



HB 1743 & Why We Are Here

Eco-Flows Science Advisory Board

Nov 8, 2010

Major Water-Related Legislation 2010 Ratified Bills

1. Improve River Basin Modeling – SL 2010-143

- Codifies the requirement for river basin models. Mandates that models be approved by the EMC. Creates a science advisory board for ecological flows.

2. Modify Water Funding Priorities - SL 2010-151

- Add priority criteria for regionalization and drought water conservation.

3. Water Infrastructure Information Needs – SL 2010-144

- Improve the collection and utilization of water and wastewater infrastructure information.

4. Water Supply System Capacity Planning – SL 2010-150

- Revise LWSP when demand exceeds 80% of supply to show how future needs will be met.

Improve River Basin Modeling

- DENR to dev. hydrologic models for all river basins
- Models shall incorporate:
 - Surface/groundwater resources in basin
 - Ecological & instream flow requirements
 - Withdrawals, discharges, & local water supply data
 - Projections of future withdrawals
- Models shall predict:
 - Inadequate yield to meet all needs
 - Inadequate yield to meet all essential water needs
 - Adverse effects on ecological flows

River Basin Modeling – Key Definitions

- Ecological Flow
- Ecological Integrity
- Groundwater Resource
- Prevailing Ecological Conditions
- Surface Water Resource

River Basin Modeling-Science Advisory Board (SAB)

- Directs DENR to establish SAB to assist in characterizing ecology & flow requirements.
- Key Stakeholders:
 - DWR / DWQ / Natural Heritage Program
 - NC Wildlife Resources & Marine Fisheries Commissions
 - US FWS & National Marine Fisheries
 - Agriculture / Forestry / Manufacturing
 - Electric Utilities
 - Local Governments
 - Environmental NGOs
- Members must have expertise in aquatic ecology.

SAB – What It Is

- Members w/ a strong background in aquatic ecology
- An expert panel to collectively:
 - Review all relevant studies
 - Reports
 - Other pertinent information

SAB – What It Is

- Based on its review & discussions:
 - The SAB will advise DENR on an approach to characterize the ecology of river basins and a method to determine the flows necessary for ecological integrity.

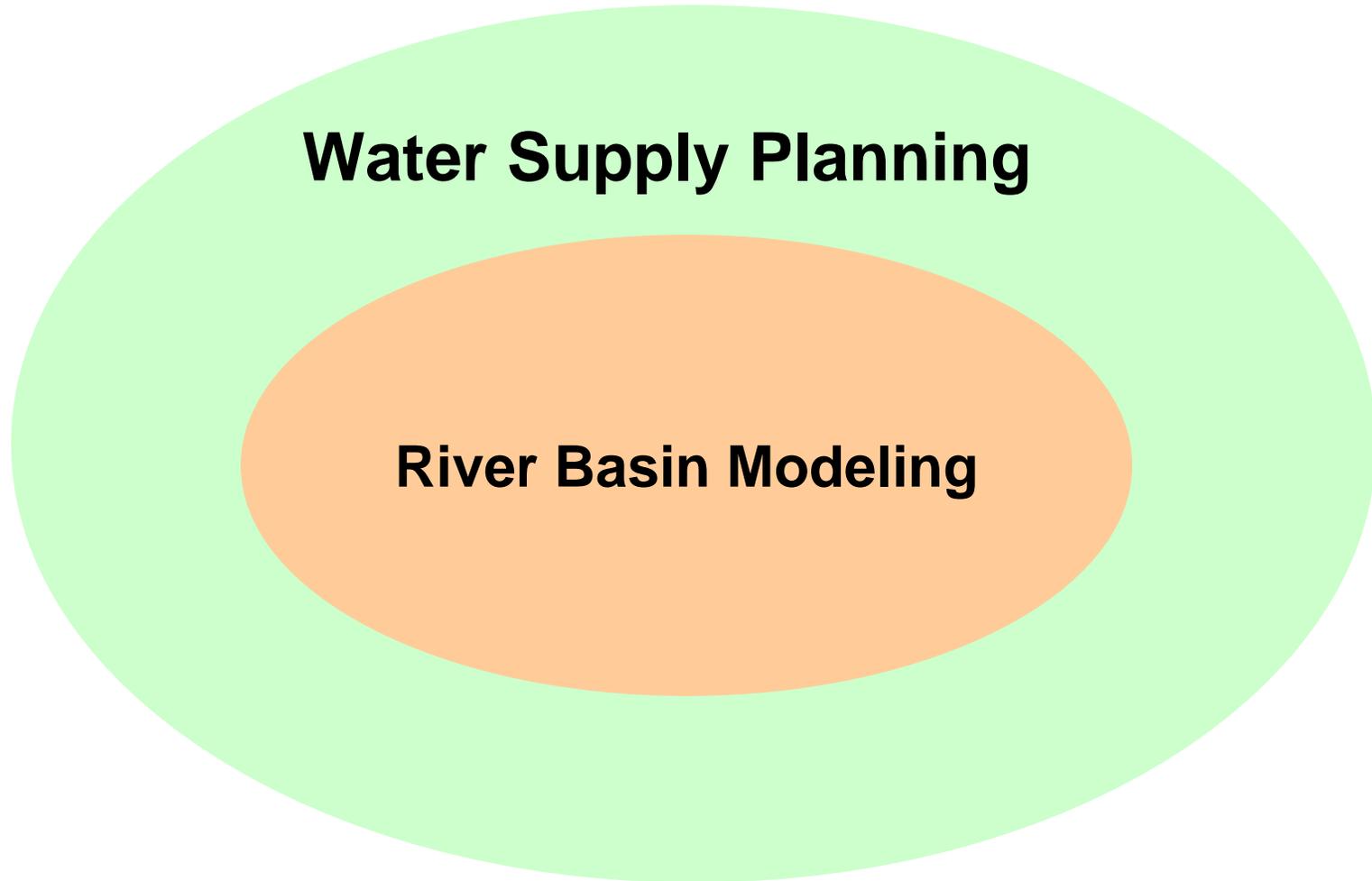
SAB – What It Is

- A board to develop an approach for planning purposes that will help users meet anticipated water needs in the future and address concerns at a watershed level that includes cumulative effects.
- A board to provide scientific input as part of a broader stakeholder process.

SAB – What It Is Not

- Not the final decision maker on this issue.
- SAB will advise on methods/approaches – not specific flow numbers.
- Not trying to develop a method to replace site-specific studies needed for a specific EA/EIS or permit review.

Modeling Supports Planning



Water Supply Planning

River Basin Modeling

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