

# Urban Encroachment in the Everglades



## An Ecosystem Changed

South Florida, the southeastern tip of the United States, was once a 23,000 km. sq. (8,880 sq. mi.) unbroken marshland of sawgrass and small tree islands. The Kissimmee - Okeechobee - Everglades region formed a system of rivers, lakes and wetlands that controlled water flow, mitigated seasonal flooding, filtered sediment, and provided habitats for hundreds of species.



Photo: South Florida Water Management District



Photo: South Florida Water Management District



These two Landsat images of southern Florida in the United States reveal some of the changes that have occurred in this region over the past 30 years. One of the most obvious is the growth of the Fort Lauderdale - Miami urban area. Urban expansion has led to the conversion of what were once farmlands to cityscapes. The city of Miami has also expanded greatly to the southwest. The advance of urban areas westward across the peninsula threatens the continued existence of the vast wetlands area known as the Everglades.

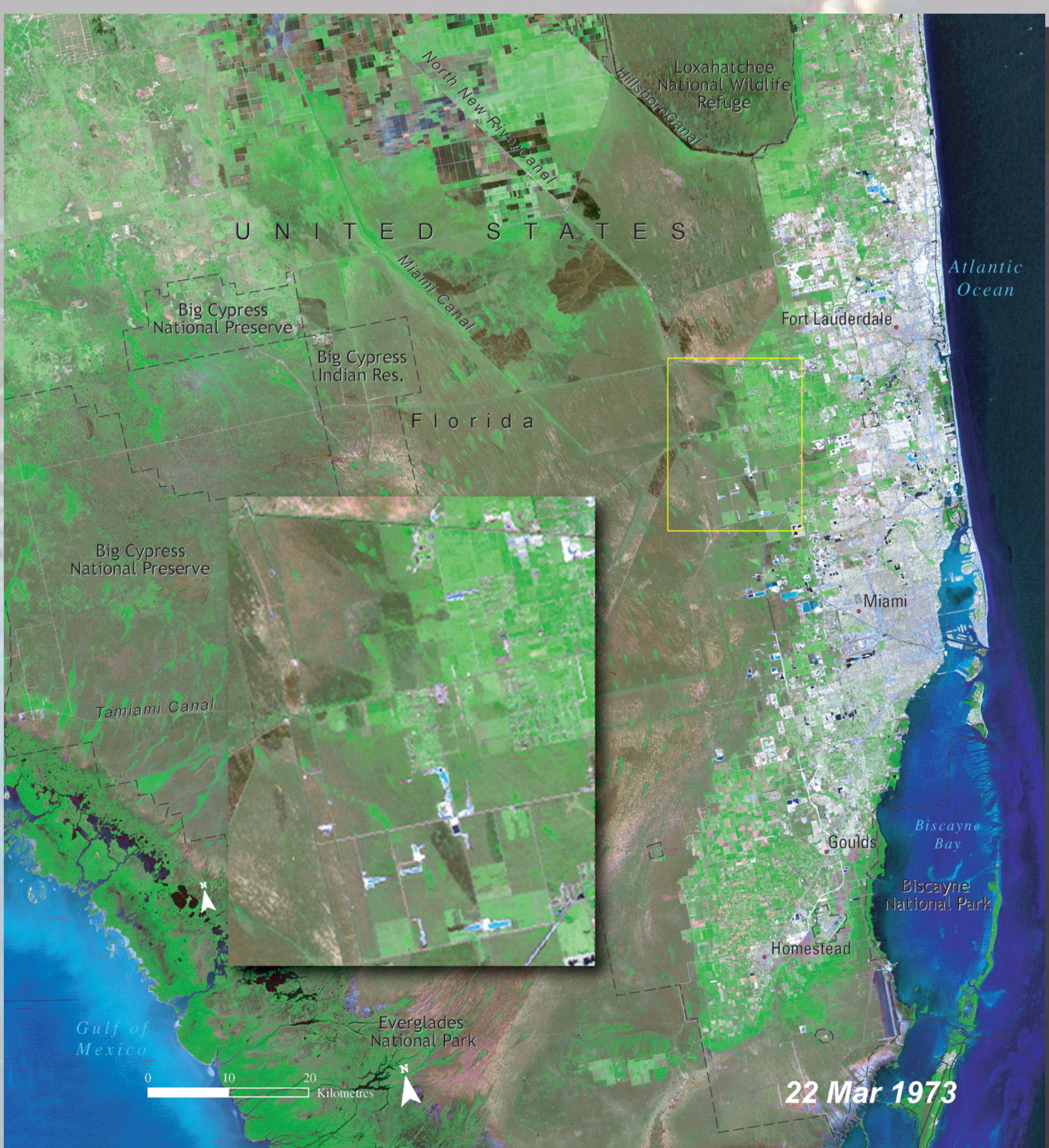
## Urban Edges



Photo: South Florida Water Management District



The Everglades ecosystem naturally filters groundwater and helps to recharge the Biscayne Aquifer. It is also home to a remarkable collection of plants and animals for which southern Florida is famous. As urban areas encroach upon the Everglades, water resources and wildlife habitat are placed at serious risk. Protecting the Everglades to maintain its essential water filtering capacity and remarkable biodiversity is part of the mission of the Federal "Smart Growth" Task Force, which is working to better manage urban sprawl and its negative consequences.



In 1948, the federal government started draining the Everglades and building dikes and canals for agricultural uses. There was a large loss of biodiversity, with some 10 million alligators killed between 1960 and 1965. Populations of herons, egrets, storks and spoonbills had, by 1979, decreased by 90 percent. By 1998, 68 species were endangered or threatened with extinction. Agricultural intensification produced sugar cane, tropical fruit and winter vegetables. However, that benefit is now threatened by encroachment from urban areas.

## Native Landscape



Photo: South Florida Water Management District

Since 1998, the US Army Corps of Engineers has been attempting to restore the natural function of the Everglades. The estimated cost is US\$7.8 billion, which covers only the first stage of the restoration effort, which is expected to require more than three decades.