

Plugging ditches on the Bayfield Mitigation Bank site flooded the adjacent pine plantations and ruined the interior roads so it is difficult to travel on them. Plugging ditches to rehydrate swamps to increase recharge would never be allowed by landowners because it makes the land to wet. Plugging ditches may be a good tool on public lands. Pre and post hydrographs from piezometers installed in wetlands and the surficial aquifer on the Bayfield Mitigation Bank site clearly demonstrate the significant increase in water retention and length of time water remains in the wetlands in between rain events.

Consequently this proposal for recharging the Floridan was created. The assumption is that the drainage referenced above does occur. The area proposed for this project is located over the Floridan where significant lowering of groundwater levels have occurred over a very large area. The most efficient way to recharge large areas is by constructing drainage wells. In the attached map, the major wetland systems have a drainage-well constructed in a location that is accessible and, is located, where the wetland system begins to narrow down.

Top of casing elevations can be set at an elevation where they capture water during high flow conditions that occur after large rainfall events and during the winter months, both times of higher recharge to the Floridan.

The wells are intended to capture a portion of the flow from the system. The entire plan could be constructed for less money than the plan calling for pumping water from the Suwannee River over to Falling Creek in Columbia County and the recharge would benefit more areas than the Falling Creek site and still include the Ichetucknee Springs basin.

It is a passive system depending on gravity, maintenance costs are minimal and changing the desired invert elevation is as simple as cutting and welding or a spillway.

All the wetlands depicted on the plans are important and they should be purchased with Amendment 1 money, directed towards buying environmental sensitive lands. For those opposed to recharging swamp water into the aquifer, this water still recharges naturally all along the Suwannee through springs, vents and siphons and into the numerous stream to sink areas in the District.

Out of professional respect, if people have misgivings about the plan, please allow me to discuss my thoughts with them. This is not a comprehensive scientific study, it is just a proposal based on experience.

Sincerely,

Dennis J. Price, P.G.
SE Environmental Geology