## THE BLUE WATER AUDIT

- Multi-year project developed by the Howard T. Odum Florida Springs Institute
- Elevated nitrate levels and increased groundwater pumping are having an impact on the Floridan Aquifer
- The Blue Water Audit analyzes existing data to estimate nitrogen loading and groundwater withdrawals in the Florida Springs Region





### THE FLORIDA Springs region

- Includes 56 counties in Florida
- Area is roughly 27 million acres

 Counties identified by the USGS as making withdrawals from the Floridan Aquifer



- **Unit 1:** individual parcels 5 acres and larger (outside city limits)
- **Unit 2:** generalized land use where parcels are less than 5 acres (outside of city limits)
- **Unit 3:** cities (treated as single entities)

## Image: Second system Image: Second system ATMOSPHERIC DEPOSITION Image: Second system Image: Seco

# GROUNDWATER WITHDRAWALS

## The Blue Water Audit uses data from the following organizations:

- FL Water Management Districts
- FL Dept. of Environmental Protection
- FL Dept. of Health
- FL Dept. of Revenue
- FL Dept. of Agriculture and Consumer Services
- US Geological Survey
- US Census
- US Dept. of Agriculture
- National Atmospheric Deposition Program

#### NITROGEN LOADING

#### BLUE WATER AUDIT RESULTS

The Blue Water Audit results form a detailed, comprehensive geodatabase and tabular database.

The detailed results can be used to inform future research and prioritize conservation efforts.

The results were also shared online as an interactive map. Due to the project area's size, results were generalized for online display.



2018 BLUE WATER AUDIT – RESULTS OVERVIEW

- An estimated 51.6 million pounds of nitrogen reach the Floridan Aquifer annually in the Florida Springs Region.
- An estimated 2.9 billion gallons of groundwater are withdrawn from the Floridan Aquifer each day in the Florida Springs Region.
- Roughly 330,000 parcels were analyzed
- 641 cities were analyzed

#### BLUE WATER AUDIT AQUIFER FOOTPRINT MAPS



#### Floridan Aquifer Nitrogen Footprint (water quality)



Floridan Aquifer Groundwater Footprint (water quantity)





#### **INTERACTIVE MAP**

The map includes Nitrogen Footprint layers (water quality), Groundwater Footprint layers (water quantity), spring locations, and more.

#### **FLORIDAN AQUIFER RESOURCES**

The website includes general information about the Floridan Aquifer, as well as videos and links to data from organizations such as the US Geological Survey.

#### **LOWER YOUR AQUIFER FOOTPRINT**

Coming in 2019! Additional information will be added about Aquifer Footprints. Information and resources will be added to help users find ways to lower their Aquifer Footprint.

#### **AQUIFER FOOTPRINT CALCULATOR**

Coming in 2019! An Aquifer Footprint Calculator will allow users to estimate their personalized Aquifer Footprint.

#### www.bluewateraudit.org