

Groundwater Availability Team

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Status

1. Established Groundwater Availability Team
2. Developing Scope of Work and Schedule
 - Schedule based on integration of other CFWI team deliverables
 - Anticipate finalize scope and schedule at the next Steering Committee meeting
3. Key Deliverable: Groundwater Availability
 - Through the Steering Committee to Regional Water Supply Planning Team 8/31/2012

Current Key Components

1. Evaluate Water Level Drawdown Due to Groundwater Withdrawals.
2. Evaluate Potential for Future Impact to Wetlands, Surface Waters, and Groundwater (Saltwater Intrusion and Springs).
3. Estimate Groundwater Availability (to RWSP Team by 8/31/2012).
4. Develop Options for Uniform Definition for Hydrologic Harm Caused by Hydrologic change to Wetlands, Surface Waters and Groundwater.
5. Develop Options for Unified Process for Environmental Review of CUPs.

Additional Key Component: Evaluation Measures

1. Teams to collaborate and develop draft evaluation measures.
2. Technical/Scientific Quantification of Current and Potential Future Impacts to:
 - Wetlands
 - Surface Waters
 - Groundwater (saltwater intrusion and springs)
3. Identify Appropriate Values (per 62-40 F.A.C.)
4. Different for Types of Water Resources in CFWI (i.e., Wetlands, Lakes, Rivers and Springs, Groundwater)
5. Metric (tied to model output)
6. Threshold (severity, frequency and duration)
7. Application (How will the application of thresholds effect availability of groundwater?)
8. Policy Issues Will Grow Out of Establishing Evaluation Measures

Environmental Evaluation Measures (Example)

- Environmental Value = fish and wildlife habitats and the passage of fish (62-40.473(1)(b))
 - Sub-category = wetland/organic soils
- Water Resource Type = wetlands
- Metric = water depth/surface elevation
- Threshold = >1.0 ft of surficial aquifer drawdown may represent increased risk of hydrological stress to wetlands

Environmental Evaluation Measures (Example, cont'd)

- Evaluation Process
 - Generate monthly time series of the surficial aquifer levels (model layer #1) for the various model simulation runs.
 - Calculate the median (P50) change in head between the model run for the reference condition and the other model simulations.
 - Compare calculated median change in the surficial aquifer levels at the location of all wetland assessment sites.
 - Identify those sites with median change/drawdown >1.0 ft.
 - Confirm change/drawdown not due to land use, drainage or other causes not related to withdrawal.

Discussion and Guidance

Seeking guidance on moving ahead with:

1. Developing draft Evaluation Measures (*All Teams*)
 - Product will feed into work of HAT/GAT
2. Identifying Policy Issues for Steering Committee consideration (*Technical/Management Oversight Committees*)
3. Review Guidance Document and recommend amendments in line with technical changes and to keep document current (*Management Oversight Committee*)