

AGENDA

Lower Neuse Basin Association, Inc.[®] Neuse River Compliance Association, Inc.[®]

**May 4, 2017
City of Kinston, N.C.
10:00 a.m.**

- **Welcome, Roll Call, and Introduction of Guests**
- **Approval of Minutes for February, 2017 – {pages 2 – 4}**
- **Proposed By-Law Revisions – {page 5}**
- **Officer Nominating Committee Report and Officer Elections – {page 6}**
- **LNBA/NRCA Treasurer's Report –**
 - * **March, April, and May 2017 Treasurer's Reports {page 7}**
 - * **Contract Renewals (MFG, LLC, Sauber, & ModMon) {page 8}**
- **LNBA Sampling Report, February, March, and April, 2017 – {page 9}**
- **LNBA/NRCA Annual Training Workshop Update – {page 10}**
- **LNBA and NRCA Annual Reports - {powerpoint and pages 11 – 12}**
- **NRCA Nitrogen Projection and Discussions - {powerpoint and handout}**
- **Dissolved Organic Nitrogen, Reactive with Algae? Dr. Hans Pearl**
- **Letter to DEQ Secretary – {page 13 – 14}**
- **Yellow Lance – {powerpoint, handout}**
- **Rules Review Schedule and Comments -**
- **Legislative Updates -**
- **Member Reports –**
- **Next Meeting and Adjourn – Location/Date: Dupont-Kinston, September 7, 2017**

**Lower Neuse Basin Association®/Neuse River Compliance Association®
February 2, 2017, Meeting Minutes
City of Raleigh, N.C.**

Attending:

Donald Smith	Town of Cary	Marty Stone	Town of Apex
John Cratch	Town of Apex	Jeff White	Dupont - Kinston
Fred Dancy	SGWASA	Emily Elmore	City of Kinston
Paul Allen	Town of Benson	Barry Parks	City of Wilson
Tim Webb	City of Havelock	Jimmy Pridgen	City of Wilson
T. J. Lynch	City of Raleigh	Danny Lassiter	CWS, Inc.
James Warren	Town of Clayton	Chuck Smithwick	Contentnea MSD
Dan Wall	Johnston County	Mike Graham	Duke Energy Progress
Steve Tedder	TFC/EMC	Mike Wagner	City of Goldsboro
Rusty Hayes	Craven County	William Simpson	Town of Clayton
Mark Vander Borgh	DEQ DWR WSS	Adam Stephenson	Town of Fuquay-Varina
David Huffman	DEQ DWR	Dan McLawhorn	City of Raleigh
Kenny Stevens	City of Kinston	Glenn Dunn	Poyner & Spruill
Haywood Phthisic	LNBA/NRCA	Jay Sauber	Water Quality Consultant
John Craft (call in)	Town of LaGrange	Timothy Lawrence (call in)	MCAS-CH

The Chair, Dan McLawhorn, called the meeting to order and welcomed everyone. The roll was called and there were 15 of 18 members present representing the LNBA and 18 of 22 members present representing the NRCA. There was a quorum present for both association. Guests were introduced and recognized.

Board Minutes – The Board Minutes from the November 3, 2016 meeting were presented for approval. With no revisions, the minutes were approved as presented.

LNBA Sampling Committee Report – Work on the Lower Neuse River Monitoring Service Contract No. 5 with Environment I continues. All sampling was completed by Environment 1 in November, December, and January, 2017 except as noted below. Data sets have been received through November, 2016 and loaded on the website. All invoices through December, 2016 have been processed and paid.

November, 2016 – All samples collected and analyzed per MOA. J7850000 (11/30/16) was sampled from the bank because the boat ramp was displaced during Hurricane Matthew.

December, 2016 - All samples were collected and analyzed per MOA requirements. These results are in the data review stage.

January, 2017 - All samples were collected per MOA requirements. No exceptions noted.

Treasurer's Report - The Treasurer's Reports for November, December 2016, and January 2017 were presented by Donald Smith, Treasurer. As of January 27th the LNBA account balances were \$144,742.35 and NRCA account balances are \$166,326.69. Barry Parks made a motion to approve the reports as presented, seconded by Chuck Smithwick, and approved by the Board.

Proposed Budget and Membership Fees for FY 2017-18 – Haywood presented the Finance Committee’s (Barry Parks, Donald Smith, Chuck Smithwick, and Haywood Phthisic) recommended budget and membership fee schedule for FY 2017-18. No increase was recommended in the LNBA budget or fee schedule. For the NRCA the committee recommended funding at the same level as the current year and funding the ModMon Program in the amount of \$5,000.00 with funds from fund balance. Following discussion, John Craft made a motion to approve the Finance Committee’s recommendation, seconded by T. J. Lynch, and approved by the Board.

LNBA/NRCA Website Data and Information – Haywood reviewed the current operating status and access to information and data on the website. The Board minutes, agendas, the sampling information/data require logging in to the website to access (as previously designated by the Board). Haywood noted that the Board Minutes, meeting presentations, comment letters, and agenda packages are available on the website (on “Meetings Calendar” page). The meeting page serves as a permanent library for files of the associations and Haywood’s request/recommendation to the Board is to make this information available without requiring a log in (the monitoring data would require log in to access). Following discussion, T. J. made a motion to remove the log in requirement on the above information, seconded by Barry Parks, and approved by the Board.

Officer Selection Committee Appointments – Dan appointed T.J. Lynch, John Cratch, and Kenny Stevens to serve on the Officer Selection Committee. The committee is to meet and make a recommendation for officers at the May meeting.

NRCA Nitrogen Cost Capital Investments – Haywood presented an updated capital cost summary created from member input and noted that he will be requesting cost information to bring the summary up to date.

Craven County Water Treatment Facility – Rusty Hayes with Craven County made a presentation to the Board on their new water treatment facility that will be ready for operation in the near future.

Proposed By-Law Revisions – The By-Laws Committee (James Warren, Tim Webb, and Haywood Phthisic) reported on three revisions for the Board’s consideration:

Appointments: Expand the designation of board members to include a Director, Alternate 1, and Alternate 2.

Quorum: Revise the quorum to allow meeting to proceed with 40% of the membership is present. In order to take action on any agenda items, 50% of the membership is required for a quorum.

Voting: Clarify the voting responsibility of Director/Alternate when a Director is serving as Chair. The Alternate 1 or Alternate 2 will be recognized as the voting party in this case.

Following discussion by the Board, James Warren made a motion to approve the revisions, seconded by Kenny Stevens, and approved by the Board.

Comments on EPA Revised 303(d) Listing and Algal Toxins – EPA recently has sought public comment on the revised 303(d) and also an algal toxin for recreational ambient water quality criteria. Dan and Jay Sauber reviewed the draft letters on each issue. Following discussion by the Board, Tim Webb made a motion to send the comments on both issues, seconded by Kenny Stevens, and approved by the Board.

Executive Director Notes – Haywood reported the NRCA annual report is underway for 2016 followed by preparation of the LNBA's Annual Report. The Training Workshop Committee will begin work in the near future. A reminder to members to sign the register for continuing education hours before leaving the meeting today.

The next meeting is scheduled for May 4, 2017 at 10:00 hosted by the City of Kinston. With no further business the meeting was adjourned.

Draft

By-Law Committee Recommendations

5/02/17

By-Law Committee Members - James Warren, Town of Clayton; Timothy Webb, City of Havelock and Haywood Phthisic, Executive Director.

The committee (through telephone calls) discussed the suggestion at the last Board meeting regarding revising the by-laws to allow Directors and Alternates serve as officers. After discussion, the committee recommends the following for consideration by the Board:

- 1.> **LNBA** – The committee recommends the Board consider revising the by-laws to allow Director and Alternates serve as Officers.
- 2.> **NRCA** - The committee recommends the Board consider revising the by-laws to allow Director and Alternates serve as Officers.

Lower Neuse Basin Association
Neuse River Compliance Association

MEMORANDUM

TO: LNBA/NRCA Board

FROM: Officer Selection Committee (T.J. Lynch, Kenny Stevens, and John Cratch)

DATE: April 18, 2017

SUBJECT: Officer Nominations for 2017.

The committee met via conference call on February 28, 2017 to review and discuss possible nominations for the Chair, Vice-Chair, Treasurer, and Secretary for the Lower Neuse Basin Association and the Neuse River Compliance Association. Members of the committee contacted the current officers and all agreed they were willing to serve a two year term beginning May 4, 2017.

The Committee recommends the following members to serve as officers beginning May 4, 2017 through May 2, 2019:

Chairman – Dan McLawhorn, City of Raleigh
Vice-Chair – Barry Parks, City of Wilson
Treasurer – Donald Smith, Town of Cary
Secretary – James Warren, Town of Clayton

Lower Neuse Basin Association, Inc. / Neuse River Compliance Association, Inc.

Treasurer's Report

5/1/2017

LNBA

Balance Forward: (checking per bank statement -1/27/17)	Checking	\$	94,413.70
	Savings	\$	50,328.65
Debits:		\$	
Environment 1 (Jan, Feb, & Mar 17 Invs)			21,868.74
Phthisic Consulting, Inc. (Jan, Feb, Mar 17, Invs.)			5,065.99
Poyner & Spruill (Jan & Feb 17 Invs)			1,789.88
Sauber Water Quality Consult. (Jan 17 Inv)			630.00
MFG Consulting, Inc. (Jan 17 Inv.)			255.00
Bank Charges (checks & maintenance fees)			3.00
			<hr/>
	Total Debits	\$	29,612.61
Credits:		\$	
Interest (checking)			30.15
Interest (savings)			30.69
Membership Fees			-
Checking Account Balance (per bank statement - 4/26/17)		\$	64,831.24
LGCU Share Account Balance (savings account)			50,359.34
			<hr/>
Total LNBA Account Balance		\$	115,190.58
			<hr/> <hr/>

NRCA

Balance Forward: (per bank statement - 1/27/17)	Checking	\$	112,581.14
	Savings		53,745.55
Debits:		\$	
Sauber Water Quality Consult. (Jan 17 Inv)			630.00
PCi (Jan, Feb, & Mar 17 Invs.)			8,610.00
Poyner & Spruill (Jan & Feb 17 Inv)			1,789.35
MFG Consulting, Inc. (Feb & Mar 17 Invs.)			150.00
Bank Charges (checks & maintenance fees)			3.00
	Total:	\$	11,182.35
Credits:		\$	
Transfer to Checking			-
Interest (Savings)			32.77
Interest (Checking)			39.05
Membership Fees			-
Account Balance (per bank statement -4/26/17)	Checking	\$	101,437.84
LGCU Share Account Balance (savings account)	Savings		53,778.32
			<hr/>
Total NRCA Account Balance		\$	155,216.16
			<hr/> <hr/>

Contract Renewals for LNBA & NRCA for FY 2017-18 and FY 2018-19

Lower Neuse Basin Association:

Sauber Water Quality Consulting – Amount \$3,500.00

MFG Consulting, LLC (website support) – Amount: \$1,500.00

Neuse River Compliance Association:

Sauber Water Quality Consulting – Amount \$3,500.00

MFG Consulting, LLC (website support) – Amount: \$1,500.00

Modmon Funding – Amount: \$5,000.00

Lower Neuse Basin Association®

TO: Board Members

FROM: Water Sampling Contract Coordinator

SUBJECT: Sampling/Monitoring Report for May 04, 2017 Board Meeting

DATE: May 2, 2017

Work on the Lower Neuse River Monitoring Service Contract No. 5 with Environment 1 continues. All sampling was completed by Environment 1 in February, March, and April, 2017. Data sets have been received through February, 2017 and loaded on the website. All invoices through March, 2017 have been processed and paid.

February, 2017 – All samples collected, analyzed, and reported per MOA.

March, 2017 - All samples were collected and analyzed per MOA requirements. Results are in the data review stage.

April, 2017 - All samples were collected per MOA requirements. Results are in the data review stage.

LNBA/NRCA Annual WWTP Operator Training

Sponsored By: *Lower Neuse Basin Association and the Neuse River Compliance Association*

Cost: Free to employees of LNBA/NRCA Member Facilities (must be employed at a member facility), **lunch will be provided.**

Locations:	Raleigh, N.C.	July 18, 2017	8:30 am – 4:00 pm
	Kinston, N.C.	July 20, 2017	8:30 am – 4:00 pm

Registration will begin “June 7, 2017” and remain open until “July 10, 2017”.
Seating is limited to 60 attendees at both locations.

Directions and registration confirmations will be emailed to the “designated coordinator” of each association member on or before July 14, 2017.

Course Description: This course is approved by the WPCSOCC for six (6) continuing education hours and is approved for **all wastewater certificates**. A certificate of completion will be given at the conclusion of the course. **You must attend the entire class to receive a certificate.** The LNBA/NRCA will report attendance (for those who complete the course) to the WPCSOCC on behalf of the individual operators.

The program topics for this workshop are:

- 1.) How to Complete the SSO Reporting Form.
- 2.) EPA Reporting Requirements for Sludge.
- 3.) Screw Press Presentation.
- 4.) WWTP Side Stream Treatment.
- 5.) Biogas Utilization.
- 6.) Hurricane Matthew (3 case Studies).

NEUSE RIVER COMPLIANCE ASSOCIATION

Total Nitrogen Monitoring Report for 2016

Date: March 22, 2017

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FACILITY	NPDES Permit #	END OF PIPE				ESTUARY			Annual Lease (Estuary Lbs.)	Transport Factor	Member TN Discharge (Lbs/Yr.)	Member Estuary Allocation	Adjusted TN Allocation 2016 (Lbs/Yr.)	2016 TN Delivery (Lbs/Yr.)	% of Estuary Allocation
		Permit Flow (MGD)	2016 Avg. Flow (MGD)	Member TN Allocation (Lbs/Yr.)	Member TN Discharge (Lbs/Yr.)	Member Estuary Allocation	Adjusted TN Allocation 2016 (Lbs/Yr.)	2016 TN Delivery (Lbs/Yr.)							
SGWASA	NC0026824	5.500	2.019	58,599	14,111	10%	0	5,860	0	1,411	24				
Town of Apex	NC0064050	3.600	1.087	40,547	12,451	50%	0	20,274	0	6,226	31				
Town of Benson	NC0020389	1.900	1.063	33,070	10,724	50%	0	16,535	0	5,362	32				
Town of Cary ~ North	NC0048879	12.000	5.659	143,246	38,968	50%	0	71,623	0	19,484	27				
Town of Cary ~ South	NC0065102	12.800	5.369	180,211	34,452	50%	0	90,105	0	17,226	19				
City of Raleigh ~ Smith Creek	NC0030759	3.000	1.872	70,814	20,752	50%	0	35,407	0	10,376	29				
City of Raleigh ~ Neuse	NC0029033	60.000	46.106	687,373	422,673	50%	0	343,687	0	211,337	74				
Raleigh ~ Ground Water	NA	NA	NA	NA	89,002	50%	NA	NA	NA	44,501					
City of Raleigh ~ Little Creek	NC0079316	2.200	0.805	26,660	4,388	50%	0	13,330	0	2,194	16				
Town of Clayton	NC0025453	2.500	1.439	22,832	20,408	50%	0	11,416	0	10,204	89				
Neuse Colony, (Aqua NC)	NC0064564	0.350	0.243	8,447	6,655	50%	0	4,224	0	3,328	79				
Johnston County	NC0030716	9.500	4.610	71,476	50,391	50%	0	35,738	0	25,196	71				
Town of Kenly	NC0064891	0.630	0.401	7,096	3,080	50%	0	3,548	0	1,540	43				
Town of Farmville	NC0029572	3.500	2.003	42,211	7,481	50%	0	21,106	0	3,741	18				
City of Wilson	NC0023906	14.000	9.497	157,886	65,558	50%	0	78,943	0	32,779	42				
Duke Energy ~ Lee Facility	NC0003417	NA	0.041	0	34	70%	0	2,282	0	24	1				
City of Goldsboro	NC0023949	14.200	9.807	199,822	68,193	70%	0	139,876	0	47,735	34				
Town of LaGrange	NC0021644	0.750	0.642	8,447	8,734	70%	1,000	6,913	0	6,113	88				
City of Kingston (Regional)	NC0024236	11.850	6.278	126,711	46,487	70%	0	88,697	0	32,541	37				
Contentnea MSD	NC0032077	3.500	2.137	37,100	10,369	70%	0	25,970	0	7,258	28				
Dupont-Kinston, Inc.	NC0003760	3.600	0.307	25,493	1,381	70%	0	17,845	0	967	5				
City of New Bern	NC0025348	6.500	3.957	64,210	56,515	100%	0	64,210	0	56,515	88				
MCAS Cherry Point	NC0003816	3.500	1.743	39,421	22,115	100%	0	39,421	0	22,115	56				
City of Havelock	NC0021253	1.900	1.326	21,400	15,461	100%	0	21,400	0	15,461	72				
Carolina Water Service, Inc.	NC0033111	0.600	0.321	11,263	9,510	100%	0	11,263	0	9,510	84				
		177.880	108.734	2,084,335				1,169,673		593,145	51				

This Compliance Report has been compiled from co-permittee members' monthly discharge monitoring reports. I certify that this report is accurate and complete to the best of my knowledge.

Daniel F. McLawhorn, Chairman, Neuse River Compliance Association _____ Date

- NOTES: 1. Average Total Nitrogen Concentration End of Pipe by NRCA Members during 2016: **2.86** MG/L
 2. Average Total Nitrogen Concentration with ground water contribution in 2016: **3.13** MG/L
 3. NRCA's Annual Report Prepared By: Haywood M. Phthisic, III, Executive Director

NRCA 2016 Annual Report Summary w/ Potential TN Reductions

Date: 3/23/2017

FACILITY	Average EOP Conc (mg/l)	Average Flow MGD		Potential TN Reduction (lbs)
Duke Energy Progress - Lee	0.00	0.041		
Town of Farmville	1.22	2.003		
Dupont-Kinston	1.47	0.307		
Contentnea MSD	1.59	2.137		
City of Raleigh - Little Creek	1.79	0.805		
Town of Cary, South	2.10	5.369		
Town of Cary, North	2.26	5.659		
City of Wilson	2.26	9.497		
City of Goldsboro, Pipes 01&02	2.28	9.834		
SGWASA	2.29	2.019		
City of Kinston (Regional)	2.43	6.278		
Town of Kenly	2.51	0.401		
City of Raleigh - Neuse	3.00	46.106		
Town of Benson	3.31	1.063	0.31	990
Johnston County	3.58	4.610	0.58	1,885
City of Raleigh - Smith Creek	3.63	1.872	0.63	3,606
Town of Apex	3.75	1.087	0.75	2,498
City of Havelock	3.82	1.326	0.82	3,323
MCAS Cherry Point	4.16	1.743	1.16	6,150
Town of LaGrange	4.46	0.642	1.46	2,853
Town of Clayton	4.65	1.439	1.65	7,230
City of New Bern	4.68	3.957	1.68	20,268
Neuse Colony (Aqua)	8.96	0.243	5.96	4,419
CWS Systems, Inc.	9.71	0.321	6.71	6,570
Daily Average	3.03	108.734		58,802
			2015	124,185

Annual Report Values	Average EOP Conc. (mg/L)	Average Estuary Lbs.	Avg. Flow MGD	Avg. Estuary w/o Debit
2003	3.81	722,374	108.379	
2004	3.38	558,777	101.203	
2005	3.25	566,627	101.739	
2006	3.12	542,205	102.970	
2007	3.02	461,325	92.994	
2008	3.41	489,798	91.005	
2009	3.02	497,639	98.570	
2010	2.98	584,398 *	101.909	527,275
2011	2.85	519,199 *	93.384	464,014
2012	2.80	540,892*	97.281	487,794
2013	2.62	514,847*	102.413	463,836
2014	2.71	568,387*	108.359	519,612
2015	3.03	610,915*	108.721	564,277
2016	2.87	593,145*	108.734	548,644

* Includes nitrogen debit for City of Raleigh's land application system

Lower Neuse Basin Association®
Neuse River Compliance Association®

Post Office Box 1410
Clayton, North Carolina 27528 – 1410

May 04, 2017

The Honorable Mr. Michael S. Regan, Secretary
N.C. Dept. of Environmental Quality
1601 Mail Service Center
Raleigh, N.C. 27699-1601

Dear Secretary Regan:

I am writing this letter as chairman of the Lower Neuse Basin Association (“LNBA”) and the Neuse River Compliance Association (“NRCA”). First, I want to congratulate you on your appointment and confirmation as Secretary of the North Carolina Department of Environmental Quality (“DEQ”) on behalf of the LNBA and the NRCA. I speak for myself and, I am sure, for the members of both the LNBA and NRCA in saying we are glad to have a person with your environmental experience heading DEQ.

The purpose of this letter is to familiarize you with the LNBA and NRCA and to set out our concerns regarding the impacts of livestock-related farm operations on water quality in the Neuse River Basin. As you may already know, the LNBA was formed over twenty years ago to engage in a cooperative water quality monitoring program with DEQ in the Neuse River Basin. The NRCA was formed about fifteen years ago to achieve point source nitrogen reduction requirements of the Neuse River Nutrient Sensitive Waters Management Rules adopted by the EMC and the companion TMDL established by the EPA. The LNBA and NRCA are composed of almost all the major point source dischargers in the Neuse Basin including your hometown of Goldsboro. A list of the members of each association is enclosed. The members work together under a “bubble permit” to be able to trade nutrient credits and to support members that need time to bring their facilities up to permit requirements.

The NRCA members have worked cooperatively for the last fifteen years to reduce the nitrogen they discharge by approximately 70% at a cost exceeding \$400 million. The LNBA and NRCA meet and work together to develop and analyze water quality data in the Neuse River Basin and estuary. The monitoring data and analysis done by the LNBA and NRCA, in conjunction with the work of water quality experts Dr. Hans Paerl and Martin Lebo, indicate that nitrogen associated with point sources (nitrate-nitrite) has been reduced in the entire Neuse Basin. The most recent update of the report “Evaluating Effectiveness of Management Actions for the Neuse River Basin – Update Through 2015” and a second report “Neuse River Nutrient Trends – Below Falls Reservoir to Clayton” examine the Neuse at various sampling stations. For the section for the upper Neuse Basin below Falls Lake comprising Wake County and some of the Johnston County, the required reductions in nitrogen associated with non-point source runoff are being achieved despite the high rate of urban land development. The first report shows increasing loads coming into the River after it intersects with primary tributaries Contentnea Creek and the Trent River where non-point sources, primarily agriculture, are dominant. This indicates that non-point source controls, including buffers, are succeeding in the upper Neuse Basin, but

Secretary Regan
May 4, 2017
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such controls are not being successful in the lower Neuse Basin and its primary tributaries which drain parts of the basin that have a significant number of animal operations. The edge -of -field information on other agriculture also shows that it is meeting its reduction goals. In sum, our Associations remain concerned that the lack of progress in total nitrogen loading of the Neuse Estuary is being frustrated in significant part by agricultural animal operations which are contributing nitrogen through surface runoff, groundwater and air emissions. The Division has recently reported to the EMC that the number of animal feed operations continues to grow in the basin.

In view of these studies and their implications, the LNBA and NRCA have been very concerned regarding the lack of information regarding these types of non-point nitrogen sources and the cumulative impacts of animal operations on water quality. Over two years ago we informed former Secretary Skvarla of our concern and requested that the cumulative impacts of animal operations be analyzed as part of the permitting process for the Sanderson Farms chicken processing plant proposed initially in Cumberland County. Enclosed are copies of our email and subsequent letter urging that an environmental impact statement be required to analyze not just the direct environmental impact of the Sanderson facility itself, but the indirect impact of the animal operations that it would precipitate. In response we received a telephone call from then-Deputy Secretary van der Vaart and staff members who disagreed that there was a need to require analysis of such indirect impacts. Consequently an EIS was not required.

The development of the next Neuse Basin Plan will be underway by the Department in the near future. It is scheduled to be issued in 2019 and we think it is appropriate for the Department to more closely examine and report on the failure to make any significant progress on the total nitrogen reductions loading the Neuse Estuary. We also think that the Department needs to provide a candid assessment of what are the appropriate and necessary steps to make the TMDL succeed. The original TMDL recommended nonpoint source allocations, without which that key part of the Plan will never be enforceable. We urge the Department to commit to a robust and thorough Neuse Basin Plan that will set forth a strategy to achieve progress in the upcoming 10 year planning cycle. We also suggest that in the event another poultry processing facility is proposed in or near the Neuse Basin, DEQ should require environmental documentation analyzing the cumulative indirect impacts of the facility.

Thank you for the opportunity to bring this to the Department's attention. If you require additional information please contact me or Haywood Phthisic, our Executive Director.

Sincerely,

Daniel F. McLawhorn, Chair

Enclosure
cc: LNBA/NRCA Boards