

Developing Indicators for the Bay of Fundy to Long Island Sound

9. Climate Change

Many human activities including deforestation and the burning of coal, oil, and natural gas have contributed to an increased accumulation of greenhouse gases such as carbon dioxide and methane. This results in an overall warming of the Earth or portions of it. The potential consequences of this warming (e.g., melting of the polar icecaps and resulting sea level rise, increased water and air temperatures) affect the overall ecosystem of our region. Concerns have been raised regarding the effects of temperature on biodiversity, extreme climactic events, sea level rise; changes in weather patterns affecting hydrology and freshwater inputs; and impacts on coastal wetlands and infrastructure.

34. How important are the following climate change issues?

	Very Important	Important	Somewhat Important	Not Important
Effect of climate change and changing weather patterns on hydrology and fresh water inputs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effect on biodiversity related to water temperatures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate-related regime shifts in biota	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effect of sea level rise and changing weather patterns on coastal infrastructure & erosion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35. Suggested Additional Climate Change Issues:

- a.
- b.
- c.

36. How useful are the following themes in communicating the status and trends of climate change?

	Very Useful	Useful	Somewhat Useful	Not Useful
Rate of sea level rise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Species at risk with changes in climate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of extreme storm events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biodiversity index	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Days with unhealthy levels of ozone pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appearance of sentinel species tied to seasonal climate changes

37. Suggested Additional Climate Change Themes:

- a.
- b.
- c.