Lake Norman Marine Commission Agenda

Thursday, November 19, 2026

Mecklenburg County: Charlotte Water – Dukes Treatment Plant
7980 Babe Stillwell Farm Rd.
Huntersville, NC 28078

1. Welcome
2. Approve Agenda
3. Approval of October 15, 2026 Meeting Minutes *(attachment)*
4. Public Comments
5. Partner Reports
    a. Catawba County Lake Patrol
    b. Cornelius Police Department
    c. Iredell County Lake Patrol
    d. Lincoln County Lake Patrol
    e. Coast Guard Auxiliary
    f. NC Wildlife Resource Commission
    g. Fire partners
    h. Mecklenburg County Water Quality
    i. Duke Energy Lake Services
    j. Catawba Riverkeeper
    k. NC Wildlife Federation
6. Executive Director Report/Update *(attachment)*
7. Non-Project Use Application *(attachment)*
    a. Revised Boater Safety Plan for the R-2307B (NC-150 widening project)
8. Operational Updates – Gary Mozeley
9. Update on Committee Next Steps
10. 2027 Lake Norman Marine Commission Meeting Schedule *(attachment)*
11. Open Discussion
    a. December meeting
    b. eScribe
12. Adjourn

Lake Norman
Marine Commission

Next meeting: Thursday, December 17, 2026 – 7pm
Catawba County: Sherrills Ford-Terrell Library Community Room
9154 Sherrills Ford Rd.
Terrell, NC 28682

Lake Norman Marine Commission

Regular Meeting Minutes – October 15, 2026

The Lake Norman Marine Commission met in Regular Session on Thursday, October 15, 2026, at 7:00 p.m. at St. Peter By-the-Lake Episcopal Church, 8433 Fairfield Forest Road, Denver, NC 28037.

Members present were Barbara Beatty, Jarid Church, Tim Holder, Cameron Sloan, and Rob Weller. Richard Gaskins, Jason Ralston, and Gregory Truesdell were not present. Also, present were Executive Director Jim Loftin, Attorney Chris Clark, and Centralina Regional Council staff support to the board Megan Upchurch**.**

1. **Call to Order and Approval of Agenda.** Commission Vice-Chair Beatty called the regular meeting of the Lake Norman Marine Commission to order at 7:00 p.m., noting a quorum was present. A motion was made by Commissioner Holder and seconded by Commissioner Church to approve the meeting agenda as presented. The motion passed unanimously.
2. **Approval of Minutes.** The Commission reviewed the minutes from the September 17, 2026 regular meeting. A motion was made Commissioner Holder and seconded by Commissioner Sloan to approve the minutes as presented. The motion passed unanimously.
3. **Public Comments.** The Chair opened the public comment period and reviewed the public comment procedures, including the three-minute limit per speaker. No public comments were offered.
4. **Partner Reports**
    - **Catawba County Lake Patrol:** Not present. No report.
    - **Cornelius Police Department:** The Cornelius Police Department reported responding to 26 lake-related calls during September with an average response time of approximately four minutes. Officers also noted an increase in debris and navigational hazards resulting from recent fluctuating lake levels and rainfall.
    - **Iredell County Lake Patrol:** Iredell County Lake Patrol reported 101 calls for service during September, including nine alarms, twenty-nine 911 hang-up calls, and 574 security checks. Additional activity included 17 facility inspections, 14 boat inspections, 11 vessel traffic stops, one vessel crash, approximately 310 patrol hours on the water, and 372 patrol volumes.

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- **Lincoln County Lake Patrol:** Present. Nothing to report.
- **U.S. Coast Guard Auxiliary:** Representatives of the U.S. Coast Guard Auxiliary reported year-to-date activity including 28 patrols totaling 156 hours, 13 boating safety classes serving 205 students, and 441 vessel safety checks. Staff highlighted a boating safety class held on September 19 at Denver Fire Department with eight graduates, seven of whom were youth under age 17. The Auxiliary also announced participation in a boating safety outreach booth at the upcoming Haunted Cove event.
- **North Carolina Wildlife Resources Commission:** Representatives reported that boating activity has slowed seasonally and noted the opening of the three-day duck season.
- **Fire Partners:** Present. No Report.
- **Water Quality Report:** A representative was unable to make the meeting, and instead Ms. Megan Upchurch informed the Commission that the water quality report was included in the meeting packet. It was noted that sampling data had been collected prior to the recent storm event and should be considered in that context.
- **Duke Energy Lake Services:** Representatives from Duke Energy reported significant rainfall throughout the Catawba River basin, with some areas receiving over nine inches of rain. Lake Norman crested near elevation 99.4 feet and had receded to approximately 98.8 feet at the time of the meeting. Duke Energy provided updates on reservoir operations, drought-response protocols, ongoing Stage 2 low inflow restrictions, anticipated winter drawdown levels, and increased debris impacts resulting from recent flooding and reservoir spills. Duke Energy also recognized local law enforcement agencies, particularly the Cornelius Lake Patrol, for assistance in responding to debris hazards and loose vessels following the storm.
- **Catawba Riverkeeper Foundation:** Representatives reported significant cleanup efforts along the Henry Fork of the Catawba River, including the removal of more than 1,100 tires and nearly 39,000 pounds of trash. Staff also provided results from the recent River Sweep event, which included 140 volunteers on Lake Norman and nearly 500 volunteers basin-wide. An update was provided on the Floating Classroom program, which is expected to serve approximately 2,000 students by the end of November.
- **NC Wildlife Federation:** Not present. No report.

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5. **Executive Director Report.** Executive Director Jim Loftin provided updates on the Commission website, highlighting development of interactive features to communicate aids-to-navigation maintenance and no-wake zone information. He reported that processes with Centralina Regional Council continue to move forward and that the Commission's financial operations are functioning successfully. Mr. Loftin also welcomed new Commissioner Robert Weller and reported on completing ICS-300 emergency management training to support future coordination during emergency response activities.
6. **Non-Project Use Application.** The Commissioners were directed to the application in their agenda packet regarding a non-project use application associated with geotechnical borings for the NCDOT Buffalo Shoals Bridge Replacement project. Discussion focused on operational considerations for barges and work vessels, particularly maintaining navigable channels and proper lighting if equipment remains on the lake overnight. A motion was made by Commissioner Weller and seconded by Commissioner Sloan to approve the request. The motion passed unanimously.
7. **Operational Updates.** Mr. Gary Mozeley was unable to attend the regular meeting and instead, Mr. Loftin incorporated the update into his Executive Director update.
8. **Committee Updates.** The Commission discussed the importance of reactivating committee work and encouraging greater member participation. Commissioners were asked to complete committee interest forms, and leadership committed to increasing committee activity moving forward. No formal committee reports were presented. Additionally, the Commission reviewed the proposed no-wake application form and discussed implementation of procedures related to the Commission's Charter Boat Regulations. Consensus was reached to move forward with posting both items on the Commission website. No formal action was required.
9. **Open Discussion.** The Commission discussed filling the remaining vacant commissioner seat. Members agreed to post an announcement on the Commission website and solicit applications from interested candidates. Applications will be reviewed and interviews conducted as appropriate. The Commission recognized Elaine Powell of the Mecklenburg County Commission for her support of lake-related initiatives and public safety efforts. Commissioner Powell addressed the Commission, sharing observations from recent rides with law enforcement on Mountain Island Lake and emphasizing the importance of ongoing safety and water quality efforts. The Commission presented her with a token of appreciation and thanked her for her service. Staff reported that work is underway on the 2027 meeting schedule. Meetings will continue rotating among the four counties, although some locations may change.

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Lake Norman
Marine Commission

10. **Adjournment.** There being no further business, a motion to adjourn was made by Commissioner Holder and seconded by Commissioner Church. The motion passed unanimously, and the meeting adjourned at 7:28 PM.

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Executive Director Report

November 2026

Website – Please continue to visit our website as we continue to update it.

We will be adding applications such as No Wake and Charter Boat to our LNMC website in the near future.

Centraina – We are still in the process of setting up our business through Centraina. We are currently working on setting up payment systems and billing accounts and setting up banking accounts.

eScribe is set up for LNMC. This is a system given to us by Centraina.

eScribe is basically a process for keeping minutes and process consistency for government entities. Megan can conduct training if you are interested.

ATONS – I have met with Mozeley Construction, both Mark and Gary. We have reviewed invoicing procedures, current inventory, reporting issue procedures, marker options, and challenges to their progress.

We are working on an interactive for our webpage for ATON reporting.

Greg Truesdale – had a very nice, long conversation with Greg Truesdale. He will be back in May.

Committees – We have reviewed committees, and I will be contacting each committee to set goals and agendas. I expect to set goals for each committee and set a regular meeting schedule. I plan on attending many committee meetings.

Ninth Member – We are in the process of recruiting and interviewing for the LNMC ninth member position. The process will be simple: a resume and one paragraph on why you would like to join the LNMC. I encourage all LNMC commissioners to recruit for this position.

Running Calendar

Revision 09/2026

Lake Facility Safety Plan: NC 150 Parallel Bridge Construction, Lake Norman

Introduction

There is an existing steel bridge built in 1961 located on NC 150 over Lake Norman on the Catawba County / Iredell County line near Mooresville. The bridge has an overall length of about 1,100 feet and consists of 10 spans. A new bridge having an overall length of 1,220 feet and consisting of 9 spans will be built parallel to the existing bridge creating dual bridges with one-way traffic on each.

No Wake Zone – there are at least three 'No Wake' buoys located no less than 150 feet from the existing bridge. There is one buoy south of the bridge and two buoys to the north of the bridge. All are located between 150 feet and 250 feet of the edges of the existing bridge. For this reason, the engagement of law enforcement officials during the deployment of the boater safety system or the performance of the work is not anticipated. These buoys were placed by the Lake Norman Marine Commission. The buoys will be relocated to accommodate for the boater safety system. Lake Norman Marine Commission shall be notified of the relocated buoys and of the status of the proposed project.

All work will be performed under this plan in accordance with the standard specifications[1] and all other governing federal, state or local regulations. The NC Wildlife Resources Commissions' (NCWRC) Land and Water Conservation Division (919-707-0150) or the NCWRC's Land and Water Conservation Division Mt. Holly Depot (704-263-0975) will be contacted prior construction to coordinate the review of the buoy relocations and best practices the contractor will use. In accordance with this boater safety plan, NCDOT will contact NCWRC's Major Branden Jones with 8 weeks of lead time of the anticipated construction date:

Branden Jones
Major of Support Services Law Enforcement Division
Mailing Address: 1717 Mail Service Center
Raleigh, North Carolina 27699-1717
branden.jones@ncwildlife.gov
Office: 919-707-0037 Mobile: 336-250-7435

Scope of Construction Activities

The scope of Construction Activities on the new bridge that are related to boater safety include:

Access

Access to the bridge for construction workers and equipment will be by barges situated on Lake Norman or from the new bridge. Access to Lake Norman by construction crews and equipment will be onto a barge within the proposed easements via the causeways. Multiple Shugart sectional barges will be used as needed. Work skiffs will shuttle construction workers as needed via public or private boat launch.

No impact to shorelines is expected. Additionally, there will be no impacts or access restrictions to the existing skimmer facility on the west side of the lake in the proximity of proposed bridge.

Construction Stages

Stage 1 – West Foundations/Substructure & East End Embankment

- Install floating barrier w/ solar warning lights on west end at approximate stations 464+50 to 472+65 and east end at approximate stations 478+50 to 487+50 to isolate work areas.
- Construct east embankment and drilled piers for end bent 1 through bent 5.
- (Optional) Construct caps for bents 1 through 5.

Stage 2 – East End of Bridge & East End Embankment

- Remove west end floating barrier w/ solar warning lights. Keep floating barrier w/ solar warning lights only around each newly constructed bent on west end to clearly identify the new drilled pier obstructions to boaters.
- Extend east end floating barrier w/ solar warning lights to approximate station 471+85.
- Continue east embankment construction and construct drilled piers for bent 6 through end bent 2.
- Construct caps for bent 5 through end bent 2.- Install girders, girder bracing components (diaphragms), and lightweight concrete deck for spans F through I.

Stage 3 – West End

- Remove east end floating barrier w/ solar warning lights. Install floating barrier w/ solar warning lights on west end at approximate stations 464+50 to 472+65.
- Construct remaining caps not constructed in stage 1.
- Install girders, girder bracing components (diaphragms), and lightweight concrete deck for spans A through E.

Bridge Construction Items

- All debris generated by construction will be contained and at no time will it be dropped into the lake water. Construction areas will be closed off from boating access for duration of construction activities.
- The Contractor will protect all utility lines or mains which may be supported on, under or adjacent to bridge work sites from damage. There is a water main attached to the north side of the existing NC 150 bridge.

Operational Safety Methods

- The existing bridge will be utilized for some material deliveries and additional bracing support for barge activities. All parts of the existing bridge, and the traveling public including boaters, will be protected from new bridge construction activities.

- Work Plan – No work will begin until the Contractor furnishes the NCDOT Resident Engineer with a safety work plan for construction and the Engineer has accepted the plan.
- All activities will follow OSHA requirements[2].

Boater Safety System

Each boat launch will have placards displayed at the loading areas informing boaters of the restrictions to the waterway access under the bridge. The placards will be displayed a minimum of two weeks prior to the installation of the floating barricade system and the associated work to be performed on the structure. The information and placards will provide contact numbers for the following– the contractor, NCDOT Mooresville Resident Engineer's Office Normal Business Hours 704-360-6920 and NC Wildlife Resources Commission (1-800-662-7137) so that the public can make inquiries or report damage, vandalism or operational problems with the system.

The locations of the placards are as follows:

- Ramsey Creek Boat Ramp - Mecklenburg County Parks and Recreation
- Beatty Ford Access – NCWRC
- Hager's Creek Access Area – NCWRC
- McCrary Creek Access Area – NCWRC
- Pinnacle Access Area - NCWRC

All work areas proposed for the project will be protected by a floating barrier marked with flashing warning lights as described below.

- Debris Shield Curtain – a bright orange-colored debris shield will be deployed to protect the work areas. The proposed work areas and plans depicting the sequencing are attached. See Appendix A: Proposed Debris Shield Curtain for the product to be utilized for the barricade.
- Lighting – solar powered LED marine safety lights will be placed atop the barricade buoys (see Appendix B: Proposed Solar Warning Lights) and will be spaced no more than 50 feet apart along the top of the barricade which will enclose the proposed maintenance activity. The lights will be placed a minimum of 2 feet above the water line to provide a visual barrier both day and night. These solar marine lights help protect boaters during the early morning and late afternoon/early evening hours or when cloud cover reduces visibility for boaters. The marine safety lights provide visibility in flashing mode up to one nautical mile, according to the distributor. They can be set for 'steady on' or 'in flash' mode at a rate of one flash per second. They can be seen no matter the boaters position or if not mounted perfectly level or if the buoy is bobbing or swaying. All routine maintenance activity for the barricade system is restricted to occur only between 6:00 am and 7:00 pm. Emergency repairs to the boater safety system will be made as needed, anytime 24 hours per day / any day of the week.
- Mooring requirements - When utilizing barges, tugboats or other vessels, the Contractor will

take all necessary precautions to ensure that such vessels are securely anchored or moored when not in active operation and to contain the vessels within the encapsulated work area. The contractor will also take all necessary measures to ensure that the vessels are operated in a manner that avoids damage to or unnecessary contact with bridges, boaters and other highway structures and attachments within the containment area. If severe weather conditions are anticipated or should be anticipated through reasonable monitoring of weather forecasts, the contractor shall take additional measures to adequately moor the vessel within the containment area during the extreme conditions. Vessel will be secured per Section 107 of the NCDOT Standard Specifications[1]. The contractor shall burn mooring lights for any vessels moored overnight within the project boundary.

Deployment of the Boater Safety System – the debris shield and lighted buoys will be put into place prior to the commencement of any work on the structure and moved periodically, as needed, to protect boaters from the construction activities. Deployment and redeployment will occur during daylight hours. The operation will occur from a barge and or a work skiff.

All deployment will be staged to prevent boater entrapment. The staging will progress such that work will start on the deployment and will continue each successive day until such time as the work area is protected. All construction activities on the staged work will be halted until such time as the containment barricade is in place and all work activities are adequately contained. All barricade lights will be operational as soon as the barricade is deployed in the water. The lights will be inspected daily and repaired immediately.

Post-Construction Bathymetry

Upon completion of construction work in the lake and after establishing revegetation at the edges of the lake, the NCDOT Division Construction Engineer will schedule a site visit or consultation with Lake Services staff. Upon approval of Lake Services, NCDOT will notify its Location & Surveys group and will deliver the updated sonar survey and comparison data to Duke within 8 weeks.

Staging Plan

Stage 1: Figures 1 and 2 – Construct west end foundations/substructure & east end embankment. Boaters will pass under east end of bridge.

Stage 2: Figures 3 and 4 – Construct east end of bridge completely & east end embankment. Boaters will pass under west end of bridge.

Stage 3: Figure 5 – Construct west end remaining substructure & superstructure. Boaters will pass under east end of bridge.

Schedule (tentative)

A phased-approach is described below, dates to be determined**:

Stage	Likely Start Date	Anticipated End Date	Activity
0	Ongoing	11/15/29	Procure materials
1	12/01/26	12/01/27	**Stage 1** (See Figure 1 and 2) West Foundations/Substructure and East End Embankment • Install floating barrier w/ solar warning lights on west end at approximate stations 464+50 to 472+65 and east end at approximate stations 478+50 to 487+50 to isolate work areas. • Construct east embankment and drilled piers for end bent 1 through bent 5. • (Optional) Construct caps for bents 1 through 5.
2	12/2/27	12/02/28	**Stage 2** (See Figure 3 and 4) East End of Bridge & East End Embankment • Remove west end floating barrier w/ solar warning lights. Keep floating barrier w/ solar warning lights only around each newly constructed bent on west end to clearly identify the new drilled pier obstructions to boaters. • Extend east end floating barrier w/ solar warning lights to approximate station 471+85.- Continue east embankment construction and construct drilled piers for bent 6 through end bent 2 • Construct caps for bent 5 through end bent 2.- Install girders, girder bracing components (diaphragms), and lightweight concrete deck for spans F through I.
3	12/03/28	11/15/29	Stage 3 (See Figure 5) Complete West End of New Bridge • West End- Remove east end floating barrier w/ solar warning lights. Install floating barrier w/ solar warning lights on west end at approximate stations 464+50 to 472+65. • Construct remaining caps not constructed in stage 1. • Install girders, girder bracing components (diaphragms), and lightweight concrete deck for spans A through E.

Notes:

- Time restrictions (boaters or construction):
  - Under the bridge deck: none (operations can occur 24 hours per day / 7 days per week)
  - Boater Safety System – operational throughout the project
  - Repairs – as needed, anytime 24 hours per day / 7 days per week
  - All routine maintenance of boater safety system to occur between 6:00 AM and 7:00 PM

** At the request of NCWRC, Major Branden Jones shall be contacted upon start of each phase listed above.

As the phases may be subject to change, Major Branden Jones shall also be contacted and notified of any alterations to the above schedule:

Branden Jones
Major of Support Services Law Enforcement Division
Mailing Address: 1717 Mail Service Center
Raleigh, North Carolina 27699-1717
branden.jones@ncwildlife.gov
Office: 919-707-0037 Mobile: 336-250-7435

Standards

[1] NCDOT Standard Specifications for Roads and Structures, January 2024.
[2] Occupational Safety and Health Act (OSHA 29-CFR 1910-1926)

PROJECT REFERENCE NO.	SHEET NO.
R-2307B	1

LAKE NORMAN

NAD 83

CATAWBA COUNTY
IREDELL COUNTY

MOVE /RELOCATE EXISTING NO WAKE BUOY 250' FROM PROPOSED BRIDGE

MOVE /RELOCATE EXISTING NO WAKE BUOY 250' FROM PROPOSED BRIDGE

840' +/-
WORK / STORAGE AREA
EB1 TO B5

415' +/-
BOAT PASSAGE – EX. B5 TO EX. B9

DEBRIS SHIELD WITH WHITE SOLAR WARNING LIGHTS AT 50' +/- INTERVALS

DEBRIS SHIELD WITH WHITE SOLAR WARNING LIGHTS AT 50' +/- INTERVALS

WORK / STORAGE AREA

150' +/-

TO TERRELL

EB1 B1 B2 B3 B4 B5

SPAN A | SPAN B | SPAN C | 48' | SPAN D | SPAN E

100' 100' 150' 150' 150' 40'

TYPE M350

EX. B1 EX. B2 EX. B3 EX. B4 EX. B5 EX. B6 EX. B7 EX. B8 EX. B9

TO MOORESVILLE

660' +/-

MATCHLINE –L– STA 478+50
SEE SHEET 2

LAKE NORMAN

STAGE 1

INSTALL /RELOCATE NO WAKE BUOY 250' FROM EXISTING BRIDGE (IN LINE WITH EX. B7)

FIGURE 1

GRAPHIC SCALE
50 25 0 50 100
PLANS

6/29/2026
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jbaughcane

PROJECT REFERENCE NO.	SHEET NO.
R-2307B	2

NAD 83

915' +/-
WORK / STORAGE AREA

DEBRIS SHIELD WITH
WHITE SOLAR WARNING LIGHTS
AT 50' +/- INTERVALS

305' +/-
310' +/-
260' +/-

479+00
482+00
485+00
487+50

150' +/-
120' +/-
90' +/-
60'

TYPE M350

MATCHLINE -L- STA 478+50
SEE SHEET 1

STAGE 1

FIGURE 2

GRAPHIC SCALE
50 25 0 50 100
PLANS

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heyohoe

PROJECT REFERENCE NO.	SHEET NO.
R-2307B	3

LAKE NORMAN

NAD 83

CATAWBA COUNTY
IREDELL COUNTY

DEBRIS SHIELD WITH WHITE SOLAR WARNING LIGHTS AT 50' +/- INTERVALS

MOVE /RELOCATE EXISTING NO WAKE BUOY 250' FROM PROPOSED BRIDGE

MOVE /RELOCATE EXISTING NO WAKE BUOY 250' FROM PROPOSED BRIDGE

515' +/-

BOAT PASSAGE – B1 TO B4

660' +/-

WORK / STORAGE AREA – B5 TO EB2

WEST END FOUNDATIONS / SUBSTRUCTURE WILL BE CONSTRUCTED IN STAGE 1. WEST END SUPERSTRUCTURE WILL BE CONSTRUCTED IN STAGE 3.

DEBRIS SHIELD WITH WHITE SOLAR WARNING LIGHTS AT 50' +/- INTERVALS (TYP.)

150' +/-

TO TERRELL

EB1 B1 B2 B3 B4 B5 B6 B7 B8 EB2

SPAN A | SPAN B | SPAN C | SPAN D | SPAN E | SPAN F | SPAN G | SPAN H | SPAN I

100' 100' 150' 150' 150' 150' 150' 150' 120'

TYPE B-77

TYPE M350

EX. B1 EX. B2 EX. B3 EX. B4 EX. B5 EX. B6 EX. B7 EX. B8 EX. B9

40' +/-

TO MOORESVILLE

585' +/-

INSTALL /RELOCATE NO WAKE BUOY 250' FROM EXISTING BRIDGE (IN LINE WITH EX. B7)

LAKE NORMAN

STAGE 2

MATCHLINE –L– STA 478+50
SEE SHEET 4

FIGURE 3

GRAPHIC SCALE
50 25 0 50 100
PLANS

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PROJECT REFERENCE NO.	SHEET NO.
R-2307B	4

NAD 83

915' +/-
WORK / STORAGE AREA

DEBRIS SHIELD WITH
WHITE SOLAR WARNING LIGHTS
AT 50' +/- INTERVALS

305' +/-
310' +/-
260' +/-

479+00
482+00
485+00
487+50

150' +/-
120' +/-
90' +/-
60'

TYPE M350

MATCHLINE -L- STA 478+50
SEE SHEET 3

STAGE 2

FIGURE 4

GRAPHIC SCALE
50 25 0 50 100
PLANS

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PROJECT REFERENCE NO.	SHEET NO.
R-2307B	5

LAKE NORMAN

NAD 83

CATAWBA COUNTY
IREDELL COUNTY

MOVE /RELOCATE EXISTING NO WAKE BUOY 250' FROM PROPOSED BRIDGE

MOVE /RELOCATE EXISTING NO WAKE BUOY 250' FROM PROPOSED BRIDGE

840' +/-
WORK / STORAGE AREA
EB1 TO B5

415' +/-
BOAT PASSAGE – EX. B5 TO EX. B9

DEBRIS SHIELD WITH WHITE SOLAR WARNING LIGHTS AT 50' +/- INTERVALS

150' +/-

EAST END SUPERSTRUCTURE WILL BE CONSTRUCTED IN STAGE 2.

TO TERRELL

EB1 B1 B2 B3 B4 B5

SPAN A | SPAN B | SPAN C | 48' | SPAN D | SPAN E

100' | 100' | 150' | 150' | 150' | 40'

TYPE M350

EX. B1 EX. B2 EX. B3 EX. B4 EX. B5 EX. B6 EX. B7 EX. B8 EX. B9

TO MOORESVILLE

660' +/-

LAKE NORMAN

STAGE 3

INSTALL /RELOCATE NO WAKE BUOY 250' FROM EXISTING BRIDGE (IN LINE WITH EX. B7)

FIGURE 5

GRAPHIC SCALE
50 25 0 50 100
PLANS

6/29/2026
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jbaughcore

PRODUCT DATA SHEET

24" Permanent Boom



Permanent-type oil and debris containment boom. Variables and/or deviations include: 24" PVC impregnated polyester fabric, **50' sections**, ASTM slide.

DETAILED SPECIFICATIONS

Boom Skirt Material:	150 oz/yd^2 PVC coated polyester (1.5 Lbs./ft^2)
- Color	Black
- Tensile	Ultimate Tensile Strength 27,000 Lbs.
Floats:	11 pairs Rotationally Molded LDPE; completely sealed; foam-filled with Closed cell polyurethane foam. Each float has a recessed hand grip
- Fasteners	Stainless Steel
- Color	International Orange
- Dimensions:	Rectangular L:24 x W:5.5 x H:10 inches
Ballast:	11 pairs galvanized steel bars.
End Connectors:	Aluminum Extrusion 6061-T6 Alloy. Quick Z ASTM F-962
- Fasteners:	Stainless Steel
- Toggle Pins	St. Steel 3/8-inch (9mm) spring loaded with pull ring and lanyard
- Anchor Points	SST D-rings; one each connector, opposite sides
- Hand Straps	2-inch (5cm) polyester straps each end.
- Anodes	Sacrificial Anode each end connector
Weight:	3.01 Lbs./Ft.
Buoyancy to Weight Ratio:	3.2 to 1

21401 Park Row Dr. Suite #340, Katy, TX 77449 (281) 441-2002 www.texasboom.com

PRODUCT DATA SHEET

36” Permanent Boom



Permanent-type oil and debris containment boom. Variables and/or deviations include: 36" (910mm) OAH, 175 oz. PVC impregnated polyester fabric, **65' (20M) sections**, ASTM slide.

DETAILED SPECIFICATIONS

Boom Skirt Material:		Goodyear 175 oz/yd^2 (5930 G/M^2) PVC coated polyester (1.5 Lbs./ft^2)
	- Color	Black
	- Tensile	1500 Lbs./inch; 54,000 Lbs. Total (132 N/cm; 24,545 Kgs.)
Floats:		15 pairs Rotationally Molded LDPE; completely sealed; foam-filled with Closed cell polyurethane foam. Each float has a recessed hand grip
	- Fasteners	Stainless Steel
	- Color	International Orange
	- Dimensions:	Rectangular L:24 x W:5.5 x H:10 inches
Ballast:		15 pairs galvanized steel bars. 3.8 Lbs./pair (1.72 kgs.)
End Connectors:		Aluminum Extrusion 6061-T6 Alloy. Quick Z ASTM F-962
	- Fasteners:	Stainless Steel
	- Toggle Pins	St. Steel 3/8-inch (9mm) spring loaded with pull ring and lanyard
	- Anchor Points	SS D-rings; one each connector, opposite sides
	- Hand Straps	2-inch (5cm) polyester straps each end.
	- Anodes	Sacrificial Anode each end connector
Marking:		4 each per side Reflective Tape on float.
Weight:		5.01 Lbs./Ft. (7.47 Kg/M)
Buoyancy to Weight Ratio:		3.2 to 1

21401 Park Row Dr. Suite #340, Katy, TX 77449 (281) 441-2002 www.texasboom.com

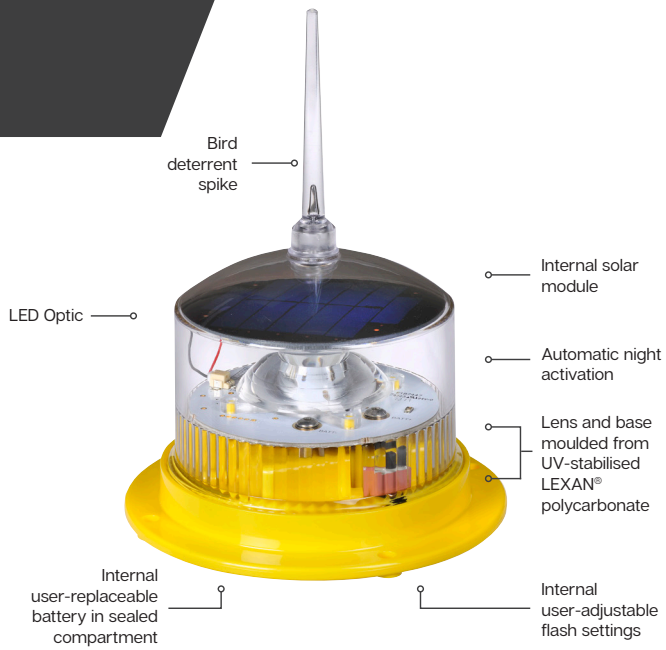
1–2NM+ Solar Marine Lantern

SL-15



IR Programmer

The equipment complies with requirements of the U.S Coast Guard in 33 CFR part 66 for private aid to navigation and 33 CFR part 88.15 for lights on dredge pipelines



The Sealite SL-15 1–2NM+ compact LED light is exceptional value and incorporates some of the most advanced technology available. In the tradition of Sealite lanterns, the SL-15 is designed to be maintenance-free and have a service life of over 5 years.

The SL-15 can be installed in minutes and requires no operator intervention. The SL-15 has a rotary switch to allow users to change the flash character of the light without the need for special tools or programmers.

During daylight hours the solar module will charge the battery, and the lantern will automatically begin operation at dusk – once the ambient light threshold drops sufficiently.

The SL-15 features Sealite's Single LED Optic which boasts exceptional power to light output efficiency. The tough outer polycarbonate lens incorporates an environment-friendly spike – deterring unwelcome bird life.

The internally housed battery is user-replaceable after years of reliable service.

The unit is sealed using advanced UV-sealing, enabling a rugged and complete waterproof seal capable of prolonged and deep immersion (IP68).





Optional ON/OFF Switch

The SL-15 is also available with an optional ON/OFF switch for temporary installations such as worksites.



User Advantage

- User-adjustable flash characters
- User-replaceable battery in sealed battery compartment
- Installs in minutes & operates maintenance-free for up to five years

Reliable

- Completely sealed & self-contained using advanced UV-sealing
- IP68 waterproof
- NiMH battery for long service life & wide temperature range

Cost Effective

- Solar Powered

Optional

- Optional ON/OFF switch for temporary installations

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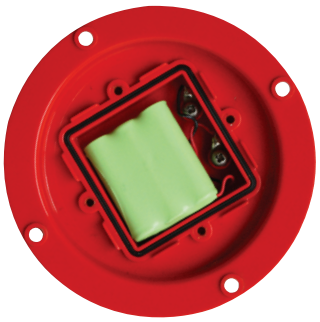
Technical Specifications ·*

SL-15	
Light Characteristics	
Light Source	LED
Available Colours	Red, Green, White, Yellow, Blue
Typical Maximum Intensity (cd)†	Red - 6.2 Green - 7.6 White - 6.8 Yellow - 5.9
Visible Range (NM)	AT @ 0.74: 1–2+ AT @ 0.85: 1.1–2.3+
Horizontal Output (degrees)	360
Vertical Divergence (degrees)	7
Reflector Type	Single LED Optic
Available Flash Characteristics	16 user-adjustable IALA flash characteristics (other flash patterns available on request)
Intensity Adjustments	32 automatic step-down settings based on power demand of flash code selection
LED Life Expectancy (hours)	>100,000
Electrical Characteristics	
Current Draw (mA)	Refer to Sealite Power Calculator
Circuit Protection	Integrated
Nominal Voltage (V)	3.6
Autonomy (days)	>50 (14 hour darkness, 12.5% duty cycle)
Temperature Range	-40 to 80°C
Solar Characteristics	
Solar Module Type	Monocrystalline
Output (watts)	0.75
Power Supply	
Battery Type	High grade NiMH
Battery Capacity (Ah)	2.4
Nominal Voltage (V)	3.6
Physical Characteristics	
Body Material	LEXAN® Polycarbonate – UV-stabilised
Lens Material	LEXAN® Polycarbonate – UV-stabilised
Lens Diameter (mm/inches)	98 / $3^{7/8}$
Lens Design	Single LED Optic
Mounting	4 x 6mm mounting holes
Height (mm/inches)	141 / $5^{1/2}$
Width (mm/inches)	136 / $5^{3/8}$
Mass (kg/lbs)	0.5 / $1^{1/8}$
Product Life Expectancy	Up to 12 years ^
Certifications	
CE	EN61000-6-1:2007. EN61000-6-3:2007
IALA	Signal colours compliant to IALA E-200-1
Quality Assurance	ISO 9001:2015
Waterproof	IP68
Intellectual Property	
Patents	US Pat. No. 6,667,582. AU Pat. No. 778,918
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
Warranty *	3 years
Options Available	· ON/OFF switch · Custom flash patterns · 50mm pole mount adapter plate · IR Remote Programmer

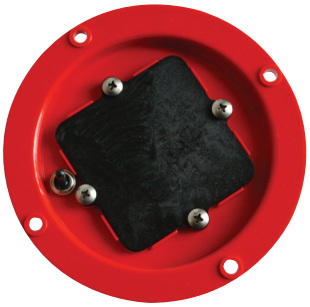
User-Adjustable IALA Flash Characteristics

FLASH SETTING CODE	Flash Sequence (on, off, on...)
0	STEADY LIGHT (intensity reduced)
1	0.5, 1.0
2	0.5, 3.5
3	1.0, 3.0
4	0.5, 5.5
5	0.3, 0.7
6	0.3, 0.7, 0.3, 0.7, 0.3, 0.7, 0.3, 15.7
7	0.3, 1.7
8	0.3, 2.2
9	0.5, 2.0
A	0.3, 2.7
B	0.5, 2.5
C	0.7, 2.3
D	0.5, 4.5
E	1.0, 4.0
F	Custom Setting

Other flash patterns are available on request



User-replaceable battery

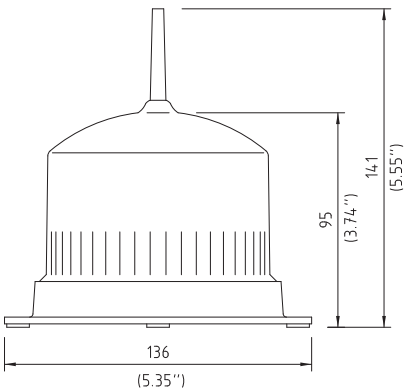


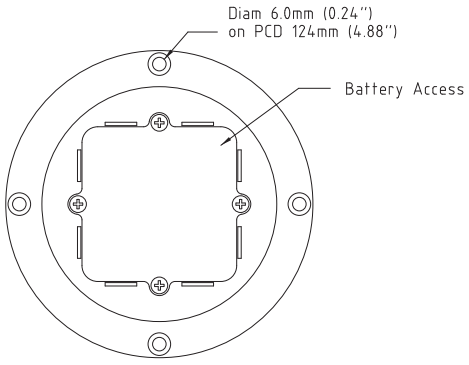
SL-15 with optional ON/OFF switch



Flash characteristic is selected via internal rotary switch located in the battery compartment

Technical Illustrations





· Specifications subject to change or variation without notice
* Subject to standard terms and conditions
† Intensity setting subject to solar availability
^ Refer to the Sealite website under the warranty section

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IALA

SL-15_DATA_EN_V3-2

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SL-B1060 Spar Buoy

Regulatory and Channel/Navigation Markers



Made from heavy duty one piece, UV-stabilized polyethylene

Self-righting

Foam filled with closed-cell polyurethane

Concrete counterweight for upright performance

Anchor point recessed in base

Sealite's SL-B1060 Buoy is rotationally-molded in one piece using UV-stabilized polyethylene making them almost indestructible. The buoy is completely foam filled for added strength and buoyancy.

An internal concrete counterweight gives the buoy a lower center of gravity, so the buoy is able to stand more upright on station.

The USCG approved optional, retroreflective bands provide unmatched night time visibility on the regulatory style. The SL-B1060 buoy can be fitted with an SL-15 or SL-60 solar marine lantern for added visibility at night or in foul weather.

Vinyl wraps and decal restoration kits are also available to repurpose existing regulatory style buoys (see back).



Above:
SL-B1060 is available in green can and red nun styles for channel marking configurations (shown in region B colors). Nun shown with optional solar marine lantern and retroreflective tape.



Above:
Integrated stainless steel mooring eye and recessed anchor point allow buoys to stand upright when stored



Features

- Molded from strong, durable UV-stabilized polyethylene
- Recessed anchor point for upright and convenient storage
- Easy mounting of solar marine lanterns
- Regulatory signage available

Cost Effective

- Withstand heavy UV exposure - no peeling or fading

Flexible Configurations

- Channel markers - red or green
- Regulatory buoy - white with orange stripes

Optional

- Mold-in graphics
- Mooring equipment & chains
- Vinyl decal restoration kits and wraps to refurbish or repurpose existing buoys

Applications

- Navigation channels, harbor approaches and port entrances
- Regulatory marking of hazards, mooring fields, cautionary zones

Certifications

- Meets U.S federal, state and local regulations

Reliable

- Excellent buoyancy & stability

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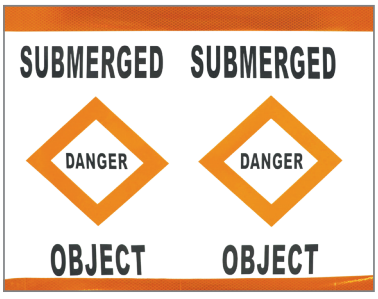
Sealite Pty Ltd
Australia
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Technical Specifications*

SL-B1060 Buoy	
General Characteristics	
Available Colors	Red, Green, White, Yellow, Orange
Nominal Freeboard (in/mm)	36 (914)
Nominal Draft (in/mm)	25 (635)
Maximum Mooring Load (lb/kg)	12 (5)
Submergence (lb/in, kg/cm)	3 (0.5)
Physical Characteristics	
Material	Rotationally-molded UV-stabilized virgin polyethylene with 316-grade stainless steel mooring eye
Wall Thickness (in/mm)	0.2 (5)
Filling	Closed-cell polyurethane foam
Height (in/mm)	61 (1549)
Net Weight (lb/kg)	63 (29)
Product Life Expectancy	12+ years
Certifications	
Quality Assurance	ISO9001:2015
Intellectual Property	
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
Warranty	1 year
Lantern Options	Sealite SL-15 or SL-60*
Options Available	· Custom signage · Vinyl wraps · Reflective band

**The SL-B1060 Nun buoy requires a mounting plate (SL-MC-10) for the SL-60 Lantern.

Regulatory Wraps & Restoration Kits		
	Vinyl Wrap Kit (Part No.: SL-BWRAP1060)	**Decal Restoration Kit**
Material	Two USCG approved retroreflective orange bands, regulatory black messages, and orange symbols on heavy-duty white vinyl material	Two each: retroreflective orange bands, regulatory black messages, and orange symbols
Options	Custom graphics or logo Silver retroreflective band	Custom graphics or logo Silver retroreflective band



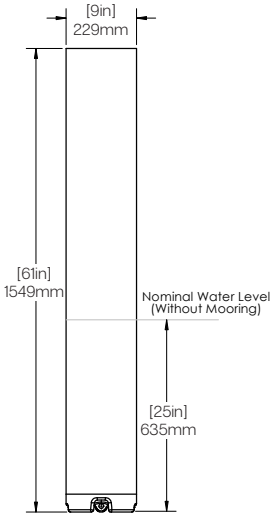
Left: Vinyl Wrap Kit example

Right: Decal Restoration Kit example

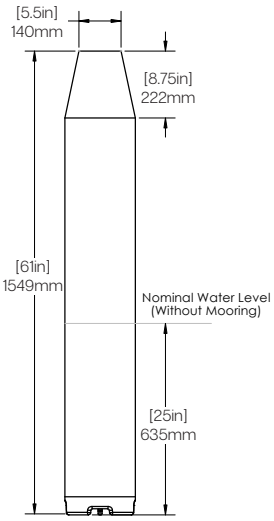


Technical Illustration

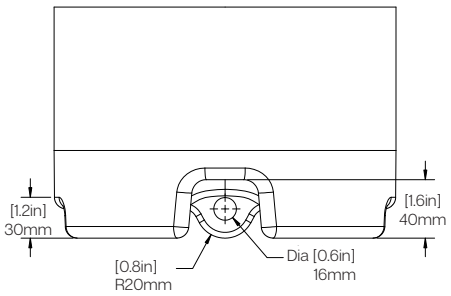
SL-B1060 Can Buoy Dimensions



SL-B1060 Nun Buoy Dimensions



SL-B1060 Bottom Eye Dimensions



† Subject to standard terms and conditions.
* Specifications subject to change or variation without notice.

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Purchase Specifications for a
61 inch High Spar Buoy

Overview

This specification is for a 61 inch (1549mm) high spar buoy.

The buoy shall be rotationally-moulded using UV-stabilized, virgin polyethylene.

1.0 General Characteristics

The buoy shall be available in red, green, white or yellow as per IALA Recommendations.

The buoy shall have a focal plane height of 812mm (32 inches).

The buoy shall have a nominal free board of 812mm (32 inches).

The buoy shall have a nominal draft of ±736mm (±29 inches).

The buoy shall have a reserve buoyancy of 9kgs (20lbs).

The maximum mooring load of the buoy shall be 9kgs (20lbs).

The buoy shall have a submergence of 12.5kg/cm (70lbs/inches).

The buoy shall have a visual area of 0.2m² (2.2 ft²).

2.0 Physical Characteristics

The buoy shall be rotationally-moulded using UV-stabilized, virgin polyethylene.

The buoy shall have a 316-grade steel mooring eye.

The buoy shall have a recessed anchor point.

The buoy shall have a wall thickness of 9mm (⅜ inch).

The buoy shall have a ballast of 22.6kg (50lbs) internal counter-weight.

The buoy shall be filled with closed-cell polyurethane foam.

The buoy shall have a height of 1549mm (61 inches).

The buoy shall have a width of 254mm (10 inches)

The buoy shall have a mass of 34kg (75lbs).

The life expectancy of the buoy shall be up to 12 years.

3.0 Options

The buoy shall be offered with the following options available from the manufacturer:

- Custom signage
- Marine lanterns available from the manufacturer
- Vinyl wrap and reflective band

4.0 Certifications

The manufacturer shall be ISO9001:2008 certified.

The buoy shall meet IALA recommendation E-108 surface colours

5.0 Warranty

The buoy shall have a one (1) year warranty.

2027 LAKE NORMAN MARINE COMMISSION

MEETING SCHEDULE

Meetings are held on the third Thursday of each month at 7:00 p.m.

Dates	Meeting Locations
January 21, 2027	Iredell
February 18, 2027	Lincoln
March 18, 2027	Mecklenburg
April 15, 2027	Catawba
May 20, 2027	Iredell
June 17, 2027	Lincoln
July 15, 2027	Mecklenburg
August 19, 2027	Catawba
September 16, 2027	Iredell
October 21, 2027	Lincoln
November 18, 2027	Mecklenburg
December 16, 2027	Catawba

Catawba County Location	Iredell County Location	Lincoln County Location	Mecklenburg County Location
Sherrills Ford-Terrell Library Community Room 9154 Sherrills Ford Rd. Terrell, NC 28682	Lake Norman State Park 759 State Park Rd. Troutman, NC 28166	Denver Fire Department 3956 Hwy 16 Business North Denver, NC 28037	Charlotte Water – Dukes Treatment Plant 7980 Babe Stillwell Farm Rd. Huntersville, NC 28078

All meeting dates and locations are subject to change. Questions regarding the Lake Norman Marine Commission meeting dates and times or persons with disabilities requiring assistance should contact Lake Norman Marine Commission Administrator at 704-688-7035 or visit the website at https://lnmc.org/.

Approved _____

DRAFT