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To: St. Johns River Water Management District
From: Lee Wilson, Ph.D.
Date: May 22, 2010
Re: Minimum Levels Reevaluation, Johns Lake, Lake and Orange Counties, Florida

These comments relate to the report on the Johns Lake MFLs by Dr. Clifford P. Neubauer as revised and dated April 2010. The report is greatly improved and I have only a few comments.

Main comments

The most important aspect of these particular MFLs is that they are not based on a relationship between water levels and stable wetland communities. The reasons are now clearly explained. However, I have difficulty reconciling the explanations with the data.

One of my difficulties is with the explanation that the wetland communities are astatic because the Johns Lake hydrograph shows a large swing from low water (2002 after the first surveys) to high water (2005). When I compare the hydrograph for Johns Lake to that for Lake Avalon or Lake Hiawassee, the swing seems broadly similar in magnitude and timing, yet at the latter two lakes the District was able to establish MFLs based on stable wetland communities. All three lakes also have a comparable and large downward drop from 1999 to 2002.

My other difficulty is with the conclusion that the communities at Johns Lake are astatic. Really only the shrub swamp in Transect 1 changed radically. In most respects the marsh community elevations stayed the same, and at other lakes that has been enough to support an MFL based on those elevations. What is there that precludes the same approach as at Johns Lake?

These two comments are important, because unless conditions at Johns Lake can be clearly distinguished from other lakes, the rejection of the “standard method” at Johns Lake will raise doubts about whether that standard method is appropriate at all. In my view, the standard method must be used at Johns Lake unless conditions at Johns Lake can be demonstrated as so different that the method cannot be used AND the reasons for the difference can be explained convincingly.

Additional comments

As to the IH and IL, I believe these are now adequately explained and justified with respect to their conceptual and specific basis. In particular the write-up on the upland ecotone is much improved.

I appreciate the addition of a water balance appendix, and ask only that future write-ups be made more user friendly.

In the executive summary, I didn’t think the explanation of “astatic” was clear; I’d also expand upon how the IH protects fish and wildlife habitat.

The WRV analysis is responsive to prior comments. As I have commented on other reports, it isn’t clear how the low-end MFL protects the WRVs that relate to boating, and I’d be cautious about any implication that the District is somehow signing off on “safe” conditions, as I’m willing to bet someone will smash aground before the decade is out.