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.

   - 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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