Clean Water Act

NC Integrated Report (IR) 305(b)
List of impaired waters NC 303(d)

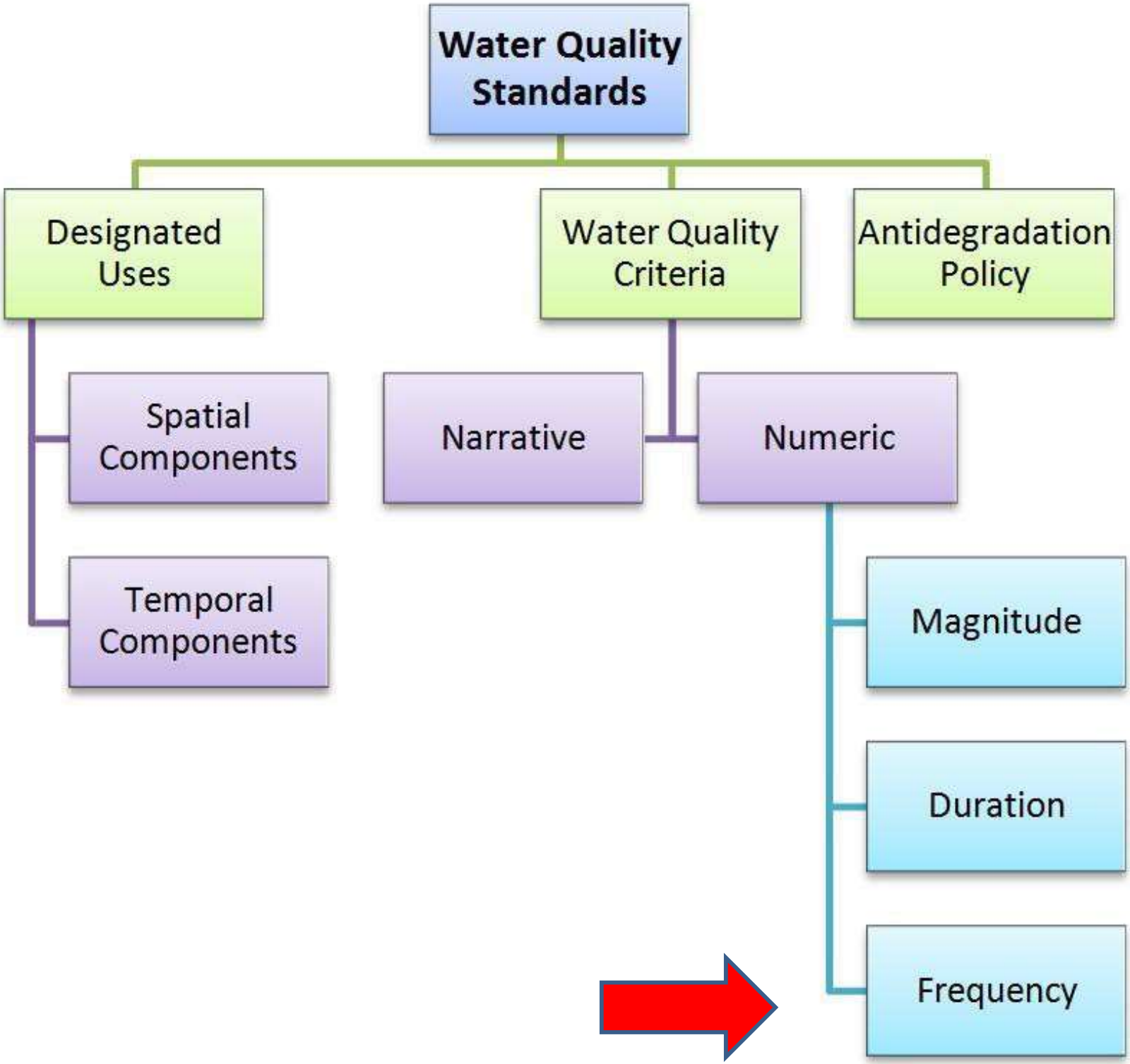
303(d) list identifies waters to Congress and Public that:

- Do not meet water quality standards and have no regulatory process in place to restore waters and attain standards
- Require development of total maximum daily load (TMDL) or other restoration plan (Falls Lake Strategy)
- states develop list every 2 years

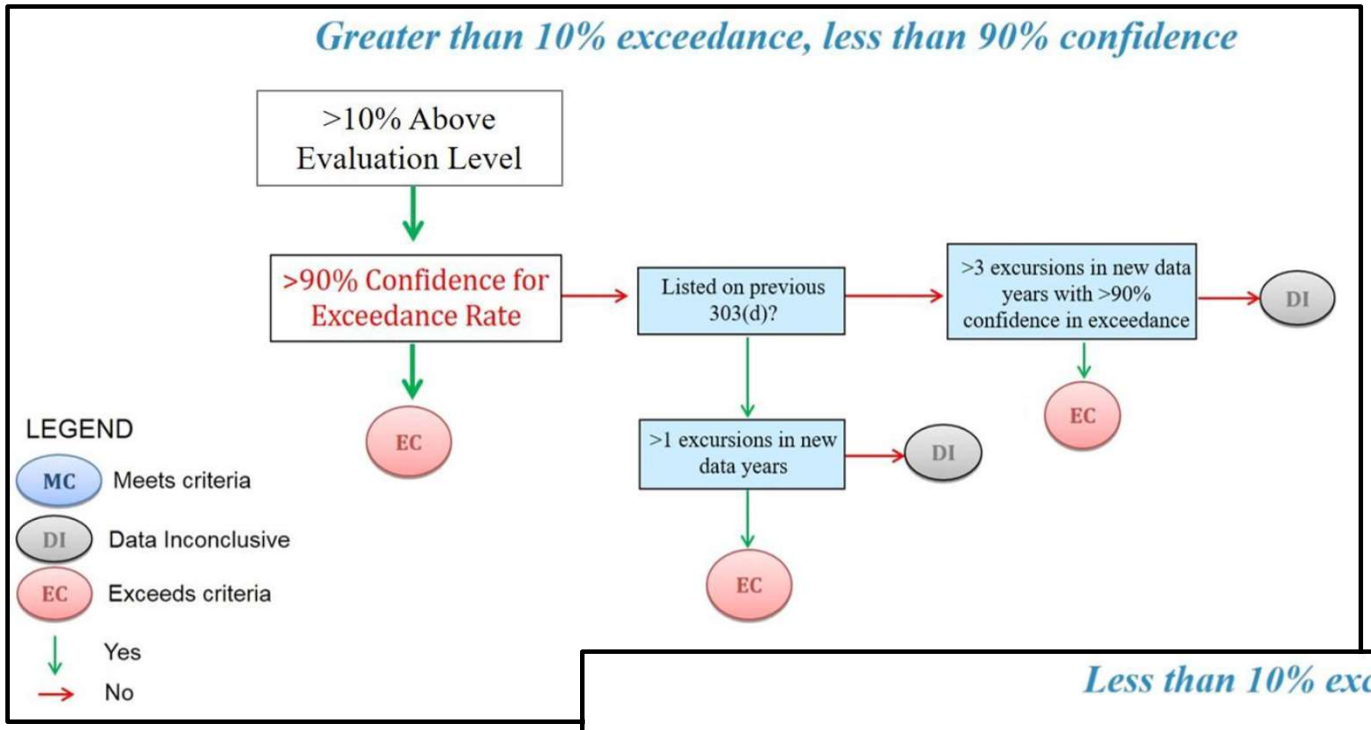
NC General Statute 143B-282(c)

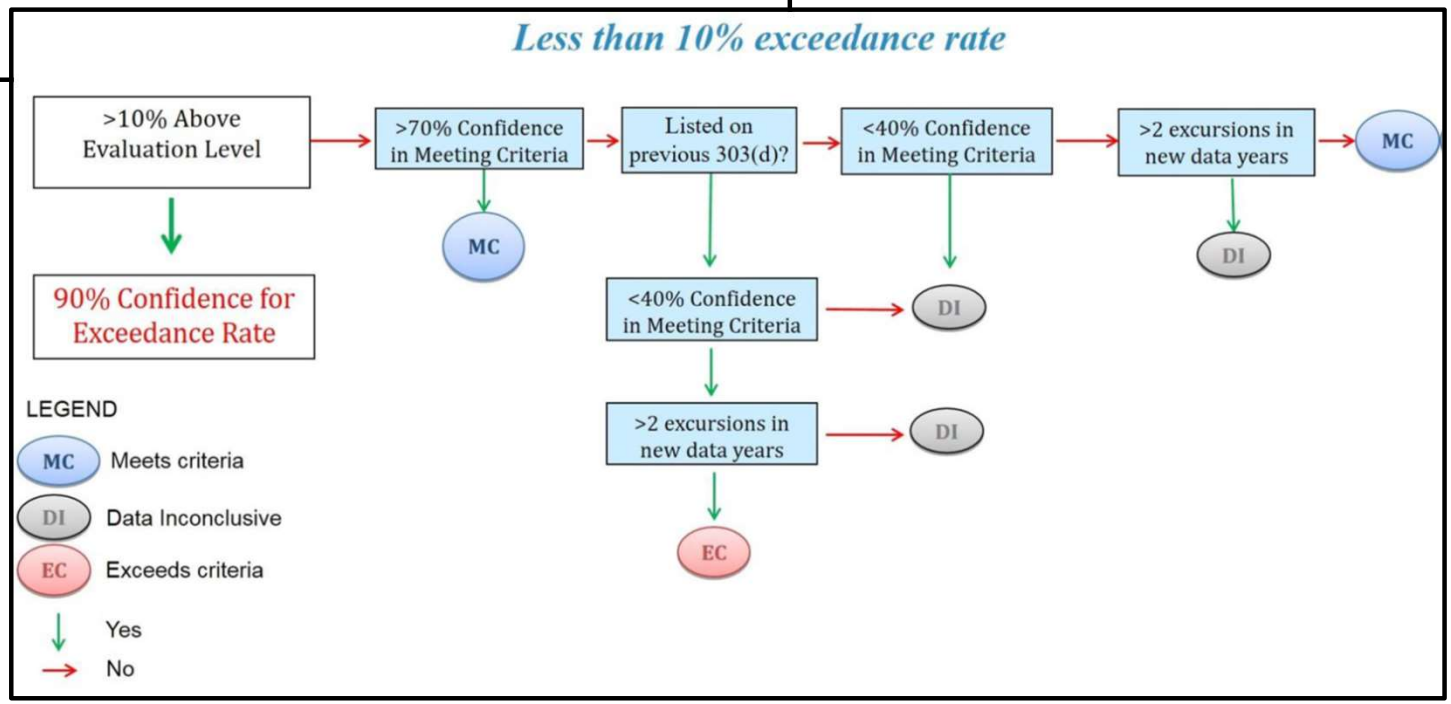
- EMC has responsibility to identify impaired waters and priorities (i.e. not DWR)
- practically speaking EMC approves methods for 303(d) listings

305(b) Integrated Report informs status water quality conditions


Water Quality Standards
Designated Uses
Water Quality Criteria
Antidegradation Policy
Spatial Components
Temporal Components
Narrative
Numeric
Magnitude
Duration
Frequency

2022 303(d) Methodology





2022 303d Methodology
"Simplified" Version (inconclusive ignored)

If exceedance rate >10% cannot be attaining standard

To be considered attaining the water quality standard

- exceedance rate is ≤ 10% and >70% confidence meeting or
- exceedance rate is ≤ 10% and ≥ 40% confidence and ≤ 2 excursions in 2019-2020

To be considered exceeding the water quality standard

- exceedance rate is >10% with 90% confidence or
- exceedance rate is >10% and 2019-2020 data > 3 excursions with 90% confidence exceeding or
- exceedance rate is > 10% and on previous 303(d) and > 1 excursion in 2019-2020 or or
- exceedance rate is <10% but on previous 303(d) and <40% confidence meeting and > 2 excursions in 2019-2020

DWR Draft 2022 303(d) New Listings

Neuse River Basin below Falls Lake

Three for benthic macroinvertebrates
Six for pH levels below a pH 6
One for low dissolved oxygen

- Crabtree Creek (Crabtree Lake) Benthic Macroinvertebrates
- Marks Creek (Lake Myra) Near Knightdale NC Benthic Macroinvertebrates
- Mill Creek (Moorewood Pond) Near Erwin NC pH (6)
- Hannah Creek Dissolved Oxygen (4 mg/l), pH (6)
- Falling Creek pH (6)
- Little River (Tarpleys Pond) pH (6)
- Buffalo Creek (Wendell Lake) pH (6)
- Walnut Creek (Lake Wackena, Spring Lake) pH (6)
- Little Creek (East Side) Benthic Macroinvertebrates

Potential Comments to Consider
Legacy Total Metals

- The Neuse Estuary is 303(d) listed for selected total metals
- New water quality metals standards adopted based on “dissolved metals”.
- Most often monitoring results in 303(d) delisting of legacy decisions

Comment to consider-

DWR should prioritize monitoring resources to evaluate new metals standards to resolve these legacy 303(d) listings.

Potential Comments to Consider
TMDL's and Strategies

- The Neuse Estuary has a TMDL – to Reduce the Nitrogen Load
- Integrated Report – Typically if standard not attained- Category 4
- 2022 DWR Integrated Report – Lists most of the Neuse Estuary as Total Nitrogen Category 4t Exceeding Criteria

- Comment to consider- TMDL's and Management Strategy
  Provide a narrative summary of the attainment or non-attainment of TMDL's and other Management Strategies in a narrative form that better informs of the progress or lack of progress including an assessment of the goals attained or not attained

Potential Comments to Consider
Data Tiers

TIER 1 - Education, Environmental Health Screening

TIER 2 – Basin Planning, Research, Effectiveness Monitoring,
Targeting of Management Actions

TIER 3 - Regulatory Assessments of Water Quality Standards Attainment
Tier 3 requires QAPP and Certified Lab

- DWR Fact Sheets include a Data Tier Column but mostly Blank
- ModMon Data now in Tier 2
- Confusing if DWR Used ModMon Data for Assessment or not
- **No Indication of DWR Director or EMC Approval or how implemented**

Comment to consider-
DWR "Water Quality Data Tiers " document should be revised and explicitly indicate that Coalitions with MOA's are included in Tier 3.
And UNC ModMon Program should be considered for a Tier 3 Exception.

Potential Comments to Consider
Technical Corrections – focused on chlorophyll-a

- DWR Fact Sheets sometimes provide no indication of the data considered for chlorophyll-a and nitrogen assessments.
- Confusing on who generated data because ModMon station numbers have been changed.
- 27-(96)b1c NEUSE RIVER Estuary Potential Error 2022 IR Chlorophyll-a Category 1 Meeting Criteria, Review suggests Category 3i Data Inconclusive.
- 27-(96)b2 NEUSE RIVER Estuary Potential Error 2022 IR Chlorophyll-a Category 4i Data Inconclusive. Review suggests Category 3i Data Inconclusive.
- 27-(118)a2a NEUSE RIVER Estuary Potential Error 2022 draft reports Category 3i Exceeding Criteria, Review Suggests Category 1i Meeting Criteria.
- 27-(118)f NEUSE RIVER Estuary Potential Error 2022 draft reports chlorophyll-a Category 4t exceeding criteria, Review Suggests Category 3i data inconclusive.