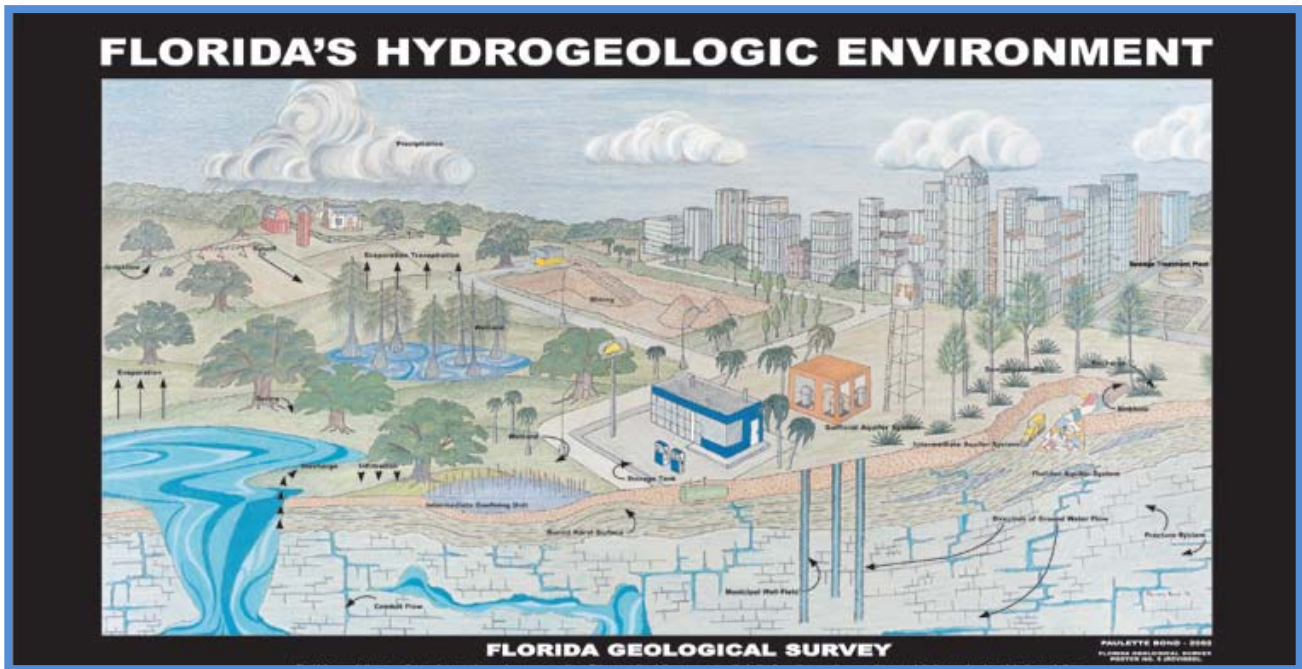


*Everglades Geological Society*

# **BULLETIN**



Volume 19, Number 1

September 2012

**Meeting This Month: Tuesday, September 18, 2012**

**Speaker: *Eduardo Patino, U.S.G.S***

**Topic:**

***U.S.G.S. Water Resources Project Update***

### INSIDE THIS ISSUE

- 2 Announcements/News
- 3 President's Address
- 4 Topic, Abstract, Biography of Speaker
- 5 Map, and Application Locations
- 6 Our Sponsors

*Everglades Geological Society*  
*P. O. Box 61684*  
*Fort Myers, FL 33906*

The Everglades Geological Society is an organization which seeks to promote interest in and understanding of Geology and the related Earth Sciences, and to provide a common organization for those individuals interested in geology and the related earth sciences. The Bulletin is a publication of the Everglades Geological Society, Inc.

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**Meeting This Month:**  
**TUESDAY September 18, 2012**  
**6 pm (Social hour starts at 5 pm)**

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*Please check them out on pages 6 & 7!!*

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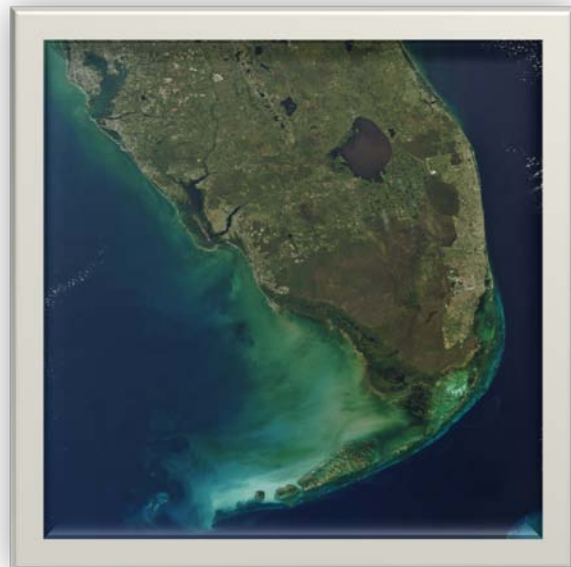
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*Do you know someone that would like speak at one our meetings? Please let us know.*

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## PRESIDENT'S ADDRESS

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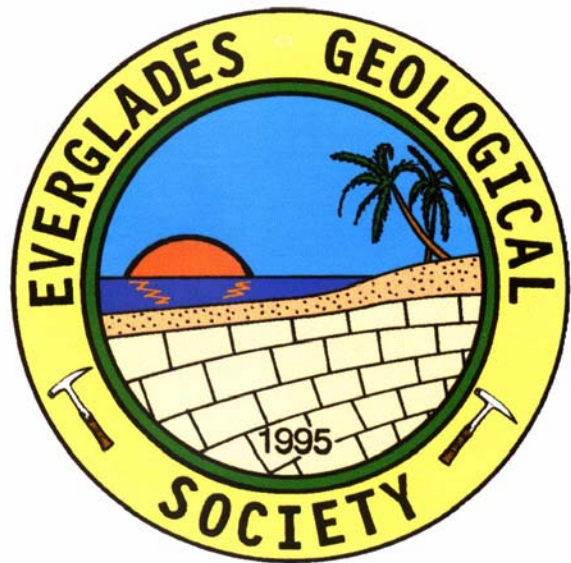
**Hydrogeologist  
JOHNSON ENGINEERING, INC.**

Welcome back! I hope everyone's summer was rewarding, filled with time spent with family and friends and some interesting work projects. I spent a good chunk of mine contending with the broken elbow mentioned in the last President's Address, but am healing well and could be out catching cuttings behind a drill rig or running a water level indicator down a well tomorrow, if needed!

We are honored to have Eduardo Patino of the local USGS office with us this meeting. Among other projects, Ed's office helps maintain the USGS water level monitoring network in our local counties that so many of us rely upon. None of us could do our jobs properly without reliable data, and the USGS has some of the best local, long term hydrologic data sets around. With regulatory changes constantly abreast (I'm looking at you, CUP CON and numeric nutrient criteria rulemaking), it becomes apparent that the relentless task of data collection plays a vital role in driving decision making based on science, rather than perception or emotion. As scientists, we depend on good data to educate the public and overcome popular misconceptions.

The severe weather affecting much of the nation also illustrates the importance of both historical and future data collection efforts. Are the drought conditions and high temperatures across much of the US part of anthropogenically-induced climate change, natural short-term climate fluctuations like NAO or PDO, or a long term natural trend within this interglacial cycle? Or, as none of these need be mutually exclusive, a little of all of the above plus more? We can't even begin to pose these questions without robust data sets guiding us—think of the iconic graph of CO<sub>2</sub> rise measured at Mauna Loa. As we sweat out our body weights in the field or contort our spines in the lab or in front of the computer generating this information, it helps to remember the data we toil over today becomes another stepping stone in advancing our knowledge about the planet. And this fact makes it imperative that data collection efforts continue, even in the face of rapidly contracting budgets.

We hope to discuss topics such as these and many more at future meetings this year. And, as always, this is your club, so please don't hesitate to let us know if you have a topic or speaker idea or would like to share some of your own research!



## **THIS MONTH'S TOPIC**

### ***U.S.G.S. WATER RESOURCES PROJECT UPDATE***

*presented by*

***EDUARDO PATINO, U.S.G.S.***

#### ***ABSTRACT***

We warmly welcome Eduardo Patino for stepping forward with his presentation on short notice. We regret that we could not insert the abstract by "press time."

The USGS office in Ft. Myers, FL oversees a total of about 200 ground water monitoring wells, about 60 surface water monitoring stations at rivers, creeks, and canals, and about 45 water quality monitoring stations along Florida's southwest coast, from Charlotte Harbor to Cape Sable in Everglades National Park. Data collected includes ground water and surface water levels, chloride content, discharge, salinity, temperature, pH, DO, turbidity, and fluorescence. Special projects include 1) testing instrument performance during changing field conditions, such as temperature, salinity, turbidity, and organic content, 2) testing the use of surrogate data from field instruments to estimate selected constituent concentrations in water, and 3) improving available field techniques to allow the use of certain instruments at remote areas while reducing effects from bio-fouling.

#### **PROFESSIONAL SUMMARY**

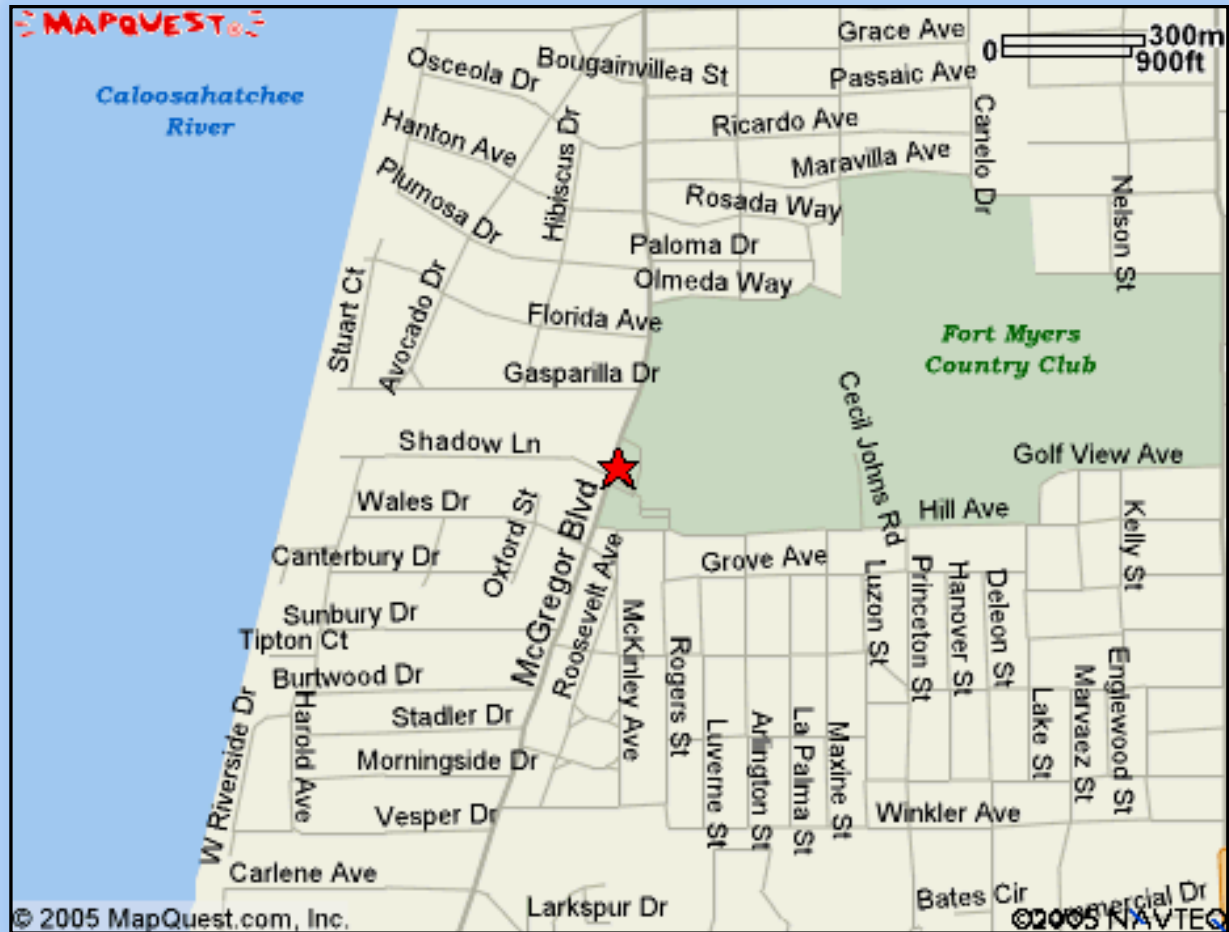
Eduardo Patino

Hydrogeologist  
U.S.G.S

Eduardo Patino completed his Bachelor of Science degree in Civil Engineering from Texas A&M University. Mr. Patino has been a hydrologist with the USGS in south Florida for 25 years and is currently managing the Ft. Myers, FL USGS office. Mr. Patino was the principal investigator for a project entitled "*Southwest Florida Coastal and Wetland Systems Monitoring*." His research interests include freshwater flows and modeling tidal movement in coastal ecosystems; and he specializes in coastal and wetland monitoring, and freshwater and tide inflows.

## Everglades Geological Society

Meets on the Third Tuesday every other month at The Edison on McGregor Blvd at the Fort Myers Country Club in Fort Myers, Florida. Social hour starts at 5:00 PM. The meeting begins at 6:00 PM. No meetings are held in July or August.



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Application forms are available:  
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**Charles T. Ferber, P.A.**

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