



## Comprehensive State-wide Management Plan 3 Year Implementation Schedule Supplemental Information

Resource Assessments – State Water Plan Sections 4 and 6		
Schedule Items 1-8		
1	Resource Assessments	“Resource Assessments” will provide a thorough evaluation of Georgia’s water resources. Current assessments for surface water availability (SWAVAIL), surface water quality (SWQUAL), and groundwater (GW) will be delivered to the Regional Water Planning Councils by the end of 2009 so they can select their management practices for future assessments, see items 35-41.
2	Data Management and Compilation (SWAVAIL); (SWQUAL); (GW)	As an initial step in the development of the Resource Assessments, a variety of data about our water resources will be compiled into usable formats.
3	Unimpaired Flow Development (SWAVAIL)	A critical component of the surface water availability assessment is the development of in-stream flows that would have been observed had there not been human activities that altered such flows. Once complete, the unimpaired flow data set will serve as the basis for modeling both the current and future assessments of surface water availability.
4	Current Consumptive Use Assessment Modeling & Report (SWAVAIL)	The current consumptive use assessment starts once the unimpaired flow is available. This assessment will identify whether the current level of water use can be sustained to meet desired water supply reliability. As noted in item 1, the current assessments will be delivered to the Regional Water Planning Councils by the end of 2009 so they can conduct their future assessments and select their suite of management practices in 2010.
5	Model Development and Calibration (SWQUAL)	The surface water quality, or “assimilative capacity” assessment involves modeling watersheds, lakes and estuaries to determine the amount of contaminant load that can be discharged to a specific waterbody without exceeding water quality standards or criteria. These models will be calibrated using data compiled during the effort described in item 2.
6	Current Assimilative Capacity Modeling & Report (SWQUAL)	The current assimilative capacity assessment will be determined using the calibrated models and delivered to the Regional Water Planning Councils by the end of 2009 so they can conduct their future assessments and select their suite of management practices in 2010.
7	Conceptual Model and Calibration (GW)	The groundwater assessment will involve the development of conceptual models for prioritized aquifers calibrated for aquifer geometry, aquifer hydraulic properties, natural recharge and discharge, interactions with surface water, and anthropogenic stresses.
8	Determine Sustainable Yield & Report (GW)	EPD will use the calibrated conceptual groundwater models to determine the sustainable yield of prioritized aquifers. The current assessments will be delivered to the Regional Water Planning Councils by the end of 2009 so they can conduct their future assessments and select their suite of management practices in 2010.

\*\*This table provides supplemental information regarding the 3 Year Implementation Schedule provided on Page One

## Forecasting – State Water Plan Sections 1,4,10, and 14

### Schedule Items 9-13

9	Forecasting	Forecasts will be developed for water planning regions and will reflect jurisdictional boundaries and economic interdependencies as well as hydrologic boundaries. Regional Water Planning Councils will compare the forecasts with the resource assessments so that management practices can be selected to ensure anticipated demands can be met within the capacities of the resources.
10	Population and Employment	The Carl Vinson Institute of the University of Georgia will develop projections of population and employment for each of Georgia's water planning regions for a range of forecast years. These population and employment projections will then be the basis for the municipal and industrial water and wastewater forecasts described in item 32.
11	Irrigated Acreage and Crop Type / Agricultural Water Use	The University of Georgia Research Foundation will produce a set of regional forecasts of additional water needed for irrigation of agricultural crops expected to be grown in Georgia in forecast years 2020, 2030, 2040, and 2050.
12	Energy Water Use	This effort will yield a set of regional projections of water needs associated with producing the additional energy required to meet the state's power needs in future years.
13	Land Use	Future impervious surface and land use forecasts will be developed using calibrated Land Use Change and Urban Growth models. The resource assessment models will use future land use and impervious surface to determine non-point source pollutant loading.

## Guidance Development – State Water Plan Sections 7, 9, 10, 13, and 14

### Schedule Items 14-18

14	Guidance Development	These documents will provide technical and procedural information for Regional Water Planning Councils.
15	Technical Guidance on Best Practices	Technical guidance documents will assist with regional water planning, provide technical and procedural information for Regional Water Planning Councils in the selection of management practices.
16	Water Conservation Implementation Plan	The State Water Plan requires that the Department of Natural Resources lead the development of a water conservation implementation plan, with assistance from stakeholders from multiple water use sectors, which will include water conservation goals, benchmarks, and best management guidelines for Georgia's diverse water use sectors. The plan will identify state resources and funding mechanisms to help achieve water conservation goals. It will also provide guidance on flexibility in implementation and reporting for smaller permittees (including the definition of a threshold for large vs. small permittees) and the reporting of progress toward water conservation goals.
17	Water Planning Guidance	Water planning guidance will describe the procedures and products of regional water planning. This guidance will be available to the Regional Water Planning Councils as they begin work in early 2009.
18	Water Conservation Guidance	The State Water Plan requires guidance to further clarify and support implementation of the water conservation implementation plan. This guidance will be developed once the water conservation implementation plan is complete.

## Rulemaking – State Water Plan Sections 3,8,10,12, 13, and 14

### Schedule Items 19-26

19	Rulemaking	The State Water Plan calls for the Board of Natural Resources to consider promulgating rules on specific topics.
20	Permitting Water Withdrawals and Discharges	These rule amendments will facilitate implementation of the State Water Plan's "Integrated Water Policy." It will provide additional factors for the EPD Director to consider in permitting water withdrawals and discharges of pollutants, will authorize the EPD Director to place appropriate conditions in these permits to reflect those considerations, and will clarify other provisions relating to all water permit holders.
21	Water Conservation	This rule will provide permit requirements, technical assistance to permittees and permit applicants, and annual reports for non-farm water uses. This rule will also encourage the most efficient, practicable irrigation and tillage practices for farm water uses as provided in the water conservation implementation plan. These rules will require compliance with Georgia's Water Quality Control Act, Georgia's Groundwater Use Act and the general provisions of Georgia's Water Resources Laws relating to the regulation of rain sensor shut-off switches. This rulemaking will begin once the water conservation implementation plan is complete.
22	Interbasin Transfer	These rule amendments will provide additional factors for the EPD Director to consider in evaluating interbasin transfer permits.
23	Water Quality Standards - Dissolved Oxygen	These rule amendments will update the water quality standards for dissolved oxygen so that the standards are correct and appropriate for different areas of the State.
24	Water Quality Standards - Bacteria	These rule amendments will update the water quality standards for bacteria to use better indicator organisms and reflect different areas of the State.
25	Coordinated Environmental Planning	This rule will establish the framework for ensuring coordination between state agencies, permittees, and local government entities responsible for land use planning and management.
26	Regional Planning	This rule will establish the framework for the preparation of the regional water development and conservation plans.

## Regional Planning – State Water Plan Section 14

### Schedule Items 27-44

27	Regional Planning	Implementation of the State Water Plan depends on the development of regional water plans called “Water Development and Conservation Plans.” Once the resource assessments and forecasts are complete, recommended Regional Water Development and Conservation Plans will be prepared (following EPD guidance) by the Regional Water Planning Councils that select the management practices to be employed in their regions to ensure anticipated demands can be met within the capacities of the resources.
28	Regional Planning Boundaries	Regional water planning boundaries were adopted in April 2008 in accordance with provisions of the State Water Plan. Ten regional water planning boundaries were adopted, in addition to the boundaries adopted by statute in 2001 for the Metropolitan North Georgia Water Planning District.
29	Nominations and Appointments	Nominations will be received for 10 Regional Water Planning Councils. The Governor, Lt. Governor, and Speaker of the House will make appointments to the Regional Water Planning Councils prior to the 2009 legislative session.
30	Kickoff Meeting, Training, MOA	A kickoff meeting will be held in February of 2009 to officially start the work of the newly formed Regional Water Planning Councils and provide a unified forum for the Regional Water Planning Councils, EPD and the contractors to familiarize themselves with the planning process and their working relationships. The State Water Plan requires newly appointed Regional Water Planning Council members to attend mandatory training which will provide members with the necessary background and information to do their work. The State Water Plan also requires each Regional Water Planning Council to execute a memorandum of agreement (MOA) with EPD and DCA, to establish the Regional Water Planning Council's procedures.
31	Regional Visioning	Each Regional Water Planning Council will develop a “vision” for the region’s future. The outcome of this process will guide management practice selection and the preparation of the region’s Water Development and Conservation Plan.
32	Municipal and Industrial Water and Wastewater Forecasting	Regional Water Planning Councils, with the assistance of EPD and contractors, will use the forecasts of population and employment to prepare municipal and industrial water and wastewater forecasts for their region using a statewide methodology tailored for region specifics.
33	Presentation of Assessments and Forecasts to Councils	The results of the surface water availability (SWAVAIL), surface water quality (SWQUAL), and groundwater (GW) assessments as well as the agricultural and power needs forecasts will be presented to the Regional Water Planning Councils prior to the selection of management practices in 2010.
34	Prepare Plan's Background Sections	One component of Regional Water Development and Conservation Plans is a background section with summary information about the region, including local governments, major water users, and a summary of previously completed water resource related plans.

\*\*This table provides supplemental information regarding the 3 Year Implementation Schedule provided on Page One

## Regional Planning – State Water Plan Section 14

Continued

35	Initial Selection of Management Practices	Following guidance and with contractor assistance, Regional Water Planning Councils will select management practices to meet their forecasted needs based on the resource assessments. This is the first step of an iterative process of management practice selection and evaluation of impacts ending with the final future assessment.
36	Initial Future Assessments (Modeling)	The models developed in the resource assessments will be used to evaluate potential impacts of the initial management practices on water resources and other water planning regions.
37	Refinement of Management Practices	Based on the initial future assessment results, Regional Water Planning Councils will refine their management practices. If results are already acceptable, refinement may not be necessary.
38	Future Assessment Refinement (Modeling)	The models developed in the initial future assessments will be used to evaluate the potential impacts of the refinements.
39	Final Selection of Management Practices	Based on the input received from the future assessment refinement, management practices will be finalized. The final selection of management practices must occur with enough time for the drafting of the final plan, EPD review and public comment, plan revision, and EPD adoption.
40	Final Future Assessments (Modeling)	The models will be refined to reflect the final section of management practices to verify that needs are met within the capacity of the natural resources. This is the last step of the iterative management practice selection process.
41	Recommended Draft Regional Plans to EPD	Regional Water Planning Councils (following guidance) will prepare and submit recommended Water Development And Conservation Plans to the EPD Director. These plans will be provided to EPD by the end of 2010 to allow for review and any necessary revisions prior to EPD adoption.
42	EPD Review / Public Comment	The EPD Director will review recommended Water Development And Conservation Plans and determine if they are consistent with the rules for regional water planning and guidance adopted pursuant to those rules. Before adopting any such plan, the EPD Director will provide public notice and a forty-five day comment period.
43	Councils Revise Plans	Following EPD and public review, the Regional Water Planning Councils will revise the plans based on any input.
44	EPD Adopts Regional Plans	After the required forty-five day public notice and comment period and following provisions of Section 14 of the State Water Plan, guidance and the Regional Planning Rule, the EPD Director will adopt the recommended Water Development and Conservation Plans by June 30, 2011. The EPD Director will prepare Water Development and Conservation Plans for any region whose plan is not submitted by this date. Once adopted, the EPD Director will use the Water Development and Conservation Plans to guide decisions regarding permitting. These plans will also guide state grants and loans from the Georgia Environmental Facilities Authority for water-related projects within that region. Once the regional Water Development and Conservation Plans have been developed and adopted, the State and the regions must partner to implement the plans.

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