

The Impact of the EAA Reservoir on the Everglades and the Refuge

by Sarah Ashton and Jim Metzler, Advocacy Committee Co-chairs

Within Florida, water historically flowed south from Orlando down the Kissimmee River to Lake Okeechobee. When water overflowed the lake, it continued its journey down through the Everglades and into Florida Bay. As this happened, much of the water soaked into the underground limestone rock and was stored in aquifers, which are a critical component of Florida's source of freshwater.

However, starting in the late 19th century several projects intended to protect against floods, enable navigation, and support both increased development and agriculture diverted most of the water coming out of Lake O. Today, the Everglades receives less than one-third of its historic water flow. This dramatic reduction threatens our aquifers and impacts the entire ecosystem of the Everglades.

In the current environment, water coming out of the lake is released based on the Lake Okeechobee Release Schedule (LORS) that is administered by the Army Corps of Engineers. See [more](#). Some of the water coming out of the lake goes east along the St. Lucie River while most of the water goes west along the Caloosahatchee River and much of it ends up surrounding the Refuge.

The water released down the Caloosahatchee creates two environmental challenges for the Refuge. One challenge is the volume of water that is released. The Refuge is negatively impacted if there is too much water, as often happens in the rainy season, and too little water, as often happens in the dry season. The second challenge is that due to a hundred years of excess nutrients flowing into, and being accumulated in Lake O, the water coming out of the lake can be toxic, which contributed significantly to the algae blooms we experienced earlier this year.

In a recent newsletter, we mentioned that the 2018 Water Resources Development Act (WRDA) was signed into law and that one of the provisions of this bill is to authorize the Everglades Agricultural Area (EAA) Storage Reservoir be built south of Lake Okeechobee. See [more](#).

The purpose of the reservoir is to hold water from Lake O and farm runoff in the wet season and release this water south in the dry season. To comply with federal law, after leaving the reservoir, freshwater would move through a network of manmade filter marshes to remove phosphorus and other nutrients that are harmful to the plants and wildlife before continuing its path through the Everglades.

Current estimates predict that if all goes well with construction and funding, the EAA reservoir will be completed sometime around 2030. While it will be beneficial, the reservoir will not completely prevent the toxic discharges from Lake O. According to the South Florida Water Management District: "Combined with other water projects under construction and in the planning stage, the proposed reservoir will cut the volume of Lake O discharged by about 56% and the number of discharge events by 63%." See [more](#).

Now that most of the red tide and blue green algae are gone from our area, it's possible to think that the fundamental environmental issues impacting the Refuge are also gone. They aren't and the fight to protect the Refuge is in high gear. Advocating to keep the EAA on track is just one of several key initiatives we are working on. We hope you are with us for the long term.