

2020 Covid-19 Restrictions



NC State CoVid Restrictions

- March 18: Notification of NCSU closure on March 20
 - Only critical activities allowed (e.g. feeding animals)
- March 27: Exemption process started for research
 - April, May, and June: Only university approved research
 - Our Lab: One approved team of 2 for all field work
- June 20: NCSU moved to Phase II of Research Restart
 - No reduction in employee pay through Phase II



2020 Covid-19 Restrictions



Current Status

- Currently in Phase III-B
 - Employees must be designated as mandatory to work
 - On campus research limited to 1 person per 150 sq ft
 - Greenhouse work allowed with 1 person per house
 - Field work allowed with social distancing; generally 2 people per project limit
 - 1 person per vehicle for travel
 - Out of state travel requires 14 day prior approval
 - Trying to complete 7 months of research in 4 months



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Future Expectations

- Phase III-B...
 - Likely until widespread vaccination
 - Field work will continue with teams of 2
 - Greenhouse and lab research will continue
 - For Gaston:
 - Project objectives should be fulfilled in 2021
 - No significant deviations in deliverables

NC State Research Update

Integrated Research Project

Lyngbya Management

- Draft literature review prepared (under review)
- Lab testing of product efficacy conducted
- Expansion of field treatments to operational level (2021)
- Small scale control evaluation (ongoing)
 - Frequency, Application Techniques, Additional Algaecides
 - Rhodamine Dye Study (pushed back to 2021)
- Lyngbya Growth and Life Cycle (some data collected 2020; 2021 primary effort)
- Deliverables: 2018 and 2019 final report

Water Quality

- Monthly data collection (ongoing)
- Sediment samples (2021)
- E. coli sampling (ongoing)
- Monthly nutrient sampling (ongoing)
- Developing predictive GIS model for Lyngbya using water quality data (2021)
- Deliverables: 2019 final report

NC State University Update

Integrated Research Project

Integration of New Technology

- Detection of Lyngbya using Biosonics (ongoing; Andrew presentation)
- Shoreline surveys (ongoing)
- Geospatial modeling using vegetation and water quality (2021)
- Deliverables: 2018 and 2019 final lyngbya treatment evaluation reports
 2019 final vegetation report

Improved Revegetation Systems

- Geospatial modeling using vegetation, water quality, land use, and sediment nutrients (2021)
- Identify areas for native plant mitigation (2021)
- Extension work with land owner addressing BMP's (ongoing)
- Novel submersed vegetation establishment (2021)

Additional Hydrilla Management

- Evaluate new herbicide for hydrilla management
 - Lab component (complete)
 - Field component (suspended due to low field acreage)
 - Deliverables: Graduate student's professional poster presentation