

## Restoring the Everglades

Florida works to protect a critical watershed



**Patrick Bohlen** 

ritical U.S. watersheds, including the Gulf of Mexico/ Mississippi River, Chesapeake Bay and the Everglades, are in need of restoration. SWS Associate Editor Williette Nyanue spoke with Patrick Bohlen, director of landscape and natural resources and arboretum, professor of biology for the University of Central Florida, to learn how state and federal officials are working to restore the Everglades.

Williette Nyanue: What is the current situation in the Everglades?

Patrick Bohlen: There are two interrelated events happening simultaneously. The volume of water and the timing of its delivery to the Everglades have been dramatically transformed, and because of that, the ecological systems that rely on the hydrology have suffered. The second event is that excess nutrients have led to eutrophication throughout various parts of the watershed, and that eutrophication is not being abated very well. The nutrients add a water quality component, which is critical.

Nyanue: What is the Comprehensive **Everglades Restoration Plan?** 

**Bohlen:** The Comprehensive Everglades Restoration Plan is a large, multi-agency effort to modify the system in order to address ultra-hydrology and eutrophication in a comprehensive way for the long term. The plan involves delivering more water by changing ditches, building large treatment areas to try to take nutrients out of the water, changing the way the schedules for water are managed, fixing the dike around Lake Okeechobee and changing the way the water is delivered from the lake. It is a big project and requires a tremendous amount of funding.

Nyanue: What are some of the ongoing watershed restoration projects?

**Bohlen:** Many of the projects have been developed by the state, and many are being done with partner organizations. There is a plan to address the issues of the Northern Everglades. Some of the approaches involve restoring wetlands in the region and trying to store more water on the landscape, mainly through private lands. There also have been public works projects in which the state of Florida has purchased land outright and put in storm treatment areas where the water is pumped out of a regional system and then put through a vegetated wetland-which removes the nutrients—before returning the water to the waterway. There is the river restoration project, which is turning up to 40 miles of a previously ditched river back into its natural meander. The scale of the problem is big, so one of the challenges is getting the projects done at a large enough scale where they can have a measurable impact.

**Nyanue:** Why is it important to restore wetlands like the Everglades?

**Bohlen:** There are a lot of people who rely on these watersheds not only as a source of water, but also for the ecosystem services that they provide. The broader issue is one that affects millions of people and has huge economic impact and large consequences for our future. Wetland restoration is one tool that can help. **SWS** 

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