

**DRAFT**

## **REGIONAL COMPONENT OUTLINE**

### **INTRODUCTION AND PURPOSE**

The Water Resources Planning Act calls for the development of a State Water Plan that consists of six regional components to reflect the geographic diversity of six major basins (Delaware, Upper Susquehanna, Lower Susquehanna, Potomac, Ohio, and Great Lakes). Section 3112 of the Water Resources Planning Act requires the State Water Plan and each Regional Component to include sixteen specific elements set out in section 3112(a) and a number of considerations set out in section 3112(b). In Section 3111(b), however, the Act allows the level of detail within the State Water Plan to vary among watersheds and other hydrologic units. To the extent that the regional components are inconsistent with the statute and other considerations, the Statewide Water Resources Committee and DEP are to consider and to resolve any differences that require reconciliation under the standards expressed in section 3115.

Below is an outline of a sample regional component for consideration by each of the regional committees. Elements of the component required by section 3112(a) are noted with a reference. Elements of the component to be considered under section 3112(b) are similarly noted with a reference. This outline suggests lead entities and target dates (of course, subject to change) for completion of each portion of this task. Each of the regional committees will be asked to consider this outline as they move forward on developing their respective regional components.

### **SAMPLE REGIONAL COMPONENT OUTLINE**

(Note: Items with “\*\*” are to be started immediately by Regional Committee)

#### **Executive Summary and Recommendations**

***Lead: DEP staff and Regional Committee***

***Target Date: Summer 2007***

## **Goals, Objectives, and Indicators**

*Section 3112(b)(2) REGIONAL WATER RESOURCES NEEDS, OBJECTIVES AND PRIORITIES AS IDENTIFIED AND EVALUATED BY THE REGIONAL COMMITTEE.*

### **EXAMPLE GOAL**

- Goal
  - Water supplies are of adequate quantity and quality to meet short and long term needs
    - Objective
      - Protect public drinking water supplies from degradation of quality and reduction in yield
    - Indicator
      - Number of source water protection plans being implemented

***Lead: Regional Committee and DEP staff***

***Target Date: Fall 2005***

## **\*\*Regional Priorities (To Be Further Fleshed Out By the Committees)**

*Section 3112(b)(2) REGIONAL WATER RESOURCES NEEDS, OBJECTIVES AND PRIORITIES AS IDENTIFIED AND EVALUATED BY THE REGIONAL COMMITTEE.*

*(This is an example of some regional priorities developed by the Potomac Basin Regional Committee.)*

- Inventory Supply
  - Continuous monitor/update
  - Quantity
  - Quality
  - Location
- Inventory Demand
  - How much is being used?
  - What is the future demand?
- Balancing Supply and Demand
  - Water Budgeting
  - Land Use
  - Conservation and Recharge Technology
  - Alternate Uses

***Lead: Regional Committee and DEP staff***

***Target Date: Spring - Summer 2005***

## **Regional Public Participation Documentation**

***Lead: Regional Committee and DEP staff  
Target Date: Summer 2007***

### **\*\*Physical Features and Resources**

- Basin Orientation
- Climate
- Hydrology
- Topography
- Geology and Groundwater
- Mineral Resources
- Soils
- Forest Resources
- Wildlife and Aquatic

***Lead: Regional Committee and DEP staff  
Target Date: Fall 2005-Winter 2006***

### **\*\*Socio-Economic Features**

- Historical Setting
- Economy and Employment
- Population
- Transportation
- Land Use

***Lead: Regional Committee and DEP staff  
Target Date: Summer 2005 – Winter 2006***

### **\*\*Assessing and Integrating Other Planning Initiatives**

Section 3112(b)(3) FEDERAL, STATE AND INTERSTATE WATER RESOURCES POLICIES, PLANS, OBJECTIVES AND PRIORITIES, INCLUDING THOSE IDENTIFIED IN STATUTES, REGULATIONS, COMPACTS, INTERSTATE AGREEMENTS OR COMPREHENSIVE PLANS ADOPTED BY FEDERAL AND STATE AGENCIES AND COMPACT BASIN COMMISSIONS.

Section 3112(b)(4) THE NEEDS AND PRIORITIES REFLECTED IN COMPREHENSIVE PLANS AND ZONING ORDINANCES WHERE ONE OF THE FOLLOWING CONDITIONS IS SATISFIED:

- (I) A COUNTY ADOPTS A COMPREHENSIVE PLAN IN ACCORDANCE WITH SECTION 301 OR 302 OF THE MUNICIPALITIES PLANNING CODE AND MUNICIPALITIES IN THE COUNTY HAVE ADOPTED COMPREHENSIVE PLANS AND ZONING ORDINANCES IN ACCORDANCE WITH SECTIONS 301, 303(D) AND 603(J) OF THE MUNICIPALITIES PLANNING CODE.
- (II) MUNICIPALITIES HAVE ADOPTED A COUNTY PLAN OR A MULTIMUNICIPAL PLAN UNDER ARTICLE XI OF THE MUNICIPALITIES PLANNING CODE AND THE PARTICIPATING MUNICIPALITIES HAVE CONFORMED THEIR LOCAL PLANS AND ORDINANCES TO THE COUNTY OR MULTIMUNICIPAL PLAN BY IMPLEMENTING COOPERATIVE AGREEMENTS AND ADOPTING APPROPRIATE RESOLUTIONS AND ORDINANCES.
- (III) A COUNTY ADOPTS A COMPREHENSIVE PLAN IN ACCORDANCE WITH SECTION 301 OR 302 OF THE MUNICIPALITIES PLANNING CODE AND EITHER:
  - (A) THE COUNTY HAS ADOPTED AND IS ADMINISTERING, IN LIEU OF MUNICIPALITIES IN THE COUNTY, A COUNTY COMPREHENSIVE PLAN AND COUNTY ZONING ORDINANCE IN ACCORDANCE WITH SECTIONS 301, 303(D) AND 603(J) OF THE MUNICIPALITIES PLANNING CODE; OR
  - (B) THE COUNTY HAS ADOPTED A COUNTY COMPREHENSIVE PLAN IN ACCORDANCE WITH SECTION 301 OR 302 OF THE MUNICIPALITIES PLANNING CODE WHICH IS IN EFFECT, IN LIEU OF COMPREHENSIVE PLANS ADOPTED BY MUNICIPALITIES IN THE COUNTY, AND MUNICIPALITIES IN THE COUNTY HAVE ADOPTED ZONING ORDINANCES GENERALLY CONSISTENT WITH SUCH COUNTY COMPREHENSIVE PLAN IN

ACCORDANCE WITH SECTIONS 303(D) AND 603(J)  
OF THE MUNICIPALITIES PLANNING CODE.

*(These examples are from the Lower Susquehanna Basin)*

- Conodoguinet Creek River Conservation Plan
- Northern Lancaster County Water Budget Study,
- Juniata Watershed Management Plan
- Strategic Comprehensive Plan for the Cocalico Region
- Capital Region Water Board Initiatives

**Lead: Regional Committee and DEP staff**  
**Target Date: Spring 2006**

**Water Resources Inventory**

*Section 3112(a)(1)* AN INVENTORY OF THE SURFACE WATER RESOURCES OF EACH REGION OF THIS COMMONWEALTH, INCLUDING AN IDENTIFICATION OF THE BOUNDARIES OF SIGNIFICANT WATERSHEDS AND AN ESTIMATE OF THE SAFE YIELD OF SUCH SOURCES FOR WITHDRAWAL AND NONWITHDRAWAL USES DURING PERIODS OF NORMAL CONDITIONS AND DROUGHT.

- Surface Water Resources Inventory [*3112(a)(1)*]
  - boundaries of significant watersheds
  - estimate of the safe yield for withdrawal and non-withdrawal uses during periods of normal conditions and drought
  - surface water quality

*Section 3112(a)(2)* AN INVENTORY OF THE GROUNDWATER RESOURCES OF EACH REGION OF THIS COMMONWEALTH, INCLUDING AN IDENTIFICATION OF AQUIFERS AND GROUNDWATER BASINS AND AN ASSESSMENT OF THEIR SAFE YIELD, PRIME RECHARGE AREAS, RECHARGE CAPACITY, WITHDRAWAL LIMITS AND RELATIONSHIP TO STREAM BASE FLOWS.

- Ground Water Resources Inventory [*3112(a)(2)*]
  - aquifers and groundwater basin
  - safe yield assessments
  - prime recharge areas
  - recharge capacity
  - withdrawal limits
  - relationship to stream base flow

- ground water quality

**Lead: DEP staff**

**Target Date: To be determined**

### **Current and Future Water Use**

*Section 3112(a)(3)* AN ASSESSMENT AND PROJECTION OF EXISTING AND FUTURE NONWITHDRAWAL USE NEEDS AND THE VALUES OF WATERCOURSES INCLUDED WITHIN THIS COMMONWEALTH OR FEDERAL WILD AND SCENIC RIVER SYSTEMS.

- Existing and Projected Non-withdrawal Use Needs [3112(a)(3)]
  - Water Quality Requirements; Values of Commonwealth Watercourses; Values of Federal Wild and Scenic River Systems

*Section 3112(a)(4)* AN ASSESSMENT AND PROJECTION OF EXISTING AND FUTURE WITHDRAWAL USE DEMANDS

- Existing and Projected Withdrawal Use Demands [3112(a)(4)]
  - Domestic
  - Municipal
  - Public
  - Commercial
  - Industrial
  - Energy Development Production
  - Agriculture

*Section 3112(a)(10)* AN ASSESSMENT OF THE WATER RESOURCES REQUIRED TO SERVE AREAS WITH IMPORTANT OR UNIQUE NATURAL, SCENIC, ENVIRONMENTAL OR RECREATIONAL VALUES OF NATIONAL, REGIONAL, LOCAL OR STATEWIDE SIGNIFICANCE, INCLUDING NATIONAL AND STATE PARKS; DESIGNATED WILD, SCENIC AND RECREATIONAL RIVERS; NATIONAL AND STATE WILDLIFE REFUGES; AND THE HABITATS OF FEDERAL AND STATE ENDANGERED OR THREATENED SPECIES.

- Assessment of the water resources required to serve areas with important or unique natural, scenic, environmental or recreational values of national, regional, local or statewide significance, including: [3112(a)(10)]
  - National and state parks
  - Designated wild, scenic and recreational rivers
  - National and state wildlife refuges
  - The habitats of federal and state endangered or threatened species

*Section 3112(a)(8)* AN ASSESSMENT OF FLOODPLAIN AND STORM WATER MANAGEMENT PROBLEMS.

- Assessment of flood plain and stormwater management problems  
[3112(a)(8)]

*Section (3112(a)(9)* AN ASSESSMENT OF NAVIGATION NEEDS AND THE MEANS FOR RESTORATION, DEVELOPMENT AND IMPROVEMENT OF TRANSPORTATION BY WATER.

- Assessment of Navigation needs and Restoration [(3112(a)(9)]
  - Transportation Development
  - Improvement of transportation by water

**Lead: DEP staff**

**Target Date: To be determined**

**Regional Water Conservation, Water Use Efficiency, and Water Reuse**

*Section 3112(a)(11)* A PROCESS FOR IDENTIFYING PROJECTS AND PRACTICES THAT ARE BEING OR HAVE BEEN IMPLEMENTED BY WATER USERS THAT REDUCE THE AMOUNT OF WATER WITHDRAWAL OR CONSUMPTIVE USE, IMPROVE EFFICIENCY IN WATER USE, PROVIDE FOR REUSE AND RECYCLING OF WATER, INCREASE THE SUPPLY OR STORAGE OF WATER OR PRESERVE OR INCREASE GROUNDWATER RECHARGE AND A RECOMMENDED PROCESS FOR PROVIDING APPROPRIATE POSITIVE RECOGNITION OF SUCH PROJECTS OR PRACTICES IN ACTIONS, PROGRAMS, POLICIES, PROJECTS OR MANAGEMENT ACTIVITIES RECOMMENDED UNDER PARAGRAPH

- A process for identifying projects and practices that are being or have been implemented by water users that:
  - Reduce the amount of water withdrawal or consumptive use
  - Improve efficiency in water use
  - Provide for reuse and recycling of water
  - Increase the supply or storage of water or preserve or increase groundwater recharge and a recommended process for providing appropriate positive recognition of such projects or practices in actions, programs, policies, projects or management activities recommended in Chapter xx "Proposed Methods of Implementing

Various Recommended Actions, Programs, Policies, Projects or Management Activities.”

**Lead: DEP staff and Regional Committee**

**Target Date: Summer 2007**

### **Potential Regional Water Use Conflicts**

3112(a)(3) AN ASSESSMENT AND PROJECTION OF EXISTING AND FUTURE NONWITHDRAWAL USE NEEDS AND THE VALUES OF WATERCOURSES INCLUDED WITHIN THIS COMMONWEALTH OR FEDERAL WILD AND SCENIC RIVER SYSTEMS.

3112(a)(4) AN ASSESSMENT AND PROJECTION OF EXISTING AND FUTURE WITHDRAWAL USE DEMANDS.

- Water Budget Analyses [3112(a)(3, 4)]

Section 3112(a)(5) AN IDENTIFICATION OF POTENTIAL PROBLEMS WITH WATER AVAILABILITY OR CONFLICTS AMONG WATER USES AND USERS.

- Potential problems with water availability or conflicts among water uses and users [Section 3112(a)(5)]

Section 3112(a)(7) AN ASSESSMENT OF THE CURRENT AND FUTURE CAPABILITIES OF PUBLIC WATER SUPPLY AGENCIES TO PROVIDE AN ADEQUATE QUANTITY AND QUALITY OF WATER TO THEIR SERVICE AREAS.

- Assessment of the current and future capabilities of public water supply agencies to provide an adequate quantity and quality of water to their service area [3112(a)(7)]
- Water quality considerations

**Lead: DEP staff and Regional Committee**

**Target Date: Summer 2007**

### **Critical Water Planning Areas**

Section 3112(a)(6) AN IDENTIFICATION OF CRITICAL WATER PLANNING AREAS COMPRISING ANY SIGNIFICANT HYDROLOGIC UNIT WHERE



EXISTING OR FUTURE DEMANDS EXCEED OR THREATEN TO EXCEED THE SAFE YIELD OF AVAILABLE WATER RESOURCES

- Identification and Description of Critical Water Planning Areas

**Lead: Regional Committee and DEP staff**

**Target Date: To be determined**

**Alternatives Review**

*Section 3112(a)(12)* AN IDENTIFICATION OF PRACTICAL ALTERNATIVES FOR AN ADEQUATE SUPPLY OF WATER TO SATISFY EXISTING AND FUTURE REASONABLE AND BENEFICIAL USES, INCLUDING IMPROVED STORAGE, GROUNDWATER RECHARGE AND SURFACE WATER/GROUNDWATER CONJUNCTIVE MANAGEMENT PROGRAMS.

- Practical alternatives for an adequate supply of water to satisfy existing and future reasonable and beneficial uses including: *[3112(a)(12)]*
  - Improved storage
  - Groundwater recharge
  - Surface/groundwater conjunctive management programs

*Section 3112(a)(13)* AN ASSESSMENT OF BOTH STRUCTURAL AND NONSTRUCTURAL ALTERNATIVES TO ADDRESS IDENTIFIED WATER AVAILABILITY PROBLEMS, ADVERSE IMPACTS ON WATER USES OR CONFLICTS BETWEEN WATER USERS, INCLUDING POTENTIAL ACTIONS TO DEVELOP ADDITIONAL OR ALTERNATIVE SUPPLIES, CONSERVATION MEASURES AND MANAGEMENT TECHNIQUES.

- Structural and nonstructural alternatives to address: *[3112(a)(13)]*
  - Identified water availability problems
  - Adverse impacts on water uses or conflicts between water users, including potential actions to develop additional alternative supplies, conservation measures and management techniques

**Lead: DEP staff and Regional Committee**

**Target Date: Summer 2007**

**Statutory and Regulatory Considerations**

*Section 3112(a)(14)* A REVIEW AND EVALUATION OF STATUTES, REGULATIONS, POLICIES AND INSTITUTIONAL ARRANGEMENTS FOR THE DEVELOPMENT, CONSERVATION, DISTRIBUTION AND EMERGENCY MANAGEMENT OF WATER RESOURCES.

- Review and evaluate statutes, regulations, policies and institutional arrangements for the development, conservation, distribution and emergency management of water resources

**Lead: DEP staff**

**Target Date: Spring - Summer 2006**

### **Recommendations and Strategies for Implementation**

*Section 3112(a)(15)* A REVIEW AND EVALUATION OF WATER RESOURCES MANAGEMENT ALTERNATIVES AND RECOMMENDED PROGRAMS, POLICIES, INSTITUTIONAL ARRANGEMENTS, PROJECTS AND OTHER PROVISIONS TO MEET THE WATER RESOURCES NEEDS OF EACH REGION AND OF THIS COMMONWEALTH.

- Review and evaluation of water resources management alternatives and recommended programs, policies, institutional arrangements, projects and other provisions to meet water resources needs [3112(a)(15)]

*Section 3112(a)(16)* PROPOSED METHODS OF IMPLEMENTING VARIOUS RECOMMENDED ACTIONS, PROGRAMS, POLICIES, PROJECTS OR MANAGEMENT ACTIVITIES.

- Proposed methods of implementing various recommended actions, programs, policies, projects or management activities [3112(a)(16)]

**Lead: DEP staff and Regional Committee**

**Target Date: Fall 2007**