

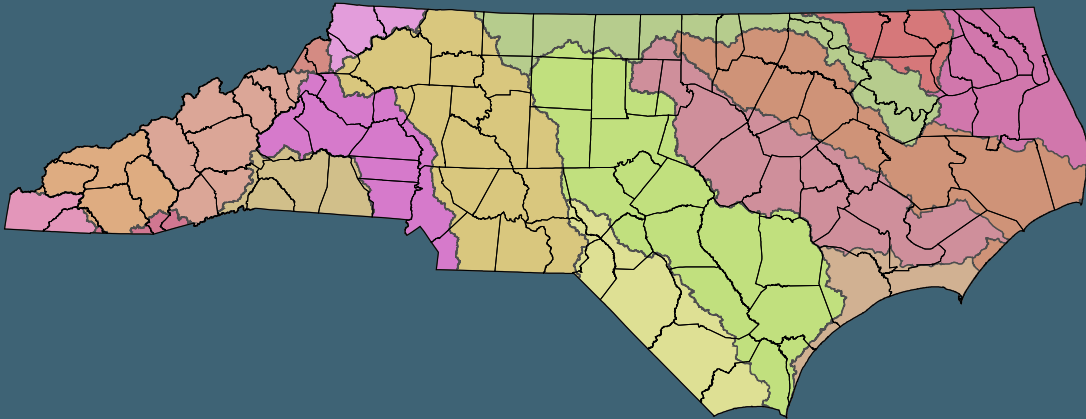


Department of Environmental Quality
Division of Water Resources
Water Planning Section – Basin Planning Branch
Cape Fear River Plan & Survey



Basin Planning

Provides a single location to present water quality and water quantity related issues



General Statute 143-215.8B – *Basinwide water quality management plans*

Watershed-based approach to managing water resources

- Considers the cumulative impacts to all activities across a river basin (point and nonpoint sources of pollution)
- Consider all transfers into and from river basins (IBT's)
- Provide that point and nonpoint sources jointly share the responsibility of reducing pollutants to the State's waters
- Report on the goals to reduce nutrients in NSW watersheds
- Basin plan required every 10 years
- Basin plans are not a rule

Basinwide Water Resources Management Plans

- Goals
 - Provide scientifically-based water quality and quantity analysis for planning purposes
 - Provide recommendations for implementation measures by water resource agencies and volunteer watershed groups
 - Provide ongoing support for watershed restoration and protection efforts
- Public education
 - Water quality and water quantity (water demand)
 - Point and nonpoint sources of pollution
 - Protection measures
- Provide guidance to support decisions about water resources management
 - Permitting strategies
 - Nutrient management strategies
 - Watershed restoration planning and implementation of best management practices
 - Water supply and demand



Basinwide Water Resources Management Plan Outline



Basin Characteristics

- Geography
- Population and land cover
- Pollution Sources



Monitoring Data and Water Quality Assessment

- Overview of biological, chemical and physical parameters



Permitted and Registered Activities

- General descriptions of existing water resource programs



Local Water Quality Initiative and Funding Opportunities

- Descriptions of stakeholder groups and watershed activities



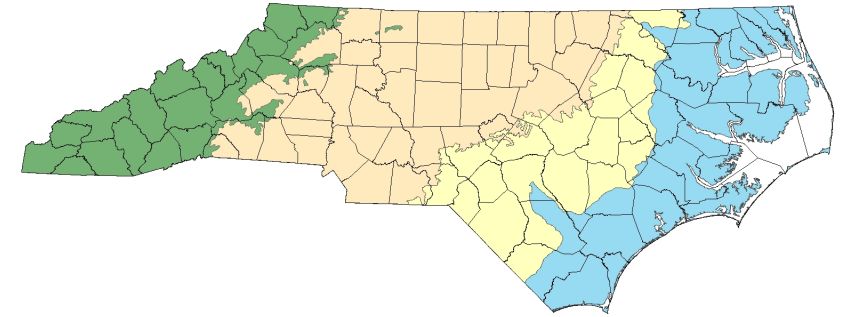
Water Use and Availability

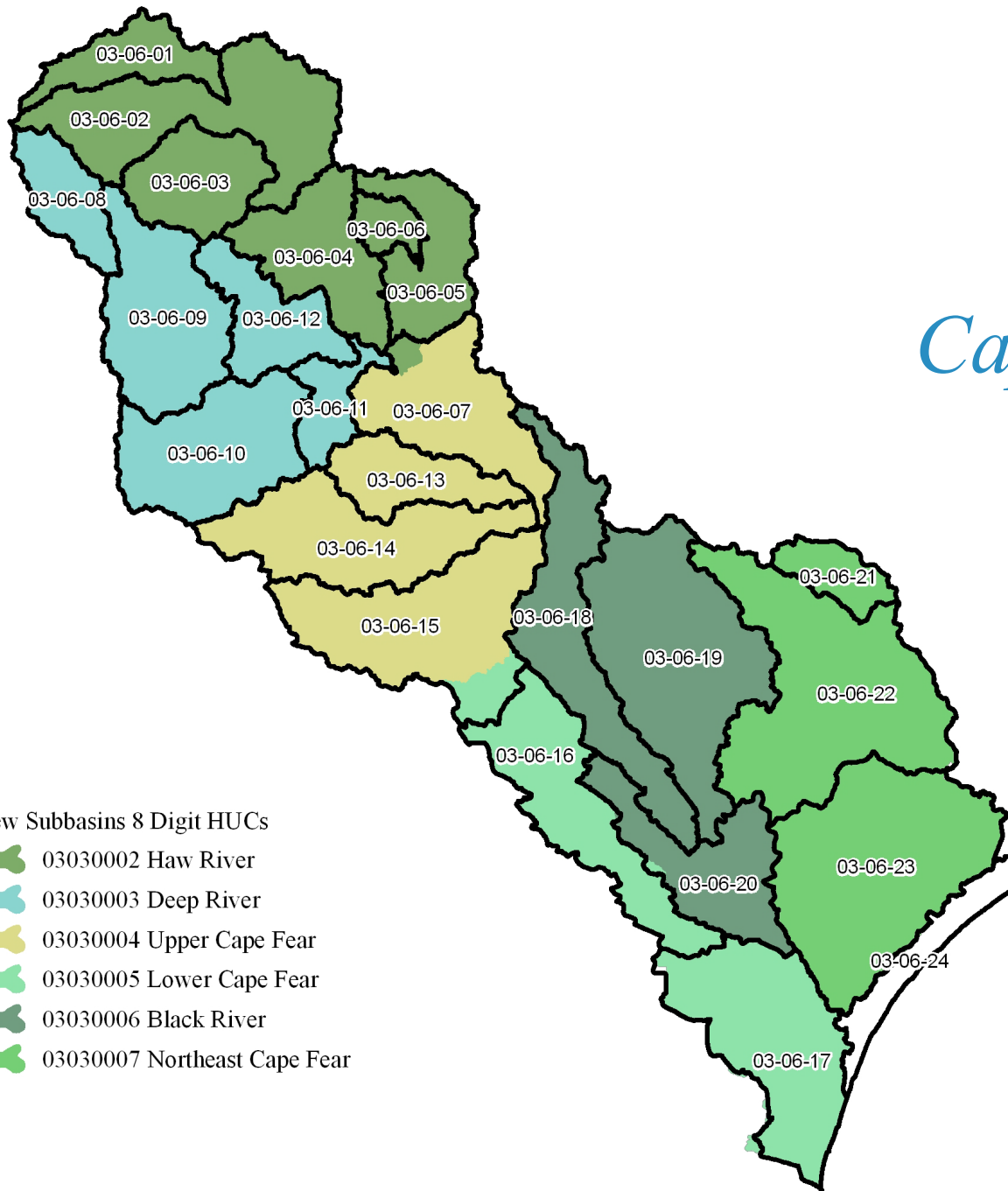
- Summary of water use in the basin



Watershed Chapters (HUC 8)







- Watershed specific information and recommendations

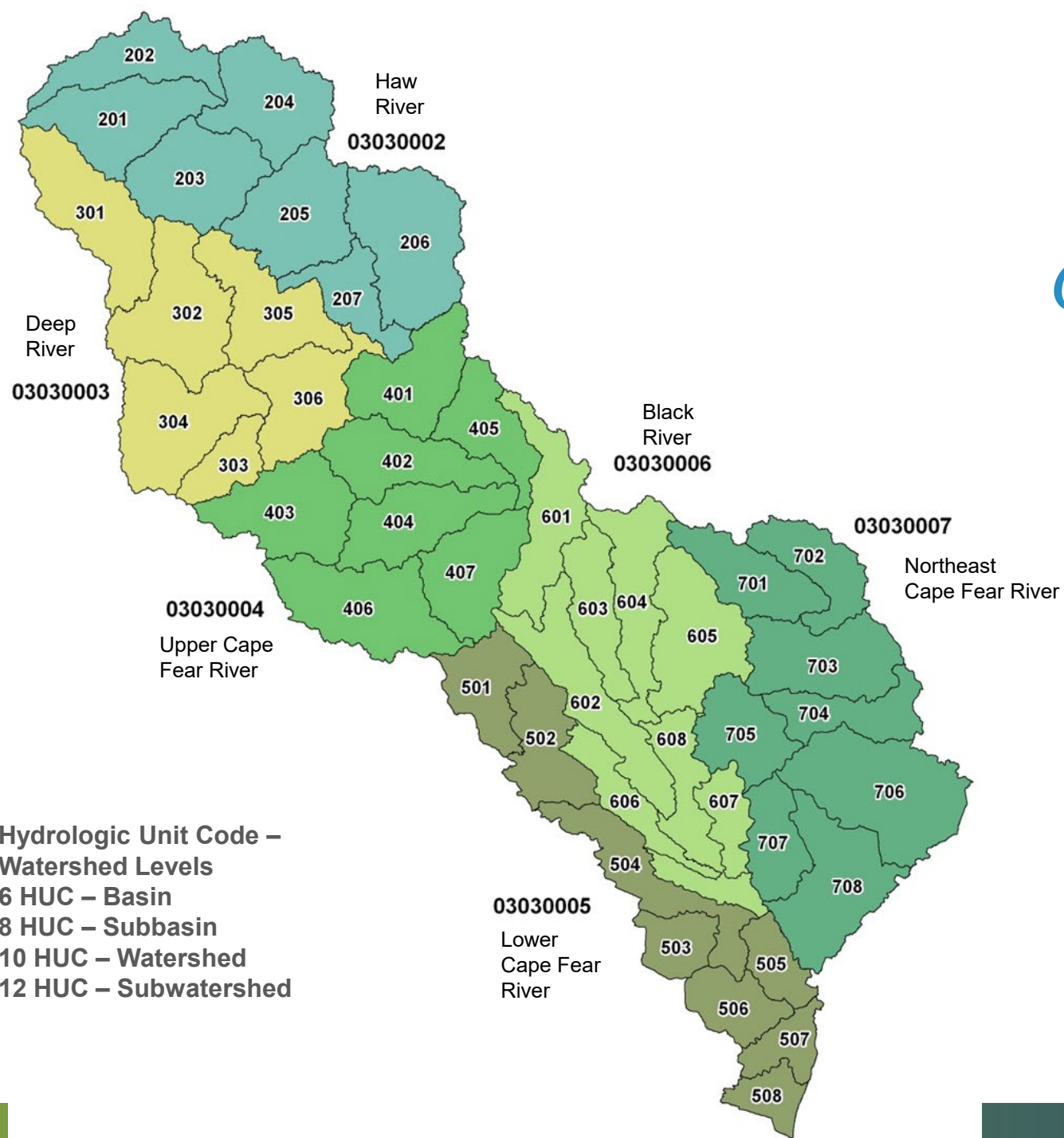




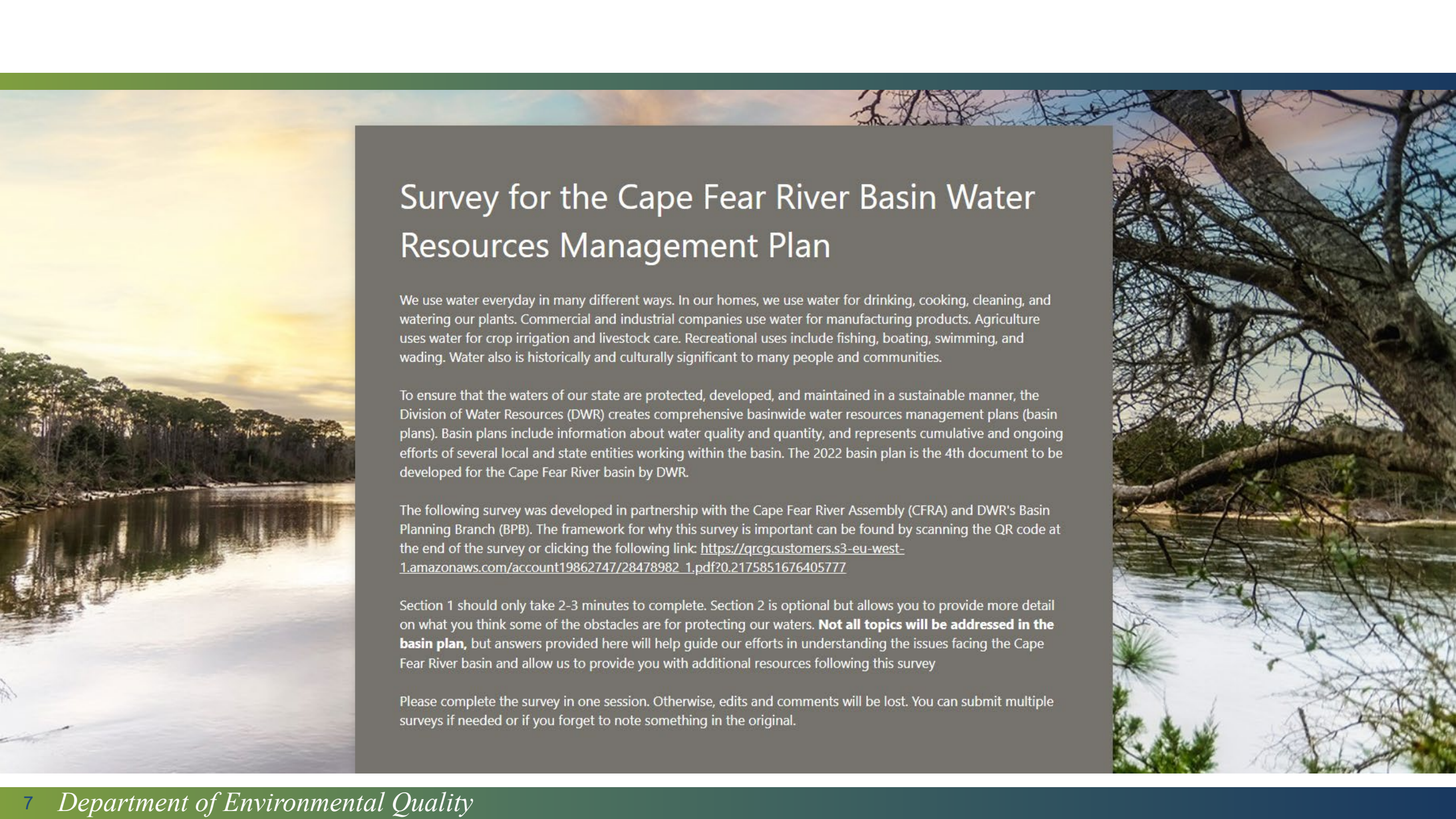
Cape Fear River Basin HUC 8 Map

New Subbasins 8 Digit HUCs

-  03030002 Haw River
-  03030003 Deep River
-  03030004 Upper Cape Fear
-  03030005 Lower Cape Fear
-  03030006 Black River
-  03030007 Northeast Cape Fear



Cape Fear River Basin HUC 8 & 10 Map



Survey for the Cape Fear River Basin Water Resources Management Plan

We use water everyday in many different ways. In our homes, we use water for drinking, cooking, cleaning, and watering our plants. Commercial and industrial companies use water for manufacturing products. Agriculture uses water for crop irrigation and livestock care. Recreational uses include fishing, boating, swimming, and wading. Water also is historically and culturally significant to many people and communities.

To ensure that the waters of our state are protected, developed, and maintained in a sustainable manner, the Division of Water Resources (DWR) creates comprehensive basinwide water resources management plans (basin plans). Basin plans include information about water quality and quantity, and represents cumulative and ongoing efforts of several local and state entities working within the basin. The 2022 basin plan is the 4th document to be developed for the Cape Fear River basin by DWR.

The following survey was developed in partnership with the Cape Fear River Assembly (CFRA) and DWR's Basin Planning Branch (BPB). The framework for why this survey is important can be found by scanning the QR code at the end of the survey or clicking the following link: https://qrcgcustomers.s3-eu-west-1.amazonaws.com/account19862747/28478982_1.pdf?0.2175851676405777

Section 1 should only take 2-3 minutes to complete. Section 2 is optional but allows you to provide more detail on what you think some of the obstacles are for protecting our waters. **Not all topics will be addressed in the basin plan**, but answers provided here will help guide our efforts in understanding the issues facing the Cape Fear River basin and allow us to provide you with additional resources following this survey

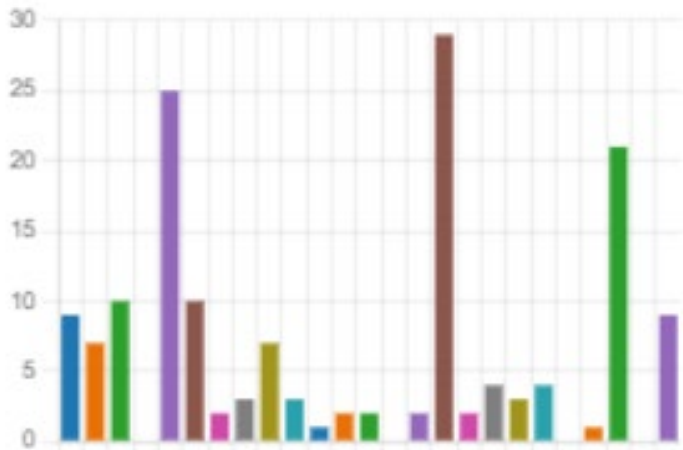
Please complete the survey in one session. Otherwise, edits and comments will be lost. You can submit multiple surveys if needed or if you forget to note something in the original.

Survey for the Cape Fear River Basin Water Resources Management Plan

156
Responses

17:10
Average time to complete

Active
Status



1. What North Carolina county do you reside in?

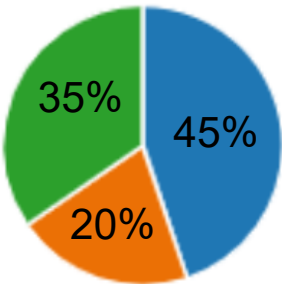
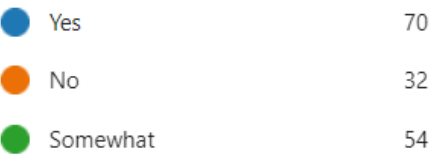
[More Details](#)

Alamance	9
Bladen	7
Brunswick	10
Caswell	0
Chatham	25
Cumberland	10
Duplin	2
Durham	3
Guilford	7
Harnett	3
Hoke	1
Johnston	2
Lee	2
Montgomery	0
Moore	2
New Hanover	29
Onslow	2
Orange	4
Pender	3
Randolph	4
Rockingham	0
Sampson	1
Wake	21
Wayne	0
Other	9



2. Are you familiar with river basin plans?

[More Details](#)



3. If so, how do you use river basin plans?

[More Details](#)

110
Responses

Latest Responses

"Those plans will give us information about water use and availability. Wate...

4. In your opinion, how do you feel that waters in the Cape Fear River basin are being protected on a scale from 1 to 5, with 5 being very protected and 1 being not protected at all?

[More Details](#)

156
Responses

2.54
Average Number

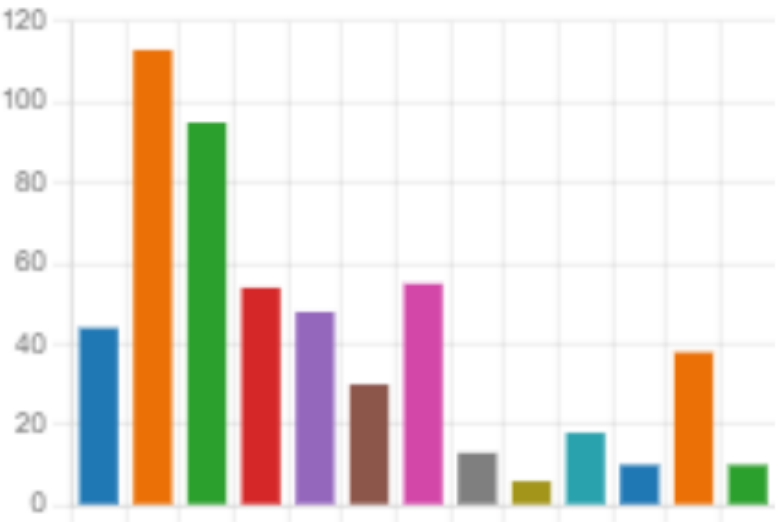
Responses
I have read them.
Decision making tools and guidance for implementation
I use them in my work, land and water conservation.
Development planning.
As an overview of the NC water resources. And I use it in my University teaaching
I am the ORC for a Water Treatment facility in the Upper Cape Fear River Basin.
Planning purposes for water quality improvement.
Helping develop management strategies, ensure other agencies are aware of basin issues and are working with us collaboratively to resolve them.
To help inform advocacy efforts, prioritize stormwater retrofit and wetland restoration projects.
General information.



5. Which water related topics would you like to learn more about in regards to the Cape Fear River basin?
Please pick your **top three**

[More Details](#)

Water supply	44
Sources of potential pollution to...	113
The health of rivers and streams...	95
Common contaminants	54
Impacts from stormwater	48
Wildlife in the Cape Fear River b...	30
Policies regarding the river basin	55
Educational opportunities	13
Learning water quality vocation...	6
Recreational opportunities	18
Volunteer opportunities	10
Conservation groups and restor...	38
Other	10

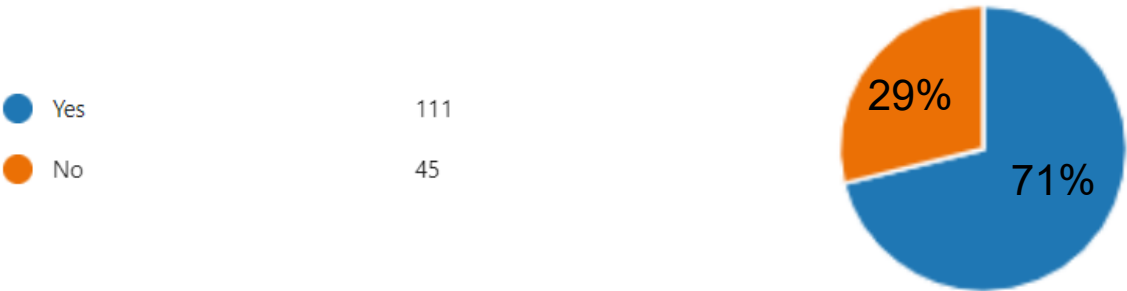


- ☐ Water supply
- ☒ Sources of potential pollution to the river basin
- ☒ The health of rivers and streams in the river basin
- ☒ Common contaminants
- ☐ Impacts from stormwater
- ☐ Wildlife in the Cape Fear River basin
- ☒ Policies regarding the river basin
- ☐ Educational opportunities
- ☐ Learning water quality vocational skills
- ☐ Recreational opportunities
- ☐ Volunteer opportunities
- ☐ Conservation groups and restoration efforts in the river basin
- ☐ Other



6. Are you affiliated with a group or community member who works to protect our natural resources?

[More Details](#)



7. If yes, what group(s) are you involved with?

[More Details](#)

111
Responses

Latest Responses

"City of Sanford"

"District Soil and Water Supervisor"

"I work for Cumberland County. Cumberland County manages an NDPES ph..."

8. Have you or someone you know completed a project or community effort to improve water quality or quantity? If possible, please provide details on the type of project, the successes, obstacles, and lessons learned from the project or effort.

[More Details](#)

95
Responses

Latest Responses

"We are developing projects that will implement improvements to landfill st..."

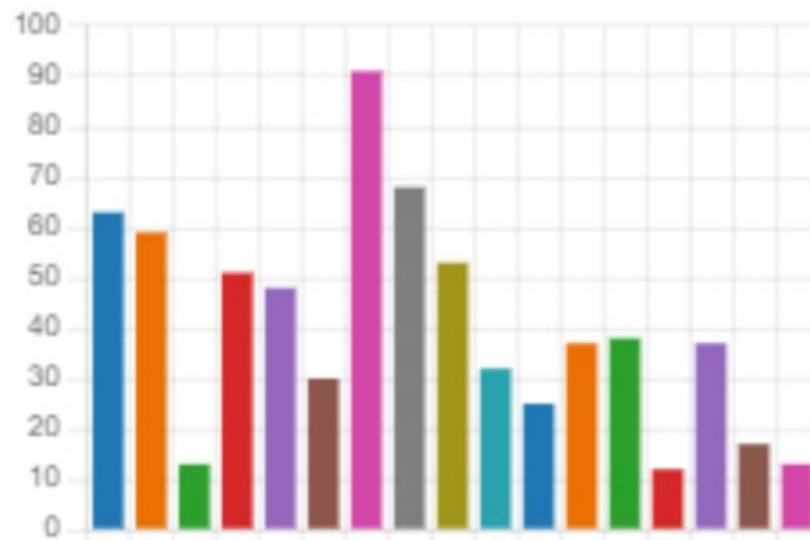
Responses
OWASA
DEQ
Department of Natural and Cultural Resources
Carolina Wetlands Association
Haw River Assy., Cape Fear River Assy, Piedmont Conservation Council
NC Forest Service
The City of Reidsville
Loves Creek Watershed Stewards
Haw River Assembly
North Carolina Coastal Federation



9. At DEQ, we understand the complex and changing issues surrounding emerging compounds (i.e., GenX, PFAS, 1,4-dioxane) and DWR will include relevant weblinks for more information in the upcoming basin plan, including DEQ's Emerging Compounds website (<https://deq.nc.gov/news/key-issues/emerging-compounds>). Besides emerging compounds, which of the following subjects are you most concerned about in regards to your water quality in the Cape Fear River basin? Please select your **top three to five** answers.

[More Details](#)

<input checked="" type="radio"/> Aquatic habitat	63
<input checked="" type="radio"/> Declining fisheries/shellfish	59
<input checked="" type="radio"/> Sustenance (relying on the river ...	13
<input checked="" type="radio"/> Animal agriculture	51
<input checked="" type="radio"/> Algal blooms	48
<input checked="" type="radio"/> Bacteria	30
<input checked="" type="radio"/> Urban development and storm...	91
<input checked="" type="radio"/> Wastewater infrastructure	68
<input checked="" type="radio"/> Drinking water treatment	53
<input checked="" type="radio"/> Groundwater resources	32
<input checked="" type="radio"/> Drought	25
<input checked="" type="radio"/> Flooding	37
<input checked="" type="radio"/> Recreational use (swimming, wa...	38
<input checked="" type="radio"/> Row crop or specialty agriculture	12
<input checked="" type="radio"/> Nutrient Enrichment	37
<input checked="" type="radio"/> Sea level rise	17
<input checked="" type="radio"/> Other	13



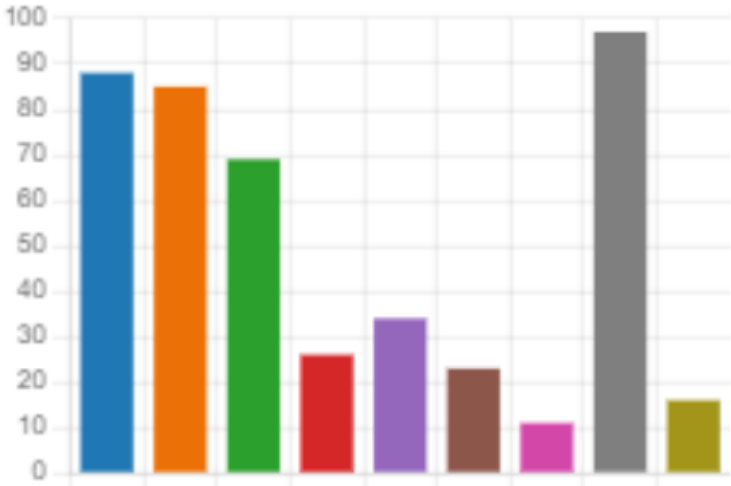
- ☒ Aquatic habitat
- ☒ Declining fisheries/shellfish
- ☐ Sustenance (relying on the river as a primary food source)
- ☒ Animal agriculture
- ☐ Algal blooms
- ☐ Bacteria
- ☒ Urban development and stormwater
- ☒ Wastewater infrastructure
- ☐ Drinking water treatment
- ☐ Groundwater resources
- ☐ Drought
- ☐ Flooding
- ☐ Recreational use (swimming, wading, fishing)
- ☐ Row crop or specialty agriculture
- ☐ Nutrient Enrichment
- ☐ Sea level rise



10. Of the examples listed below, which do you view as the **top three** biggest challenges regarding water quality in the Cape Fear River basin?

[More Details](#)

- Current management strategies ... 88
- Lack of prioritization at the state... 85
- Lack of oversight (i.e., inspectio... 69
- Not enough stream monitoring ... 26
- Lack of education and outreach ... 34
- Communities not connected to ... 23
- Too much water being withdraw... 11
- Development pressures 97
- Other 16



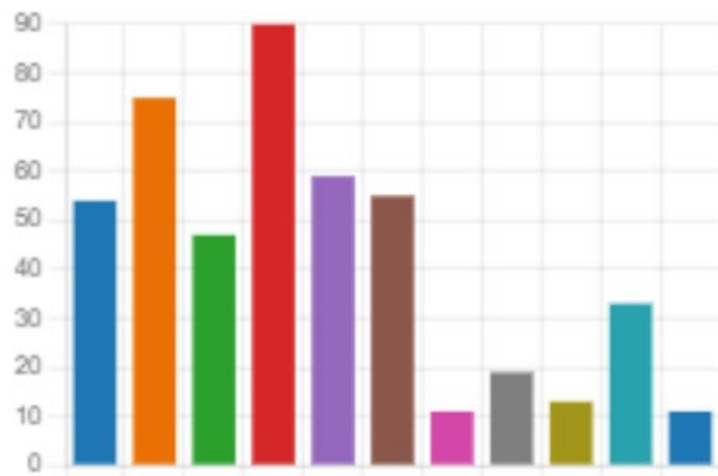
- ☒ Current management strategies & protections
- ☒ Lack of prioritization at the state or federal political level
- ☒ Lack of oversight (i.e., inspections, reporting, etc.)
- ☐ Not enough stream monitoring data available
- ☐ Lack of education and outreach (community engagement)
- ☐ Communities not connected to the river because of limited or no access
- ☐ Too much water being withdrawn or used on a daily basis
- ☒ Development pressures
- ☐ Other



11. In your opinion, what are **three** ways the challenges you identified in question 9 can be addressed?

More Details

● Improving management measur...	54
● Increasing oversight (i.e., inspec...	75
● Increased education and outrea...	47
● State elected officials prioritizin...	90
● Increasing funding and monitori...	59
● Providing technical and financial...	55
● Creating online tools and survey...	11
● Building communication efforts ...	19
● Opening up more access and o...	13
● Diversifying the people, organiz...	33
● Other	11



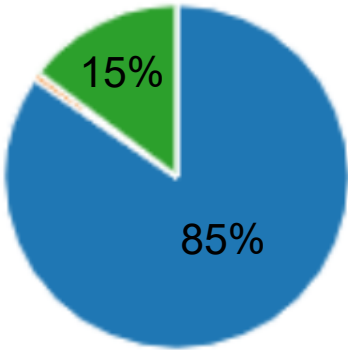
- ☒ Improving management measures
- ☒ Increasing oversight (i.e., inspections, reporting, etc.) of existing rules and regulations
- ☐ Increased education and outreach about our water resources (in school, for elected official etc.)
- ☒ State elected officials prioritizing water protection
- ☒ Increasing funding and monitoring for data collection, data monitoring, technical assistance, and planning
- ☒ Providing technical and financial assistance to develop watershed action plans and/or implement best management practices (BMPs)
- ☐ Creating online tools and surveys to help identify areas of concern and track implementation efforts
- ☐ Building communication efforts across the basins
- ☐ Opening up more access and opportunities for Indigenous Communities to participate in decision making and water management
- ☐ Diversifying the people, organizations, and decision-making bodies to include representation of the communities the basin encompasses



12. A riparian buffer is an area adjacent to a stream, lake, or wetland that contains a combination of trees, shrubs, and/or other perennial plants. Riparian buffers are often managed differently from the surrounding landscape and play a key role in protecting our water resources. Would you support basinwide riparian buffers?

[More Details](#)

● Yes	132
● No	1
● Maybe	23



13. What information do you want the DWR river basin planners to know and/or consider while developing the river basin plan?

[More Details](#)

100
Responses

Give highest priority to a focus on water quality and eliminating industrial pollution from urban centers especially of the toxic organics with long lives



14. What two to three topics would you like to see addressed in the basin plan?

[More Details](#)

110
Responses

Latest Responses
"Preserving buffers, wastewater treatment"

15. How do you receive or how would you like to receive information regarding water quality or quantity issues in the Cape Fear River basin?

[More Details](#)

112
Responses

Latest Responses
"website"

16. Additional comments

[More Details](#)

34
Responses

The remaining amount of pollution from urban centers and via wastewater facilities from industrial plants is shocking as is the permitted growth of development that cannot be sustained without further serious degradation of water quality

17. We understand that your time is valuable and we appreciate any comments you make. Please leave your email below if you would like to receive follow-up information.




Cape Fear

Cape Fear Basin webpage:

<https://deq.nc.gov/about/divisions/water-resources/water-planning/basin-planning/river-basin-plans/cape-fear>

Primary Planner Contact:
Nora Deamer
nora.deamer@ncdenr.gov

- [Link to the survey](#)  (Microsoft Forms)
- Link to an [informational flyer](#) about the river basin (PDF)
- Link to the [framework](#) shared with members of CFRA (PDF)

Cape Fear Basinwide Water Quality Plans

- + 2022 Cape Fear River Basin Water Resources Plan
- + 2005 Cape Fear Basin Plan
- + 2000 Cape Fear Basin Plan
- + 1996 Cape Fear Basin Plan

Cape Fear Water Quantity Plans & Models

[Cape Fear River Basin Water Supply Plan](#)

[Cape Fear – Neuse Combined OASIS Model](#)

Cape Fear Basin Mailing List

To subscribe to DWR's Cape Fear River Basin email list to receive emails regarding public comment periods and public meetings related to the basin, please fill out the form below. Public participation in the development of the basin plan is encouraged.

Full Name:

Email:

Survey - <https://forms.office.com/pages/responsepage.aspx?id=3lF2etC5mkSFw-zCbNftGURy0IHIs1dGgJ5QT3i27UBUQUZRUIAxVDU1V1ZSN0tTT1hSRDVCNjVaUyQIQCN0PWcu>
Framework – <https://deq.nc.gov/water-resources/planning-section/basin-planning/bpbcape-fearframework-cfrajuly2022>
Informational flyer - <https://deq.nc.gov/water-resources/planning-section/basin-planning/bpbcape-fearinformational-flyerjuly2022>

Proposed - Cape Fear River Basin Plan Timeline

Cape Fear River Basin Plan Process	Due Date
Plan preparation and Stakeholder Outreach	2022
Internal Review Period	December 2022
Public Review	January 2023
Incorporate Changes	February 2023
Premeeting & WQC Materials	February 2023
WQC Meeting	March 2023
Premeeting & EMC Materials	April 2023
EMC Meeting	May 2023

**Currently running a
few months behind**



Questions



Nora Deamer

nora.deamer@ncdenr.gov

919-707-9116

