

Withlacoochee Regional Water Supply Authority
Water Supply Plan Update
Progress Report #6 (August 2013)

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1) **Task 2. Availability of Ground- and Surface Water**

- 1) Continued our efforts to work with SWFWMD to coordinate the impact modeling of proposed wellfields. We are expecting the SWFWMD to deliver their updated Northern District model and its updated well packages to us no later than the 2nd week of September. The following are issues associated with the modeling that we have been working through.
 - a. Re-evaluating the need for and locations of the four wellfields proposed in the WRWSA's 2010 Water Supply Plan Update. The re-evaluation is based on the 2035 population and water demand projections that we have recently developed.
 - b. The Northern District model evaluates drawdowns from a pre-development potentiometric surface baseline, which is in keeping with how the SWFWMD has traditionally assessed impacts from groundwater withdrawals. However, the SJRWMD has traditionally evaluated drawdowns from a 1995 potentiometric surface baseline. Since the Northern District model will be used to evaluate drawdowns from wellfields in the SJRWMD, the Districts will need to decide how to deal with model results in the SJRWMD that will show much greater drawdowns than what they have acknowledged in the past.
 - c. For the WRWSA's 2010 Water Supply Plan, the impacts from each proposed wellfield were modeled by adding additional groundwater withdrawal quantities ranging from 7.5 mgd to 15 mgd to the model, depending on the wellfield, for each model run. These quantities were in addition to the groundwater quantities necessary to meet the 2030 demand that were already in the model. This means that the model was withdrawing more water from the aquifer than would actually occur and impacts to springs and other resources would be greater than what would actually occur. This was not a problem in 2010 because the assumption was made that the flow of the major springs near the wellfields could be reduced by as much as 15 percent without violating the anticipated minimum flow for the spring. Now that the actual minimum flows have been adopted or proposed, reduction of spring flow by as little as 2 percent may cause exceedances of the minimum flow. This will require a higher degree of accuracy in the groundwater withdrawal quantity in the model. To achieve this, we will need to remove groundwater withdrawals in the vicinity of the wellfield in an amount equal to whatever withdrawal is being proposed for the wellfield being evaluated.

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2) Task 3. Water Conservation and Reclaimed Water Strategies

- a. Develop a scope of work for the University of Florida EZ Guide staff to move forward with the model. Met with the EZ Guide staff and responded to their comments on the scope.
- b. Developed a second draft of projections of the quantity of reclaimed water that will be available to offset demand through 2035 from each utility in the WRWSA's four counties. Have submitted it to the Authority for review , and sent it to the TAC committee for additional review. Currently responding to comments from utility staff.

3) Task 4. Water Supply Project Options

- a. Our sub consultant continues work on updating the feasibility of a seawater desalination project option at the Crystal River Power Plant site.
- b. We are continuing our update the surface water supply options for the Withlacoochee River.