The Need to Re-examine the Minimum Flow Rule

There is a large and confusing set of laws, regulations, and procedures that govern the flow of water within Florida. They attempt to satisfy objectives that are often in conflict, which are managed by numerous people and organizations at the federal, state, and local levels, some of whom are elected and some of whom are appointed.

Even though it isn’t easy, we all need to understand the factors that govern the flow of water within Florida so that we can intelligently advocate for policies and projects that will benefit the Refuge. Towards that end, this article will discuss a very timely topic: The Caloosahatchee Minimum Flow Level (MFL) Rule. For simplicity, the article will only consider establishing the MFL rule and not its enforcement, even though those two concepts are closely linked.

The issue of the appropriate amount of water in the Caloosahatchee River follows the Goldilocks rule: You don’t want too much, and you don’t want too little. As happened last summer, we typically get too much water in the rainy season when the Army Corps of Engineers releases water from Lake Okeechobee.

We often get too little water in the dry season, which largely is due to how the South Florida Water Management District (SFWMD) sets and enforces the Caloosahatchee MFL Rule. A minimum flow is defined to be the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area. For example, if too little water flows down the Caloosahatchee River, it can result in increased levels of salinity. Salinity levels over 10 parts per thousand (psu) have been shown to be detrimental to the tape grass habitat. Tape grass is important to the health of the estuary because it can help filter pollutants from the water, stabilize sediments and provides food for aquatic animals like snails and water fowl. See more.

The Caloosahatchee MFL Rule was established by the SFWMD in 2001. The rule states that a minimum mean monthly flow of 300 cubic feet per second (cfs) must be provided to achieve a salinity target of 10 (psu). The new ruling proposed by the SFWMD includes a target minimum flow of 400 cfs, but eliminates the salinity target of 10 psu. See more.

The city of Sanibel is concerned with the SFWMD’s attempt to change the MFL from having a salinity target to just having a flow target. Sanibel’s mayor, Kevin Ruane, argues in part that when the SFWMD set the MFL it paid too much attention to the interests of agriculture and too little attention to the economic impact on the affected communities. Mayor Ruane also expressed concern that the MFL recommendation was based on computer modeling and not on data measured at appropriate places alone the Caloosahatchee.

The city of Sanibel, along with the mayors of Cape Coral, Ft. Myers, Fort Myers Beach, the Village of Estero, and Bonita Springs filed a challenge to the SFWMD’s MFL. In their challenge they state their belief that the peer review that was done relative to the new MFL had too narrow of a scope and that the proposed MFL rule is vague and fails to establish adequate standards. The mayors requested the SFWMD to “Immediately reverse your decision to move forward with
updating the Caloosahatchee MFL Rule and begin a pilot study to assess the flow and salinity relationships to come up with a minimum flow that will be protective of the remaining tape grass habitat in the upper estuary.”

We support Sanibel’s efforts to have the SFWMD implement a pilot study to establish an MFL that can help improve the health of the Caloosahatchee and hence the Refuge. The judge is expected to rule by early January and we will keep you updated on this issue.