

VERMONT EPSCoR

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Scientists create crowd sourcing solution to Climate Change with public input on strategies for protecting water in a warmer, wetter Champlain Basin

Since 1960, Vermont's average annual precipitation has increased almost six inches. A team of RACC scientists developed an online survey designed to deepen the region's capacity to respond to the impacts of a changing climate—like increased rainfall.

Below, an aerial view of 2011 flooding of the Lake Champlain basin



As global temperatures rise, forecasts suggest that in coming decades the Lake Champlain Basin will feel a lot like Virginia or North Carolina, but with more precipitation. The list of potential impacts is long, including increased flooding and degraded water quality.

“We’re looking for solutions — creative new ideas from experts and from a diverse set of stakeholders and interested parties,” says UVM professor Chris Koliba, who is helping to lead the effort. “Ensuring good water quality for the Lake Champlain Basin, that's the big pic-

ture goal for this work. We’re asking people to brainstorm different ways that we can, as a region, address these pressing problems,” says Koliba.

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Crowdsourcing Solutions for Climate Change in the Lake Champlain Basin is part of a larger UVM initiative called Research on Adaptation to Climate Change (RACC) supported by the National Science Foundation under the Vermont EPSCoR program.

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“Basically, think of this part of the RACC project as a Facebook for solutions,” says Koliba. “Someone poses a solution, describes it, and then people can rate it on a five-point scale as well as comment on it.”

Each participant's responses will be anonymously shared with other users, providing an opportunity for open discussion. The result will be a wide array of proposed short and long-term interventions and strategies for ensuring water quality and adapting to climate change in the Lake Champlain Basin.

Then the scientists will take all these ideas and strategies and integrate them into computer models that will assess numerous scenarios of how the lake functions and how different land use and management decisions are likely to play out. The reports from the RACC project aim to help policymakers and others as they make land use and other decisions. “These models will help build understanding and capacity in the region around the best solutions,” says Koliba.

