Quarterly Reports
April, July and October 2007

- Session Law 2005-190
  - Plan of action approved by EPA
  - Monitoring of Falls Lake extended through September 2007
  - Modeling has progressed:
    - Temperature and flow
    - Total suspended solids
    - Nutrient response\
  - Management strategy by July 2009

Total Max. Day Load (TMDL) for Jordan Lake

- Originally sent out for public review 2005
- Adjoining water listed as impaired 2006
- Phase I addresses Chlorophyll-a - new version out to public review in April
- Phase II will address pH

Other Water Quality

- Coastal Stormwater Rules sent to public hearing
- Several stream reclassifications
- Basinwide plans approved for White Oak, Watauga, and Hiiwassee/Little Tennessee/Savannah
- Approved Jordan Lake Nutrient Rule to go to public hearing

Other Water Quality

- Approved implementation plan for Coastal Habitat Protection Plan
- Site-specific endangered Species Management Strategy for Goose Creek sent to public hearing
- Several delegations of stormwater programs to local governments

Air Quality

- Numerous minor corrections and modifications to bring rules up to date
- Approved VOC and NOx Reasonably Available Control Technology
- Sent RACT Contingency Requirements for Charlotte Ozone Nonattainment to hearing in April; approved in July
- Amendments to Clean Air Interstate Rule sent to public hearing

Air Quality

- Amendments to PSD and New Source Review sent to public hearing
- Title V fees sent to public hearing

Other Actions

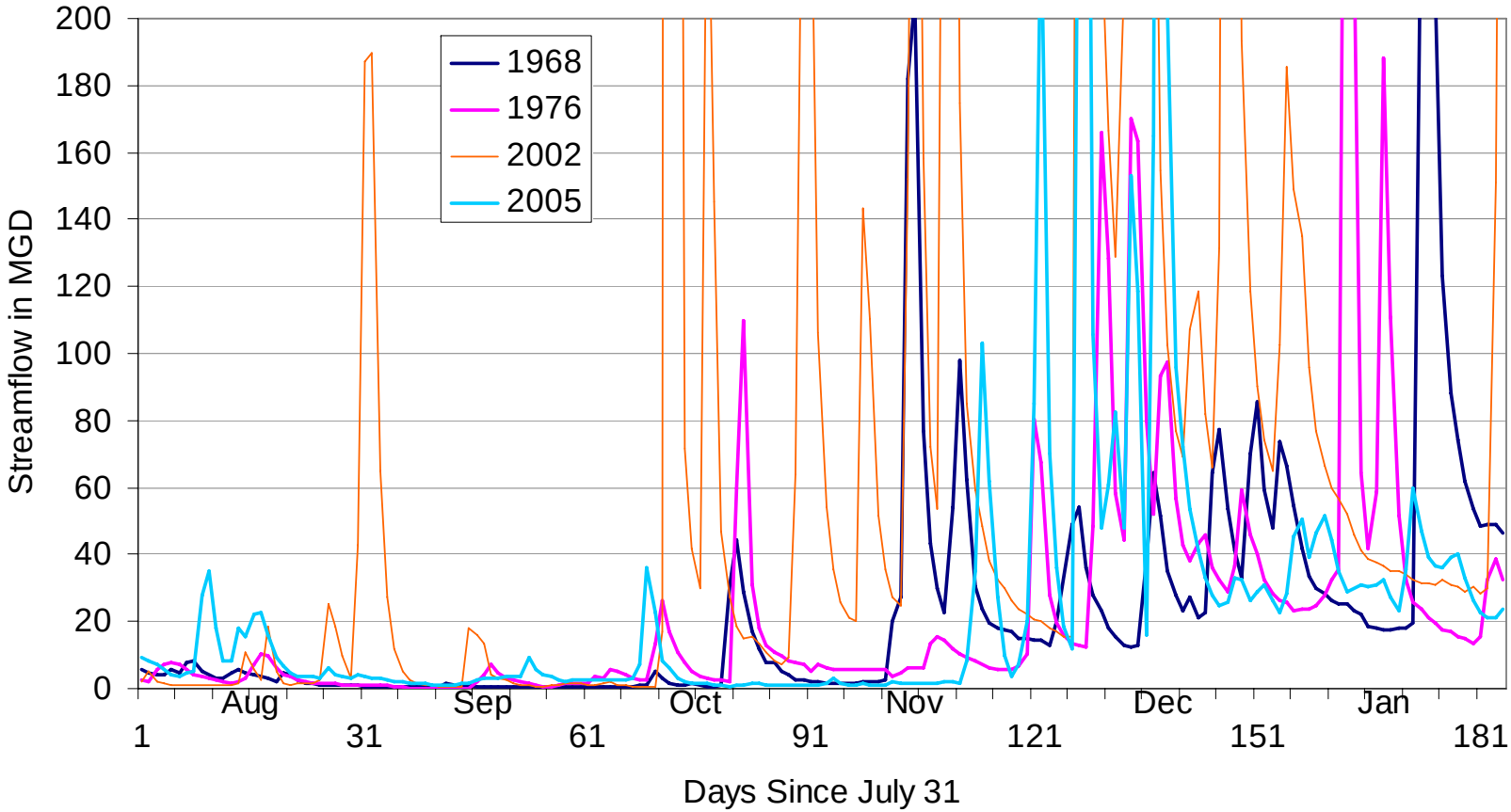
- Rulemaking initiated on permitting and inspection of private wells
- Adopted revisions to fees for Ecosystem Enhancement Program
- Sent dry-cleaning solvent cleanup risk-based rules to public hearing in July and approved rules in October
- Issued IBT certificate to Concord-Kannapolis

Risk Assessment for Typical Piedmont Water Supply

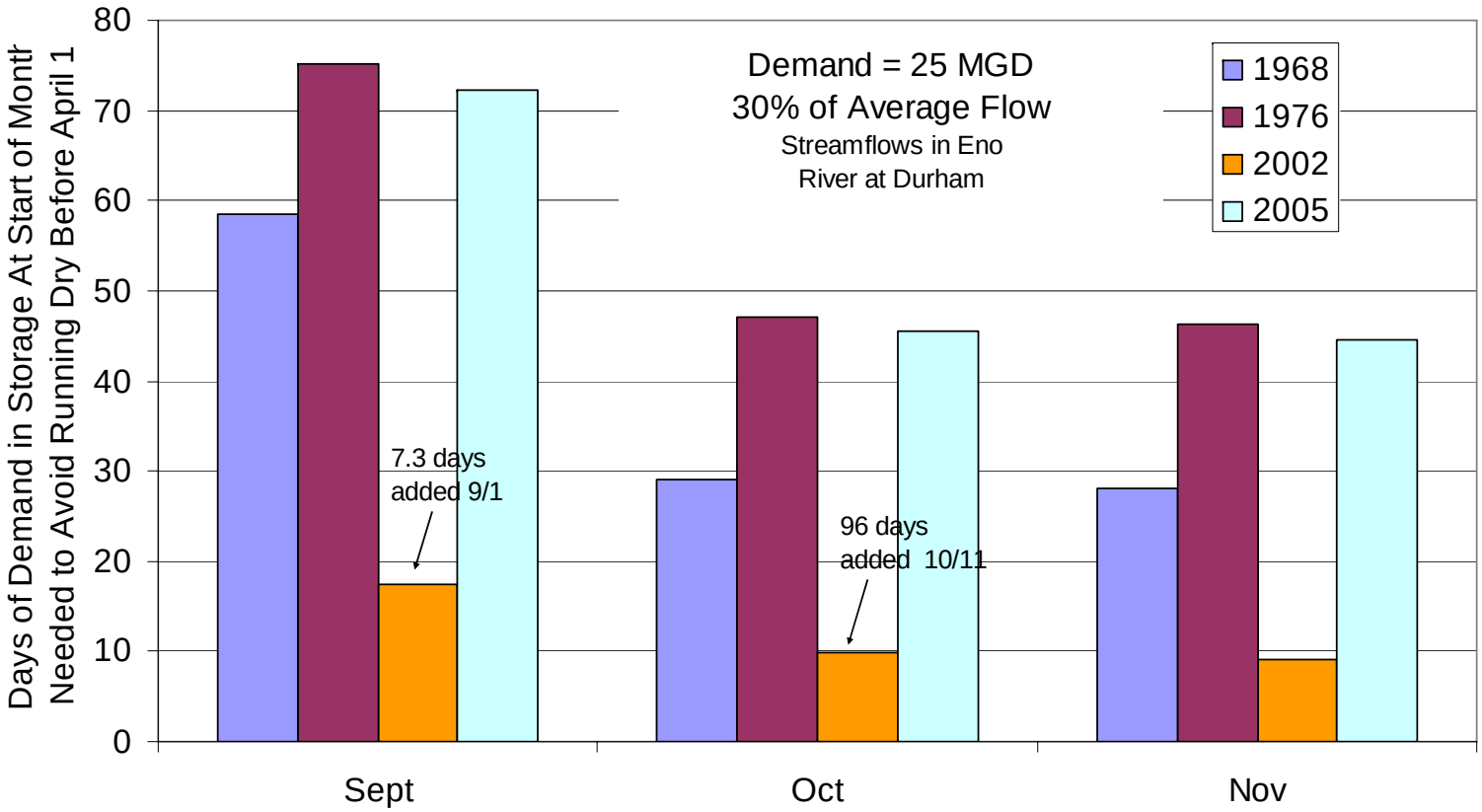
- Using Streamflow Records for Eno River at Durham 1963-2006
- Average 43-year flow = 82.9 million gallons per day (MGD)
- Case 1: Withdrawal = 25 MGD, 30 % of average annual flow.
- Case 2: Withdrawal = 33 MGD, 40 % of average annual flow.
- Four worst droughts in record: 1968, 1976, 2002, and 2005

Amount of storage Needed to Avoid Going Dry Before April 1

- How much do you have to have in your account at the start of any month so that you will not overdraft your account before next April 1 when you can expect large deposits.
- You are making daily deposits (streamflow inputs) and withdrawals on a daily basis.


Streamflow in MGD
200
180
160
140
120
100
80
60
40
20
0
1968
1976
2002
2005
Aug
Sep
Oct
Nov
Dec
Jan
1
31
61
91
121
151
181
Days Since July 31

Case 1: Withdrawal = 25 MGD



Case 2: Withdrawal = 33 MGD