Aquatic Weeds on the Yadkin Project Reservoirs

What is hydrilla?

- Hydrilla is a submersed aquatic plant recognized by the State of North Carolina as a noxious aquatic weed.
- Hydrilla forms nearly impenetrable mats of stems and leaves at the surface of the water.
- Hydrilla currently infests many aquatic systems throughout North Carolina.
- Advanced infestations can alter aquatic habitats and drive ecological shifts; and can cause the loss of recreational use of waters.
- Hydrilla is spread primarily by human activities. Plant fragments are spread from boat motors and trailers or from live wells and bait containers.

What is lyngbya?

- Lyngbya is a blue-green algae that is **not** recognized by the State of North Carolina or the Aquatic Weed Control Program as a noxious aquatic weed.
- Lyngbya forms long filamentous hair-like strands that mat together in thick layers and can form mats at the surface and throughout the water column.
- This algae crowds out beneficial native aquatic plant species and may impact recreation because of the distasteful appearance, rotten egg smell, and entanglement problems.
- Lyngbya is common in North Carolina waterbodies, with no simple solution for permanent removal.

What is Cube Yadkin doing to manage hydrilla and lyngbya in the Yadkin Project reservoirs?

- Began cooperating with the NC Aquatic Weed Control Program and the Wildlife Resources Commission in 2011 to actively manage and control hydrilla in the Project reservoirs.
- Supported the management of hydrilla in the Project reservoirs with biological (triploid grass carp) and chemical controls (herbicides) since 2012.
- Partnered with NC State University to conduct annual aquatic vegetation surveys.
- In 2014, in cooperation with SePRO, tested stands of lyngbya to develop recommendations for chemical treatment.
- The 2018 vegetation survey of Tuckertown and Narrows Reservoirs, showed that the percent occurrence of hydrilla on both reservoirs has decreased over time:

Hydrilla	2015	2018	2021	2023
Tuckertown	55%	0%	0%	0%
Narrows	2%	0%	0%	0%
High Rock	-	-	-	2%

- During this same time period, lyngbya has continued to persist, despite treatment:

Lyngbya	2015	2018	2021	2023
Tuckertown	58%	58%	68%	57%
Narrows	6%	21%	32%	34%
High Rock	-	-	-	6%

- In cooperation with the NC Aquatic Weed Control Program posted “Stop the Spread of Aquatic Weeds” at Project boat access areas.
- Cube Yadkin continues to cooperate with the State of North Carolina and NC State University in 2025. Management activities to date include:
  - Grass carp stocking (1,185 in 2025)
  - Herbicide applications by NCDEQ and NCSU/Aqua Services Inc.
  - Vegetation survey through NCWRC and NCSU.
  - NCSU lyngbya monitoring and research, including treatments contracting AquaServices Inc. using Captain XTR and AMP surfactant in treatment study areas.

What can I do to prevent the spread of these aquatic weeds?

- Practice good environmental stewardship by inspecting your boat, trailer, and equipment and removing all visible aquatic plants.
- Drain water from your boat, motor, bilge, live wells, and bait containers before leaving the access area.
- Spray, rinse, or dry boats and equipment to remove invisible hitchhikers.
- Dispose of unwanted bait and other animals or aquatic plants in the trash.
- Use best practices when applying lawn fertilizers and do not apply within 20-ft of the shoreline.
- Inspect and ensure home septic systems are functioning properly up to code.

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Information for Shoreline Landowners on Potential Hydrilla Treatments

1. Physical Removal via Cutting and Raking:

Physically removing hydrilla by cutting and raking can be effective (although eventual regrowth from remaining roots and seeds is common). Aquatic weed rakes are available online. One can tie a rope to the handle and toss the rake out into the lake around your pier or property. Let it sink into the weeds and pull it back. Pile the hydrilla onto the dock or bank and let it dry out for several days, and then bag and dispose of it. Do not let it get back into the lake or it will rejuvenate. No permit is required to physically remove hydrilla from the lakes.

2. Chemical Control via Herbicides:

Cube Yadkin Generation, LLC requires that property owners obtain a vegetation treatment/removal permit from our property department before individuals can chemically treat the water around their piers and lakeside property. Property owners are required by law to hire a contractor that has a North Carolina Department of Agriculture & Consumer Services Aquatics Pesticide Applicator's License. As part of the permit application the landowner is required to provide photos of the hydrilla growing in the water, the name of the chosen state licensed pesticide contractor (including their aquatics pesticide license #), the shoreline distance in front of the property that will be treated, the distance out into the lake that will be treated, the pesticide chemicals and concentrations used by the contractor, and expected treatment dates. This information will be required to be sent to the North Carolina district fisheries wildlife biologist for approval (information on where to send is listed on the permit application, and the approval must be attached to all submissions). Copies of letters or emails to your adjacent neighbors advising them of your treatment dates and associated treatment warnings that may be associated with the treatments will be required once the permit has been approved and a treatment date has been established. Landowners are permitted to treat only the water directly in front of their property, including the pier if one is present, and a boat channel from the shoreline or pier out to the nearest open water.

When using herbicides, it's crucial to:

- Choose the right herbicide based on your specific needs and the size of the infestation. This should be done in close consultation with your licensed contractor.
- Be sure that your licensed contractor follows label instructions carefully to avoid harming other aquatic life.
- Ensure your licensed contractor notifies neighbors of any pesticide warnings or restrictions associated with the treatments during the timeframe identified on the pesticide label. Many people use the reservoir water to irrigate their yards, and many of these pesticides will kill grass for a short period of time after treatments.
- Consider using a buffer to manage pH levels when using certain herbicides. Your licensed contractor will know if a buffer is recommended in association with your chosen treatment.

For more information and access to Cube Yadkin's Aquatic Vegetation Treatment Activity Permit, please visit Shoreline Management – Cube Hydro Carolinas.

3. **Biological Control via Sterile Triploid Grass Carp:**

Sterile triploid grass carp consume aquatic vegetation and can be effective in controlling hydrilla, but they must be carefully managed to prevent them from consuming other beneficial plants in the ecosystem. Cube Yadkin works with state governing agencies to stock large numbers of sterile triploid grass carp in the reservoirs annually; the fish migrate around the reservoirs and find the hydrilla to eat, greatly helping to reduce the overall reservoir levels of hydrilla. Fish species, including the sterile triploid grass carp or any other species, are not allowed to be stocked in the reservoirs by individuals.

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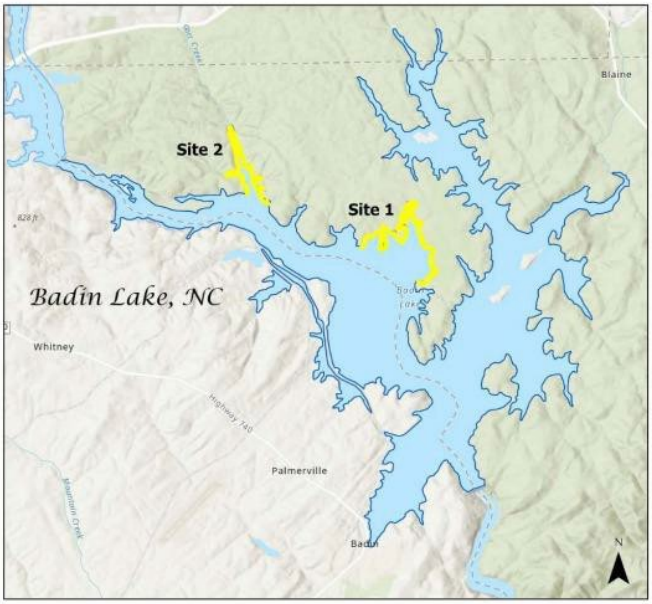
Information on Badin/Narrows Lyngbya Treatment Areas - 2025



Badin/Narrows Reservoir Approx. Lyngbya Treatment Dates for 2025 (Both Sites Treated Each Date):
April 16
May 8
June 5
July 17
August 14
September 11

High Rock Reservoir Hydrilla Treatment Date for 2025 (Sterile Triploid Grass Carp):

July 3

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