Some (Fairly) Unique Features of Carolina Water Law

Confessions of a “Good Government Guy”

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“Water for All” conference
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Overview

• Thinking about water at multiple scales
• What’s regulated and what’s not when it comes to water in NC...and why?
• What’s planned about water in NC, and how?
• Strengths/weaknesses/opportunities/threats for Carolina water resources
On scale: the region, the states, the basins
Aquifers in the Carolinas

North Carolina Geology

The potentiometric surface represents the water pressure in an aquifer and is measured by finding the level at which water will stand in wells screened in that aquifer.

The potentiometric surface along a simplified cross-section of the North Carolina coastal plain.
Our (region’s) big water challenge: growth in areas lacking water storage

A huge percentage of the South’s population, growth and economic prospects lies in the piedmont . . .

. . . a region with good average precipitation, but small streams and low yields from groundwater. Shallow reservoirs have severe nutrient overenrichment problems.

Result: low resilience; high susceptibility to drought; almost certain escalation in conflict over water unless growth stops.
What’s regulated and what’s not in NC water...and why

• Extraction

AQUA CURRIT ET DEBET CURRENER, UT CURRENER SOLEBAT!

Not!

• Which really means we are “regulated” by ancient riparian rights principles (and how well the courts apply them)
“Pure” riparian rights failed long ago

The “regulations” that replaced them have worked fairly well
(At least) when it comes to water, there is no such thing as “free market”

See 1795 N.C. Sess. Laws ch. 7 (reprinted in N.C. Laws Compilation of 1804 at 76). The law is still on the books today, G.S. 156-2 et seq.
Sure, we have a regulated riparian system

And this guy has a bass boat....
What’s regulated and what’s not in NC water...and why

• Interbasin transfer

• NC is one of the (if not THE) most regulated states in the U.S. for interbasin transfers
Geography and historical development imply many IBTs in NC.
The Seven Cities project: roots of our IBT approach, death of a central planning approach?
What’s “planned” about NC water...and why

• “State water plan” never amounted to much
• Local water supply/watershed plans probably useful, rarely scaled right for water problems
• Good plans have usually been driven from local levels to meet fed/regional/State needs
• Some hydrologic models in place
# NC Hydrologic Model status

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Status of River Basin Hydrologic Models</th>
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<tbody>
<tr>
<td><strong>Completed models</strong></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Broad and Tar models completed</td>
</tr>
<tr>
<td>2012</td>
<td>Broad receives EMC approval; Cape Fear and Neuse combined model begun</td>
</tr>
<tr>
<td>2013</td>
<td>Catawba, Roanoke, Cape Fear and Neuse combined models completed</td>
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<tr>
<td>2014</td>
<td>Tar-Pamlico model completed</td>
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<tr>
<td><strong>Schedule for remaining basins</strong></td>
<td></td>
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<tr>
<td>2018</td>
<td>French Broad, New, and Watauga (working contract)</td>
</tr>
<tr>
<td>2019</td>
<td>Lumber and Yadkin Pee Dee (If funds are available)</td>
</tr>
<tr>
<td>2020</td>
<td>Hiwassee and Little Tennessee (If funds are available)</td>
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<tr>
<td></td>
<td>Albemarle Sound, Chowan, Onslow Bay, and Savannah</td>
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Strengths of NC water regulation

- Goal of integrating water resources/water quality/surface water/groundwater is good
- We have done it on the cheap – which works ok when it rains the “right way” and there are no major water quality problems
- Mostly pragmatic, not too dogmatic
- Lots of models for regional cooperation
Weaknesses of NC water regulation

• System evolved without concern for scarcity
  – Questionable priorities in shortages: the farm vs. the city issue
  – Uncontrolled extraction
  – Still widespread reliance on run-of-river systems
Weaknesses in NC water policy, con.

“I had my lawyers research the question, and they told us that we could suck the state of Virginia out through that hole in the ground and there was nothing anyone could do about it.”

Weaknesses of NC water regulation, con.

- Modeling still somewhat crude and incomplete
- Regional and interstate water cooperation still has a long way to grow
Eastern US regions and water

Institutional context: SEUSA is behind in regional water management

Source: http://sr6capp.er.usgs.gov/aquiferBasics/crystal.html
The resilience problem:

- In 2007 every place in NC got at least 35” of rain.
- How our water systems fared

- Question: how is it that we get more precipitation in 2007 than most of the USA gets in an average year, yet we are plunged into extreme drought?
Opportunities for NC water resources

• The rare nonpartisan environmental problem
• Business interests and basic human needs might transcend other policy divisions
• Water prices have risen, but still very low
• Rising recognition of water as a key environmental and economic asset
A Dept. of Commerce View of Environmental Assets, c. 1997

ENVIRONMENTAL DECISION MAKING
(THE WAY IT REALLY IS)

START

IS THE ENVIRONMENT CLEAN?

YES

YOU'RE CARIN LUCKY!

NO

YOU POOR BASTARD

DID YOU DO IT?

NO

CAN YOU PIN IT ON SOMEONE ELSE?

YES

DO THEY HAVE A DEEPER POCKET?

NO

DO YOU AFFORD THE LAWYERS?

YES

CAN YOU AFFORD THE LAWYERS?

NO

TRY NOT TO PANIC

YES

DO THE AGENCIES KNOW?

NO

DON'T SCREW WITH IT!

FIX IT, HIDE IT, SELL IT

OPEN CHECK BOOK
START WRITING

END
Threats to better NC water resources

- Complacency among major water users...”we got ours, keep your hands off”
- Poor citizen and cultural understanding of threats to water
- Slow variables...nutrient overenrichment, emerging contaminants, deferred maintenance...
What is the right scale to tackle these long-term water concerns?

• NC’s traditional approach
  – Leave it up to individual water systems to solve
  – Small, weak state agency monitoring with required reports from local systems and a powerful but politically difficult ability to single out areas for more regulation (“Capacity use areas”)
  – Enjoy but don’t try hard to steer federal efforts

• Water allocation study (2008, 2010) recs
  – Continue primacy of local systems
  – But put more resources and power behind river-basin scaled planning organizations, at least where scarcity is expected in the next 50-75 years
Conclusion

The Charlotte/brownfields model:
Get the right folks around the table and give them some real resources to work with...but who are those folks?