## **Dorothy Sifuentes**





- Position
  - Supervisory Hydrologist, USGS
- Research Interests
  - Groundwater flow and solute transport
  - Coastal aquifers and saltwater intrusion
- Why Florida...
  - Unique hydrologic environment makes it ideal for studying effects of changes in hydrologic controls and groundwater management activities

# USGS Hydrologic Studies in South Florida

### Hydrogeology

- Biscayne aquifer hydrogeologic framework
- Floridan aquifer system, stratigraphic and structural framework

#### Hydrologic modeling

- Saltwater intrusion
- Well field contributing areas
- Canal leakage to groundwater
- Inundation during precipitation events
- Contaminant transport with deep well injection

#### Data collection

- Borehole and surface geophysical data
- Saltwater intrusion monitoring

