



USGS Science in Support of Everglades Restoration

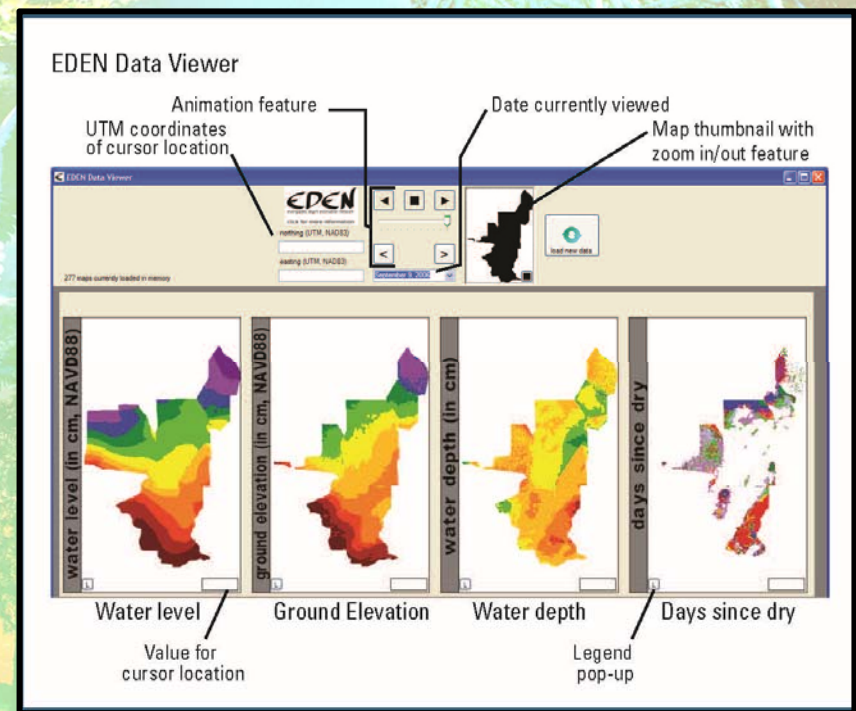
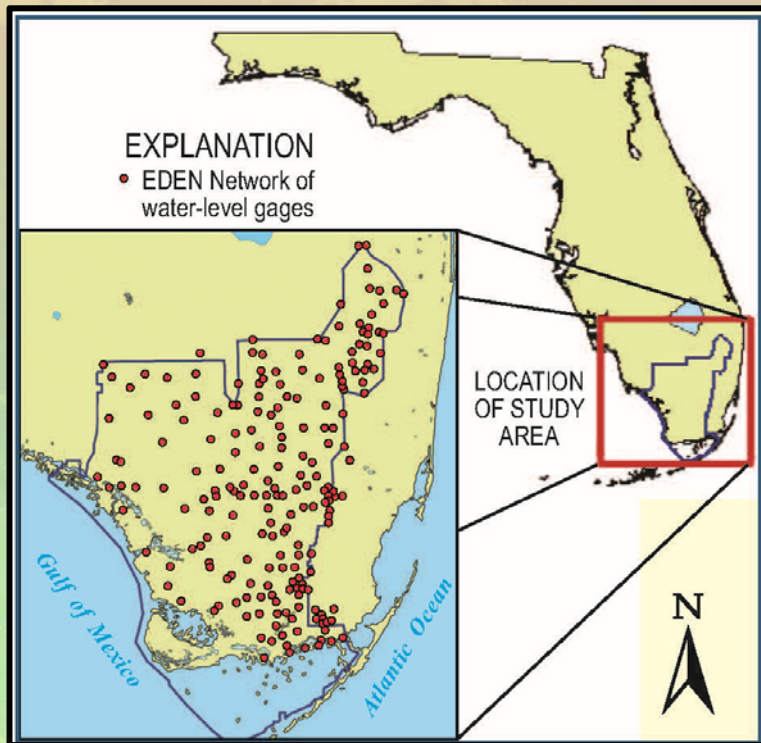
April 21, 2015

Suzette Kimball
Acting Director
U.S. Geological Survey

U.S. Department of the Interior
U.S. Geological Survey



Everglades Depth Estimation Network (EDEN)

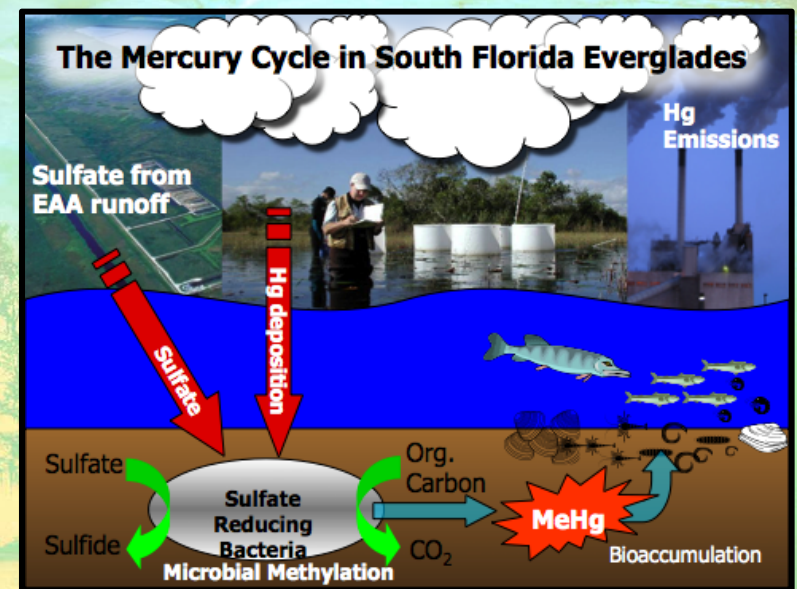


Combating Invasive Species

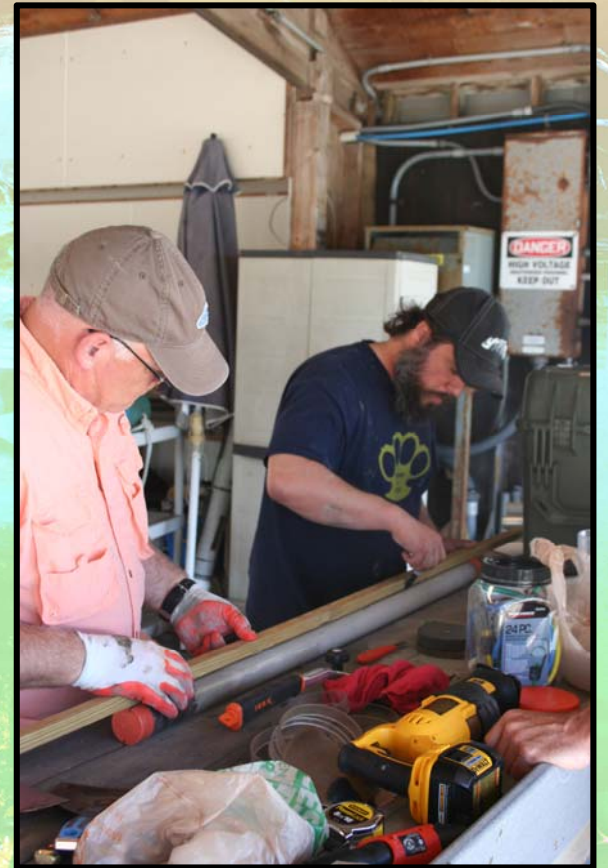
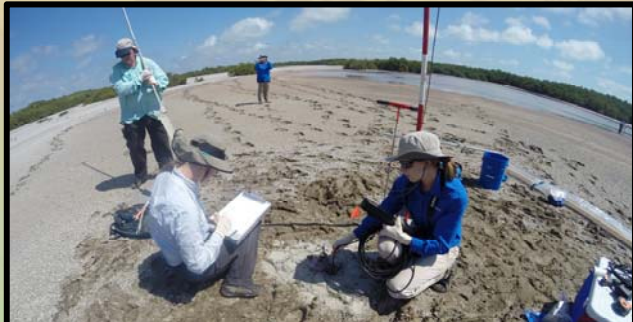


Burmese
python
eDNA here!

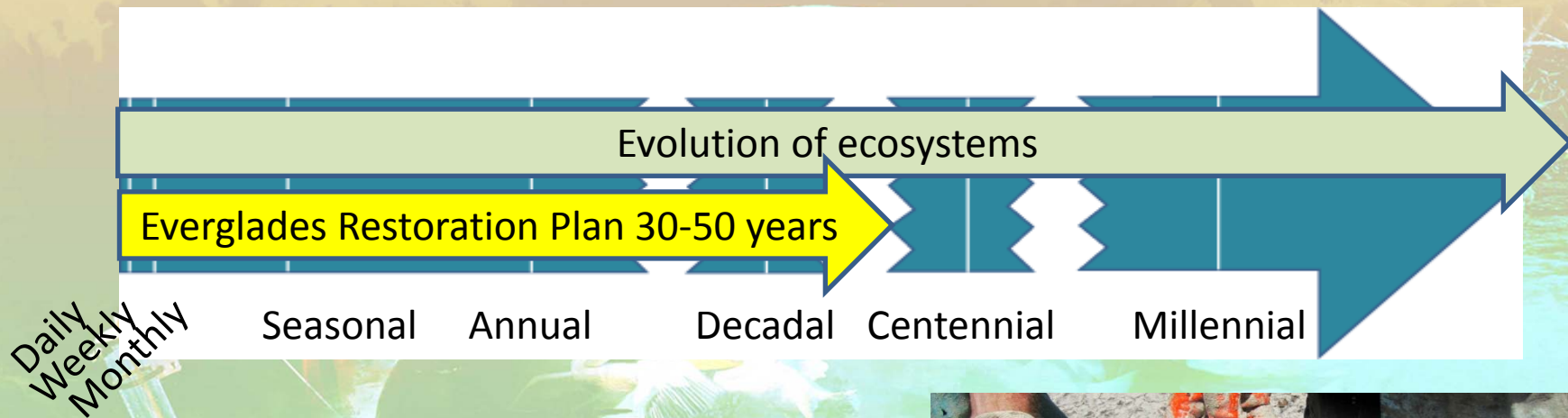
Aquatic Cycling of Mercury in the Everglades



Present is the Key to the Past - Paleoecology



Natural Scales of Temporal Change



Directly observed,
measured and/or
monitored



Proxy Data from
geologic/paleontologic record,
ice cores, speleothems, tree rings, etc.

Partnerships and Collaboration



What Awaits and Challenges to Consider

- Development of effective and ecologically safe techniques to target, detect, and remove invasive animals
- Refinement of genetic/molecular techniques
- Downscaling of global climate models
- Tools and technologies enabling transforming discoveries



Science is more essential for our prosperity, our security, our health, our environment, and our quality of life than it has ever been.

President Obama
At the National Academy of Sciences
April 27, 2009