

Engaging Contexts Data Integration
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Long Island Sound Projected Land Cover Change Data

Link:

<http://longislandsoundstudy.net/research-monitoring/slamm/slamm-page-5-data-page/>

Working on Eastern Long Island bring many opportunities to use the local environment to teach scientific concepts while fostering informed citizenship by creating opportunity for research and an overall understanding of changes in development for our local ecosystems.

This data will be used as part of a non-fiction literary/ science study using a central text entitled World Without Fish by Mark Kurlansky as well as additional multimedia resources [Padlet: Meg Tepfenhardt](#) in which students explore pictures, ted-ed talks, articles, and videos to learn about concepts associated with rising sea levels. This data can be used to develop civic awareness and build citizenry in our local community through civic action such as non-fiction writing and speaking, artistic representation, and advocacy. The use of this also creates opportunity to design primary research opportunities in which scientific investigation is used to examine our local marshes.

This data helps to investigate how Long Island Sound's coastline may respond to sea level rise by helping students consider important questions such as:

- What is the fate of Long Island Sound's estuarine marshes under short-term (2050s) and long-term (2100) scenarios?
- Which marsh systems are more (or less) sustainable under Sea Level Rise (SLR)?

The use of data is important in for inductive reasoning and using factual information to drive tentative thinking that allow individuals to build an understanding of possible and reasonable theories that support that data. 21st century learners need to be able to discern bias in a text however they also need to be able to draw reasonable conclusions from primary and secondary data. Students should be able to analyze, apply and draw conclusions from data that help to build their knowledge and serve as a catalyst to new thinking, critiquing and research. Using data allows students to develop critical thinking skills that allow to develop different viewpoints about that data by considering why the data is what it is or what are the possible effects of that data as it pertains to the topic. Students are also able to use the raw data to compare with other multimedia resources and articles.