



## Project Proposal Requirements for 6<sup>th</sup> – 8<sup>th</sup> Grades Long Island Water Quality Challenge (LIWQC)

The Long Island Regional Planning Council ([LIRPC](#)) asks that participating teams include the following requirements in their LIWQC Final Project Proposals. The requirements serve three purposes: 1) assists the team in writing and organizing their project proposal, 2) increases the team's chance of success if all requirements are met, and 3) assists the selection committee with conducting a prompt and expeditious review.

A Resource Library is available which includes key concepts, scientific source citation formatting, regionally relevant sources to use, and more.

- **Cover Page/Title**
  - Title of Project
  - Each team member name and grade level
  - Name and email of advisor/teacher
  - School name and address
  
- **Summary:** A paragraph that briefly describes the purpose of the paper. It should include a statement of the problem to be solved, what important information was discovered when researching the topic, the project design, and a concluding sentence. The summary should act almost as an advertisement for the rest of the paper, making the reader excited to learn more.  
*Tip: Often this section is written last to ensure it accurately reflects the contents of the paper.*
  
- **Introduction**
  - Describe the nitrogen problem on Long Island as it relates to water quality. Include where nitrogen comes from, and how nitrogen pollution negatively affects water quality. Be sure that your description demonstrates your understanding of the issue.
  - Explain how [Long Island Nitrogen Action Plan](#) (LINAP) works to solve the issue.
  - Identify and describe both traditional stormwater infrastructures (such as drains, pipes and gutters) and Green Infrastructure practices (rain barrels, permeable pavement) that currently exist on school grounds.
  - A description of where stormwater on school grounds currently goes. Does it travel off school property, flood certain areas of the school grounds or parking lots?
  - Utilize figures, maps, drawings, images, etc., to support the information found in this section.  
*Tip: School maintenance personnel may be able to assist with this.*



- **Materials and Research** – Describe what was discovered when researching the topic. Also include if the team conducted any experiments or model designs.  
*Experiments and model designs are not mandatory.*
- **Results** – Based on background research and if experiments were performed, introduce the Green Infrastructure idea that the team created. In addition to the project description, include the following information in this section:
  - Explanation of how the idea supports the goals of LINAP, which may be to discover how stormwater runoff contributes to nitrogen pollution and how the project can possibly improve water quality.
  - The specific area(s) of the school grounds to be targeted/the area that the proposed project would be located.
  - Explanation of how the project may reduce nitrogen pollution on school grounds and any way to measure the results, if possible.
  - Explanation of how the project improves how the school is currently managing stormwater runoff.
  - Utilize figures, maps, drawings, images, etc., to support the results and findings of the project.
- **Conclusion** – Include in the conclusion why your research and idea should matter to the reader after they have finished reviewing the paper. For example, explain how the project would benefit the school, environment, and community. Also explain how it would be useful in educating others about nitrogen pollution and stormwater runoff.
- **Art** – Incorporating Art in STEM projects encourages creative thinking using visual tools or imagery to deepen the understanding of science, math and technology. Include graphics that were helpful in developing your project proposal. Also include any visual tools that may help the reader better understand the ideas being presented. Art can take the form of illustrations, hand drawn maps, sketches of the innovation being proposed, posters, etc.
- **Acknowledgements** – this is an opportunity to thank anyone that helped with the project.
- **References** - Use proper scientific format included in the LIWQC Resource Library.