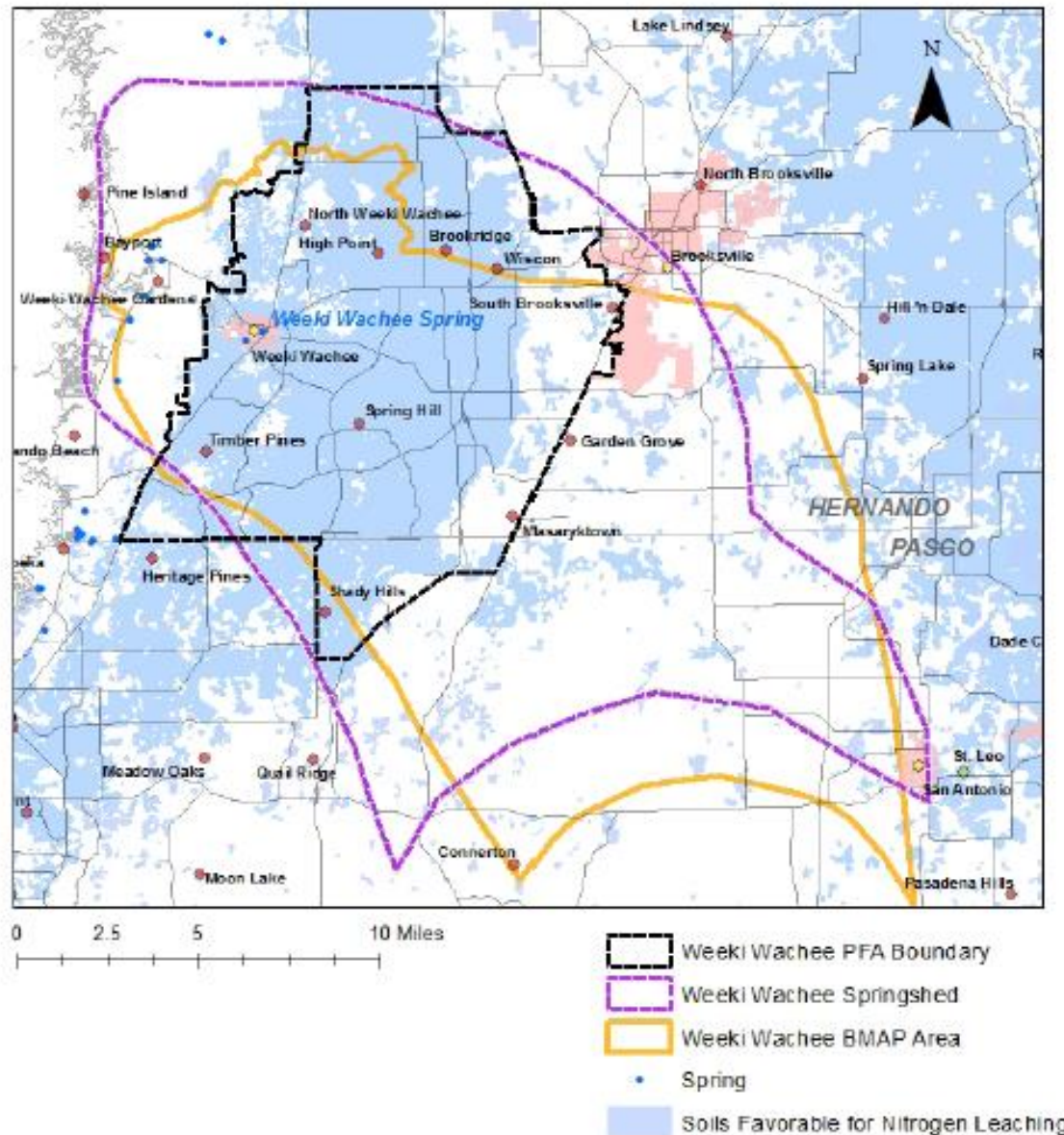
0 2.5 5 10 Miles

- More Vulnerable
- Vulnerable
- Less Vulnerable

- Weeki Wachee PFA Boundary
- Weeki Wachee Springshed
- Weeki Wachee BMAP Area
- Spring

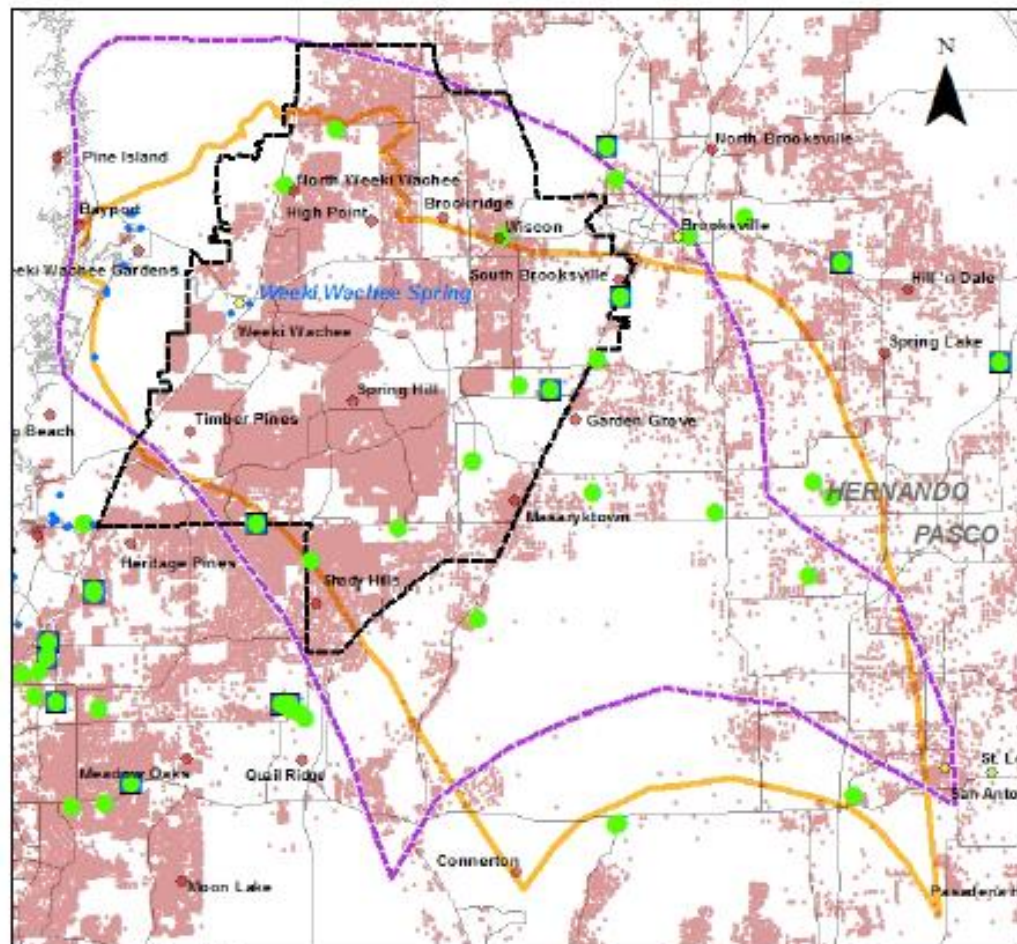


Nitrogen Loading





Potential Pollutant Sources



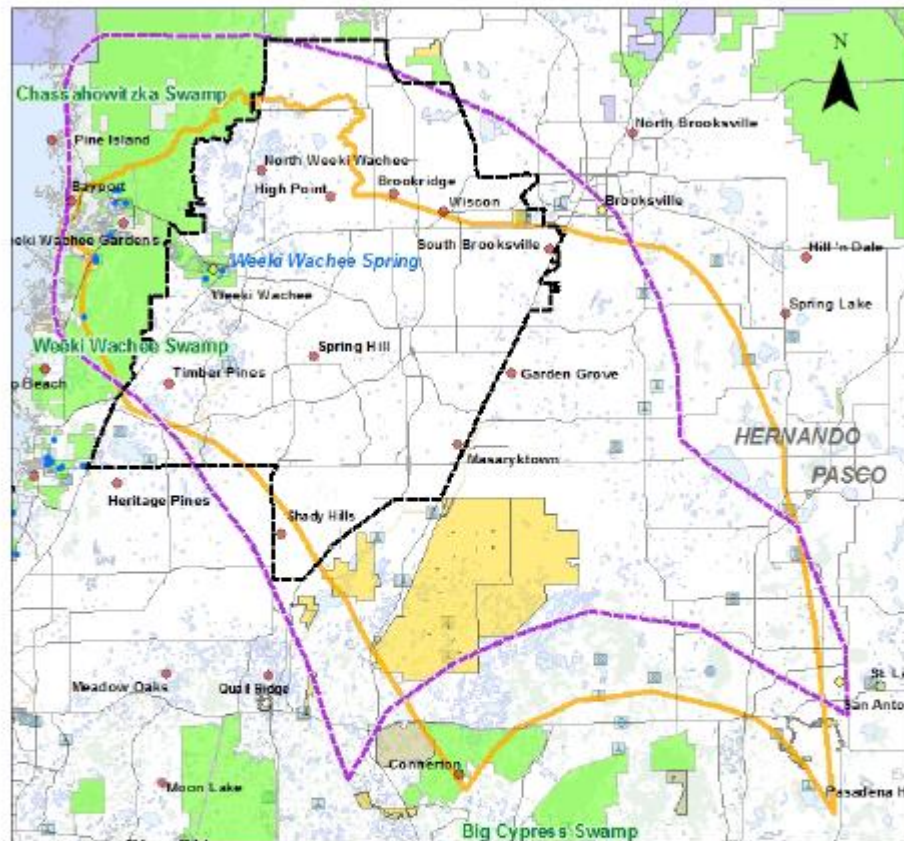
0 2.5 5 10 Miles

- Domestic Wastewater Facility
- Facility with Design Flow > 0.1 MGD
- Onsite Treatment and Disposal System

- Weeki Wachee PFA Boundary
- Weeki Wachee Springshed
- Weeki Wachee BMAP Area
- Spring



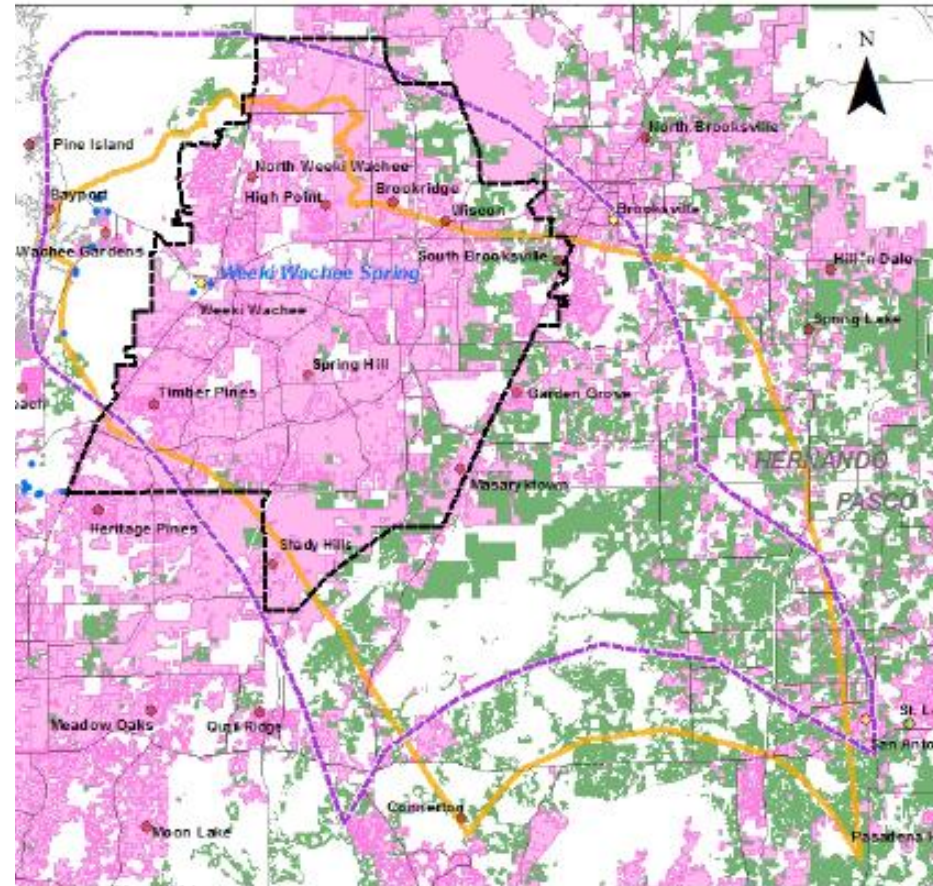
Land Use



0 2.5 5 10 Miles

- Federal
- State
- Local
- Private

- Weeki Wachee PFA Boundary
- Weeki Wachee Springshed
- Weeki Wachee BMAP Area
- Spring



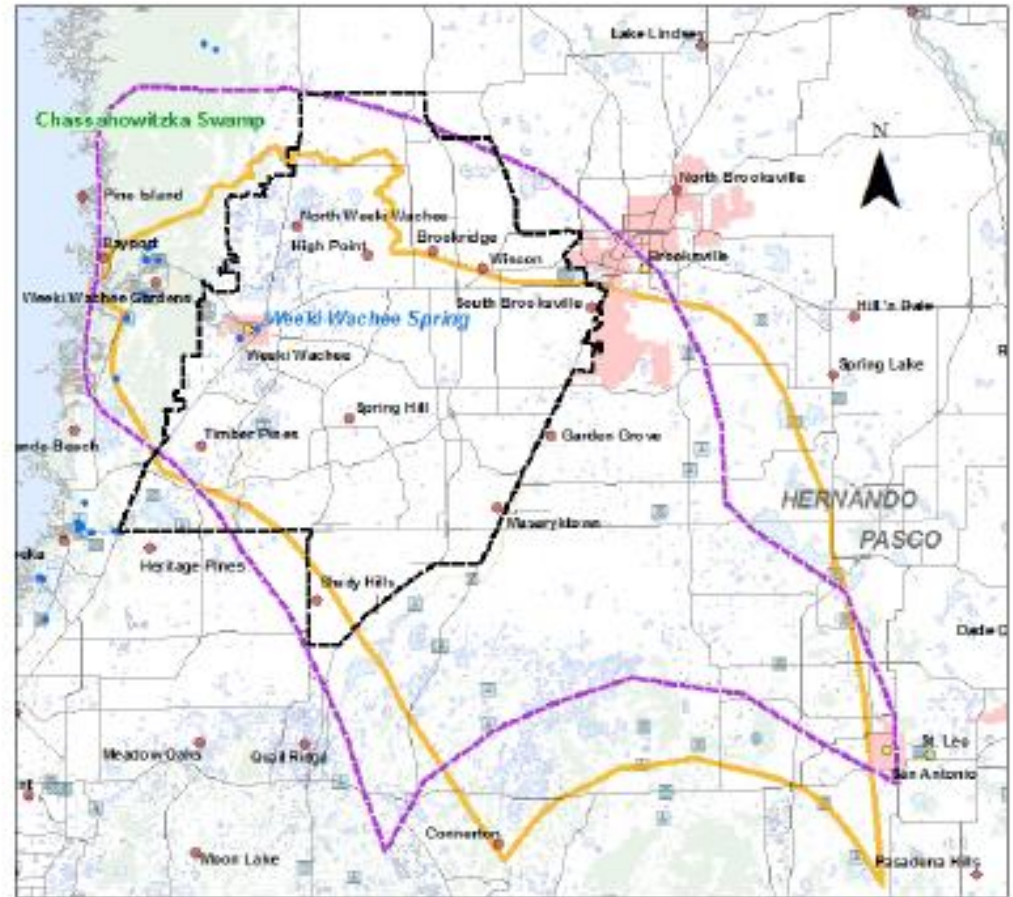
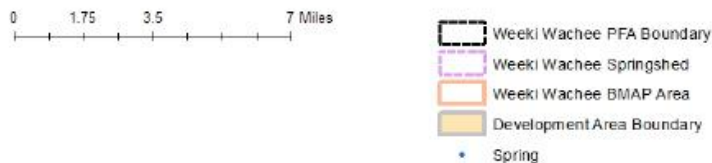
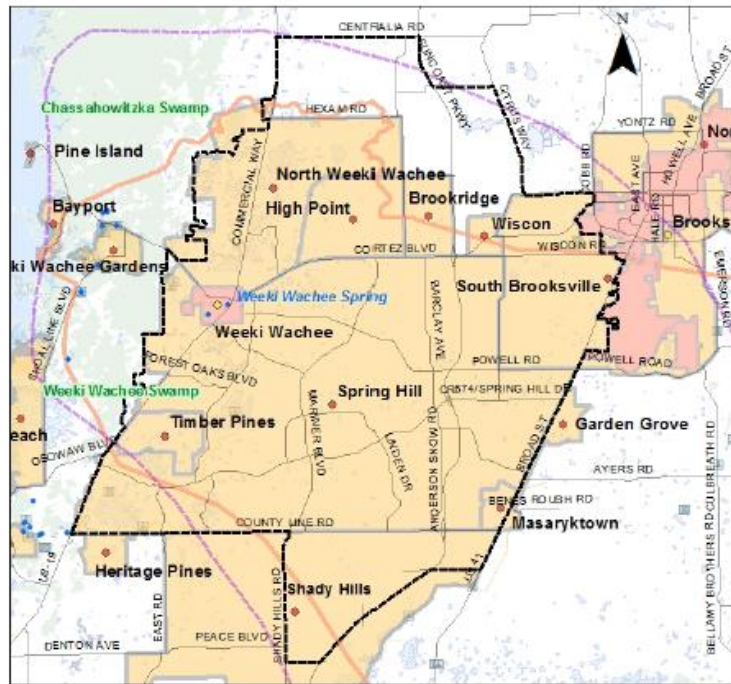
2.5 5 10 Miles

- Agriculture
- Urban

- Weeki Wachee PFA Boundary
- Weeki Wachee Springshed
- Weeki Wachee BMAP Area
- Spring



Proposed PFA Boundary





PFA Determination

Questions on Draft PFA
Process?



Basin Management Action Plan

Contact: Terry Hansen, P.G.

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<http://fdep.maps.arcgis.com/apps/MapJournal/index.html?appid=e71ecaa35bdd4caa7ba7a0c411691dfa7>

[http://publicfiles.dep.state.fl.us/DEAR/BMAP/Springs Coast/BMAPs/CR_KB_BMAP/](http://publicfiles.dep.state.fl.us/DEAR/BMAP/Springs%20Coast/BMAPs/CR_KB_BMAP/)

