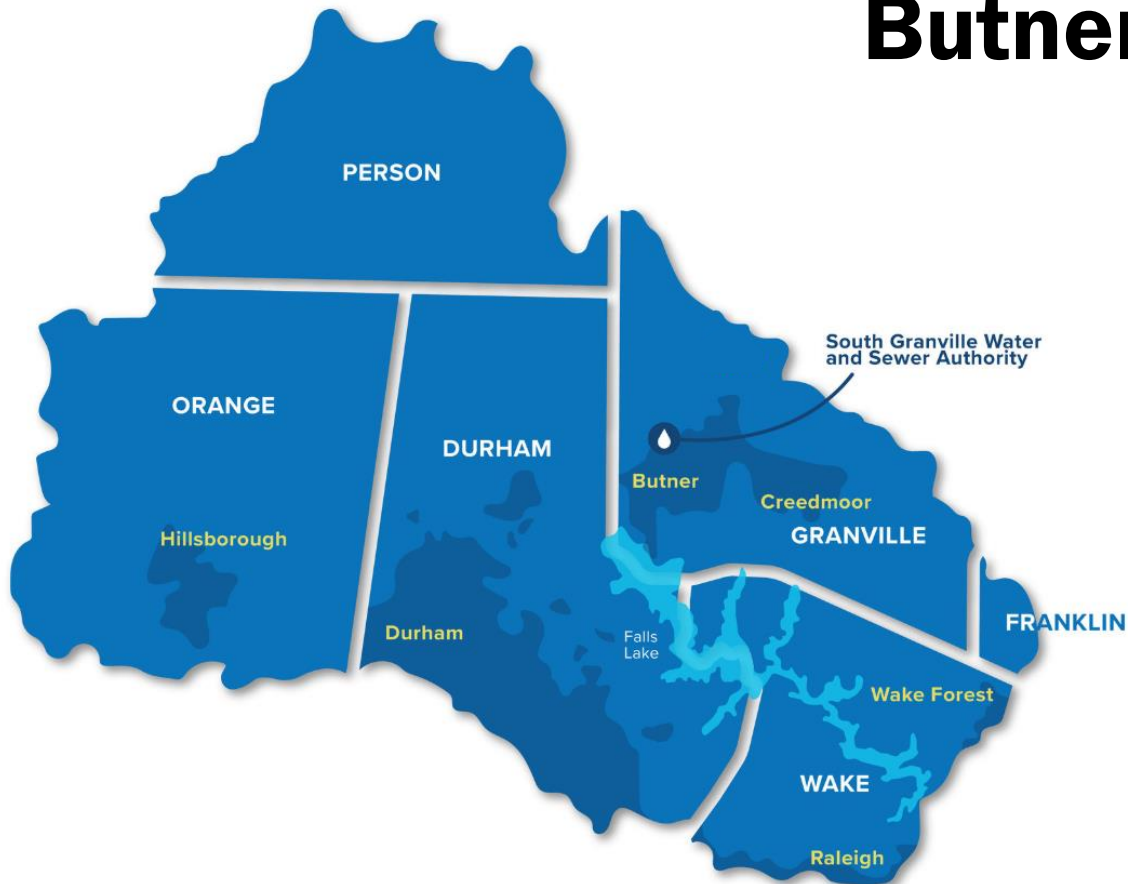




UNRBA Board Meeting September 18, 2019 Butner Town Hall



September 18, 2019 UNRBA Board Agenda

- Opening—Jimmy Clayton, Vice-Chair
- Action Items
 - Approval of June 19, 2019 Meeting Minutes
 - Treasurer's Report
 - Approval of the UNRBA Media Engagement Protocol
- Status Reports and Informational Items
 - Site Specific Standard for Chlorophyll-a
 - Consideration of an Alternative Implementation Approach
 - Development of a UNRBA Decision Framework
 - Modeling and Regulatory Support (MRS) Status
 - Monitoring Program Status
 - Ongoing DEQ Discussions/Issues
 - UNC Collaboratory Coordination
 - Communications Support Status
- Closing Comments

Opening—Jimmy Clayton

Opening

- Introductions and announcements
- Roll call for quorum
- Identification of any conflicts
- Review agenda

Action Items

Meeting Minutes for June 2019

Treasurer's Report

Approval of Media Engagement Protocol

**Approval of June 19, 2019
Meeting Minutes**

Treasurer's Report

- Approval of banking summary
- Report on banking change to the Civic Federal Credit Union
- Prospective budget for FY2021 will be provided at the November meeting

Treasurer's Report

9/9/2019

Balance Forward: (per bank statement - 6/25/19)	Checking	\$	53,801.60
	Savings		508,605.23
Debits:			
McGill Asso. (June & July, 19 Invs)		\$	32,527.86
Brown & Caldwell (MP, FY 19, May & June, 19 Invs)			33,696.83
Brown & Caldwell (MRS, FY 19, May & June, 19 Invs)			98,552.06
Barnes & Thornburg (May & June 19 Invs)			12,757.44
Sauber Water Quality Consulting (June & July 19 Invs)			4,410.00
MFG Consulting, LLC (June & July 19 Invs)			480.00
Phthisic Consulting Inc. (June & July 19 Invs)			1,489.38
HDR, Inc. (June & July 19 Invs)			8,495.75
Bank Fees			2.00
			<u>2.00</u>
Total Debits		\$	192,411.32
Credits:			
Interest (checking)		\$	83.75
Interest (savings)			366.37
FY 2019-20 Membership Fees			587,084.53
Transfer from Savings to Checking Account			100,000.00
			<u>100,000.00</u>
Account Balance (per bank statement - 8/26/19)	Checking	\$	548,558.56
	Savings		408,971.60
Total UNRBA Account Balance :		\$	<u>957,530.16</u>
Outstanding invoices/deposits in process since the close of bank statement (8/26/19):			
Debits:			
McGill Asso. (Aug 19 Inv)		\$	-
Brown & Caldwell (MP, FY 19, July, 19 Inv)			21,446.19
Brown & Caldwell (MRS, FY 19, July, 19 Inv)			1,411.51
Penn National Insurance			572.00
MFG Consulting, LLC (Aug 19 Inv)			75.00
Phthisic Consulting Inc. (Aug 19 Inv)			859.80
Great American Insurance			1,075.00
Sauber Water Quality Consulting (August 19 Inv)			1,680.00
Credits:			
FY 2019-20 Membership Fees		\$	-
Current Account Balances:	Checking	\$	524,194.06
	Savings		408,971.60
Total UNRBA Account Balance :		\$	<u>933,165.66</u>

Treasurer's Report

- Approval of banking summary
- Report on banking change to the Civic Federal Credit Union
- Prospective budget for FY2021 will be provided at the November meeting

Approval of Media Engagement Protocol

Media Engagement Protocol

- Established a structure for the UNRBA's media relations during the reexamination
- Dual focus – proactive outreach and post-publication education – to encourage timely, accurate coverage
- Executive Director serves as primary spokesperson of the UNRBA
- Executive Committee reviews all media responses and approves media interactions before they take place
- Allows for a media response decision to go to the Board if the Executive Committee feels this is needed
- Approach relies on already-approved communication tools and messages

Do you know a reporter who might be willing to write a story on the UNRBA? Let Forrest know!

Status Reports and Informational Items

Site Specific Standard for Chlorophyll-a

REVIEW

DWR's Scientific Advisory Council's (SAC) recommendations for site specific chlorophyll-a water quality standards in High Rock Lake

Path Forward Committee Meeting September 3, 2019

SAC Members

Martin Lebo and Clifton Bell

NCDP Science Advisory Council

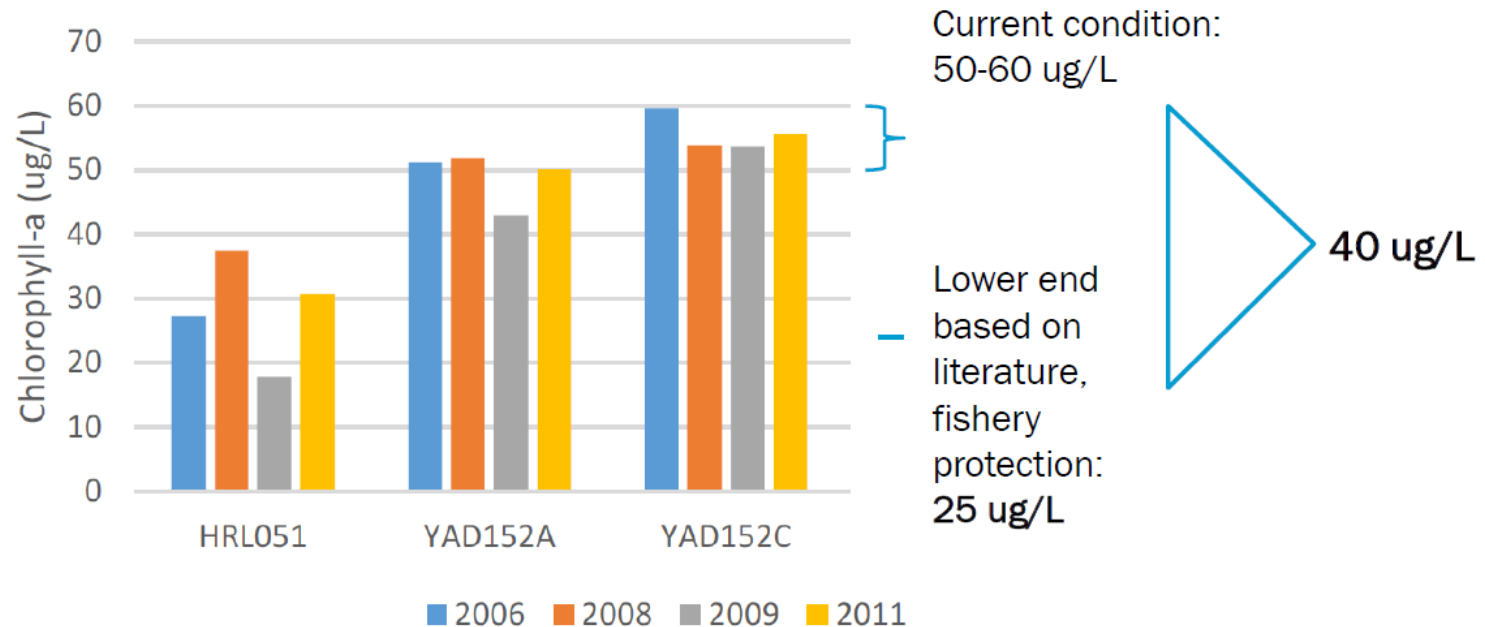
- High Rock Lake, Albemarle Sound, Middle Cape Fear River
- May 2015 –SAC First Meeting
- Deliberations focused on proposals for site specific criteria
- Challenge: Define the specific numeric threshold for protection of designated uses – Water Supply, Recreation, Fish and Wildlife.

High Rock Lake Characteristics

- Good Fishery
- Few nuisance algae blooms
- Few User Complaints
- Algal Toxins below concern
- Raw water treatable (WS)
- No Surface Scums of Algae
- No clear Impact to WS
- No clear impact to recreation
- Cyanobacteria often dominate
- Water often very green
- Water clarity low
- Elevated pH
- Large daily swings in dissolved oxygen saturation

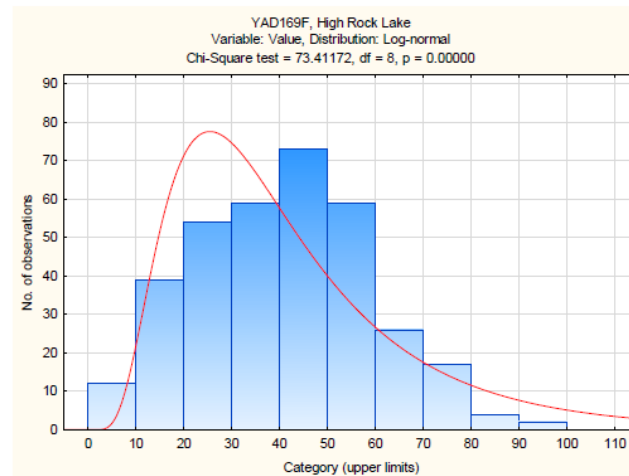
SAC Potential Range of Interest

SAC discussed 25- 40 ug/L as the potential range of interest



Basis of Recommendation for Seasonal Geometric Mean

- A measure of overall trophic status to protect against a variety of effects over different time scales.
- Geomean is measure of central tendency for log-normal or asymmetric variables (USEPA, 2012)
- Precedents (e.g., Florida, Virginia, Missouri)



Surviving SAC Proposal from December 2018

- Magnitude: 35 ug/L
- Frequency/duration: “Seasonal geomean for samples collected from the months of April-October for the assessment period.”
- Basis:
 - “Support for warmwater fishery while lowering potential for future impacts to aquatic life, recreation, and drinking water.”
 - “Derived from 25-40 ug/L range for warmwater reservoirs. Near the upper end...due to mostly favorable indicators.”

SAC High Rock Lake Recommendation site specific chlorophyll a standard

- 35 ug/L chlorophyll-a growing season geometric mean
- Number of years – still under discussion
- Spatial Assessment unit – still under discussion
- Photic zone composite samples
- Growing Season - April 1 through October 31.
- Minimum number of samples ten observations.
- Not to exceed chlorophyll criteria – still under discussion

Wording could change before formal documentation completed !

Current Proposal for Chla Standard

- o **Long-term Geomean for Chla during the months of April through October – not greater than 35 µg/L for each assessment unit (under discussion)**

Table 2. Proposed Chlorophyll a Standard for High Rock Lake.

Parameter	Selection	Notes on Selection
Chla Criterion	35 µg/L	Not to Exceed; Each Assessment Unit
Period	Multi-Year Geomean	Calculated Geomean for Assessment Period
Season	April-October	Applies to all seasons but assessed as geomean for growing season months
Spatial Considerations	Open Waters	Applies to waters with typical depth greater than 10 feet; shallow waters and isolated coves to be addressed through narrative criteria; all data within an assessment unit are incorporated into the calculated geomean
Confidence	TBD	No Agreement in Concept – potential for statistical confidence in assessment of impairment decisions

Note – NCSAC Agreed in Concept in Dec 2018; Final Agreement will be based on detailed write-up



Commentary

The objective of the North Carolina Nutrient Criteria Development Plan (NCDP) Scientific Advisory Council (SAC) is to provide advice and recommendations to the NC Division of Water Resources (DWR) on site-specific nutrient criteria based solely on data and scientific judgments about pollutant concentrations and their effects.

**Communications with the UNC Policy
Collaboratory: Falls Lake site specific
water quality standards for chlorophyll-a**

The Chlorophyll-a Standard is Critical to Developing a More-appropriate Lake Management Strategy

- NC Rules require attainment of the Chlorophyll-a WQS
Otherwise - Clean Water Act requires impairment listing CWA 303(d) and TMDL or Management Strategy
 - High Rock Lake does not have TMDL or Management Strategy
 - Jordan Lake has a TMDL and rules
 - Falls Lake has a management strategy specified in the Falls Lake Rules
- Regardless of the UNRBA science developed to better understand the lake The chlorophyll-a standard remains the sole basis for determining if the waters are “in or out” of compliance
- A publicly supportable determination of “compliance” can only occur if the standard is related to protection of designated uses
- The current chlorophyll-a standard and how it is being applied doesn't reflect impairments to the public's uses and needs to be revised based on the site-specific conditions

UNRBA Chlorophyll-a challenges – drivers for a site-specific standard

- WQ Standards Attainment CWA 305(b) and 303(d)
- Status DWR STD Revision of chlorophyll-a
- DWR NCDP Science Advisory Council
- Modeling and Regulatory Support Implications
- NCAC Water Quality Site Specific Standards
- Legal Group Considerations - Re-examination may need site specific standards as part of ensemble approach

UNRBA July 27, 2018 UNRBA letter to the Environmental Management Commission

- Chlorophyll-a should be based on central tendency, not instantaneous measurements impacted by short-term conditions
- Current standard difficult to equate to protection of designated uses
 - * Higher values may not indicate impairment
 - * Lower values may not be protective of uses
- Chlorophyll-a standard, at a minimum, should include
 - Provision to allow the development of site-specific standards that reflect an appropriate value related to designated uses
 - Methodology for application of a central tendency determination

Modeling and Regulatory Support Implications

- If compliance is determined at individual stations, will Falls Lake meet standards (i.e., upstream of Hwy 50, upstream of I-85)?
- Is there scientific support for site specific criteria for different portions of Falls Lake?
- If DWR/SAC/EMC cannot substantiate a relationship between chlorophyll-a levels and specific designated uses, can modeling and science identify alternative site-specific criteria?
- EPA has been supportive of chlorophyll-a site-specific criteria in other states when statewide criteria have been absent or less restrictive. What does that mean for Falls Lake?
- If site specific chlorophyll-a standard for HRL is adopted, will EPA approve? What are the ramifications for Falls Lake?

Consideration of an Alternative Implementation Approach

Alternative Implementation Approach— Status of Discussions

- Following the August PFC meeting, a strawman framework has been developed for consideration
- Strawman distributed prior to the September PFC meeting
- Strawman incorporates additional flexibility to better utilize the efficiencies of existing programs
- The PFC will discuss the strawman at a special meeting scheduled for September 24, 2019

Objectives of the Alternative Implementation Approach

- Promote reasonable progress and communicate a commitment to maintain uses and provide water quality improvement
 - Implement projects in the watershed while the re-examination continues toward completion
 - Use a simplified framework based on funding levels to overcome challenges with the Rules as currently written
- Demonstrate commitment of the UNRBA to a reasonable, fair, and equitable management strategy
- Utilize existing programs when available to efficiently implement eligible projects and activities
 - Minimize administrative and process delays
 - Seek ways to lower costs in the development and installation of projects

What might be the Role of the UNRBA?

- Assist the members in the establishment of a workable framework
- Compile progress reports from UNRBA members
- Summarize progress from the membership as a whole
- Coordinate funding activities as appropriate, depending on approach taken by the jurisdictions to fund projects

Funding Options

- Self-funded – An individual member may use funds for eligible projects and activities within and managed by their own jurisdiction.
- Interlocal agreement – Individual members may enter into an interlocal agreement where eligible projects and activities are jointly funded.
- Funding other local programs – Individual members may contribute funds to other local programs including local Soil and Water Conservation Districts, County Health Departments, watershed associations, and land conservation groups.
- Contribution to UNRBA pool of funds – Individual members may contribute to a joint funding pool that would be used by the UNRBA to fund eligible projects and activities.

Duration

- Begin in the FY2021 budgeting cycle
- Continue until a revised nutrient management strategy is put in place and implementation begins
- Previous and ongoing nutrient reduction activities and projects will count in the newly developed management strategy
- Investments made to maintain water quality/uses and improve water quality would include work performed previously

Development of a UNRBA Decision Framework

UNRBA Decision Framework

- In September, the PFC discussed a plan to develop a Decision Framework for the UNRBA.
- The UNRBA will have to make three types of decisions during the development of the re-examination package:
 - Administrative
 - Technical
 - Policy related
- The October, November, and December PFC meetings will focus on the decision-making process for the UNRBA (meeting start times of 9:00 AM)
- The anticipated schedule includes developing a framework for presentation at the January Board of Directors Meeting.

Modeling and Regulatory Support Status

Status of the Modeling

- Currently focused on the historic modeling period (2005 to 2007)
- Working with NC Department of Transportation (DOT) and the State Climate Office to develop precipitation estimates at ~80 locations
- Working with NC Department of Agriculture to incorporate county level crop and pasture data into land use estimates
- Working with NC DOT to update the roads database
- Coordinating with researchers at the UNC Collaboratory concerning a potential project to develop model inputs for many types of onsite wastewater treatment systems
- Modeling and Regulatory Support Workgroup will meet September 25th to discuss progress

Monitoring Program Status

Considerations for FY2021

- The UNRBA currently implements a scaled-back Transition Monitoring program
 - Monthly nutrient sampling at 12 locations
 - Total organic carbon sampling at 6 locations
- Data from other organizations including DWR provides additional data in the watershed
- The PFC discussed potential changes to the program for FY2021 at the September meeting and will continue the discussion at the October PFC meeting
- Guidance from the PFC regarding a FY2021 Transition Monitoring program will be brought to the Board in November

Ongoing DEQ Discussions/Issues

Ongoing DEQ Discussions/Issues

- Scheduling a meeting with DWR to review the 2019 Annual Monitoring Program Report
- The relationship between a site-specific chlorophyll-a standard for Falls Lake and the NC Numeric Nutrient Criteria Development Plan
- Depending on outcome of UNRBA discussions, engage DEQ on an Alternate Implementation Approach
- Continue to engage DEQ in the technical stakeholder sessions and secure input to modeling as it is being developed

Coordination with the UNC Collaboratory

Meeting with the UNC Collaboratory on September 20th

- Meeting with UNC Collaboratory managers and researchers to
 - Provide a review of the UNRBA monitoring data and special studies
 - Provide orientation to the online reports and data portal
 - Identify data and information to support the Collaboratory's planned work on Falls Lake
 - Summarize results from the UNRBA 2019 Annual Monitoring Report
 - Discuss any additional research projects that may be undertaken

Communications Support Status

Communications Support Status

- A timeline that can be used to show progress on the UNRBA's efforts to complete the re-examination has been finalized
- A final draft Media Engagement Protocol has been completed and presented to the Board for approval today
- Progress has been made on all work products required under the 2019 contract
 - A UNRBA Stakeholder Forum will be scheduled for late January or early February
 - Media Engagement Protocol presented for approval today
 - Elected official orientation package

Fast Facts and Infographic

- The UNRBA fast facts and infographic are available for review on the [Resource Library](#) page.
- If you use any of these presentation materials, please complete the communication tool use tracking survey : <https://www.surveymonkey.com/r/UNRBA>.

Closing Comments

**Next UNRBA Board Meeting
is Scheduled for
November 20, 2019
Butner Town Hall
9:30 AM to Noon**