

LONG ISLAND NITROGEN ACTION PLAN

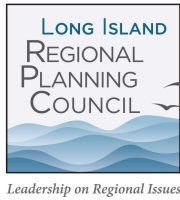
Long Island Water Quality Challenge

2019 – 2020

RECOMMENDED FORMAT FOR THE STEM CHALLENGE PROJECT PROPOSALS

The Long Island Regional Planning Council asks that participating teams use the following format for their STEM Challenge project proposals. Following this format serves two purposes: 1) it will help each team write and organize their project proposal and 2) it will help the expert reviewers conduct a prompt and expeditious review.

- Title of the project.
- Table of contents.
- Summary. This includes the questions that the project seeks to answer; the problem that the project seeks to tackle.
- Description of current stormwater treatment OR low input landscaping practices at the school. School maintenance personnel may be able to assist with this.
- An estimate of the quantity of stormwater runoff or quantity of fertilizer/pesticides utilized. School maintenance personnel and online tools may be able to assist with this.
- A description of the fate of the contaminants which includes stormwater pollutants or fertilizer (nitrogen) and pesticides. This would include:
 - Where are the contaminants going?
 - Are the contaminants seeping into groundwater?
 - Are contaminants being carried by runoff into nearby waterways?
- Background research. This would include:
 - What kind of changes could be made?
 - What would the nature of the improvements be?



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- Preliminary design of improvements related to stormwater treatment OR low input landscaping including a list of required materials
- Final design of improvements, with cost estimates.
- Analysis and discussion. Please include pollutant/contaminant reductions, with an estimate of quantities if possible; also include other benefits to the environment, school and community.
- Project proposal conclusions.
 - Please include major findings and the importance of the findings, e.g. what team learned along the way.
 - Restate why the problem is important while also addressing the larger nitrogen pollution problem facing Long Island.
 - Address possibilities for future research. Please briefly discuss what additional research the team might want to do based on what it learned. Include what might be improved, adapted, or added to ensure useful and informed future research.
- Acknowledgments. An opportunity to thank anyone who helped with the project.
- Sources cited. Reference the sources used including at least two LINAP-related resources.

Please check out the helpful resources available on the STEM Challenge page of the LIRPC website: <https://lirpc.org/water-quality-challenge/>