



NExUS Ongoing Projects and Activities Tue Oct 23 22:47:55 EDT 2018

<b>Name</b>	Evaluating Reservoir Operations and the Impacts of Climate Change in the Connecticut River Basin
<b>Description</b>	The Connecticut River Basin is the principal water source for communities in portions of Vermont, New Hampshire, central Massachusetts and central Connecticut, with over 70 major dams and reservoirs in operation to help control the water supply. This project will provide The Nature Conservancy, the US Army Corps of Engineers and other stakeholders with climate-informed guidance for current and future dam operations, and illustrate the potential trade-offs between policies that optimize one or more of services provided by the systems' operations. Downscaled data from climate model projections, fed into hydrology models, is used to construct informed streamflow forecasts; these in turn support a reservoir management model that enhances the biological community supported by the river, and existing infrastructural services including flood control, water supply, recreation and hydropower generation. This project also involves the development of decision support tools to guide river operations and to facilitate stakeholder involvement. Workshops are held to gather information about stakeholder requirements for the basin, such as ecological flow targets and dam operations
<b>Category</b>	- Climate-change Specific Projects
<b>Sector</b>	- Public Health and Safety - Infrastructure
<b>Focus Area</b>	- Climate Impacts on Water Resources - Conservation/ Restoration of Sensitive Species and Habitats
<b>Region</b>	- Regional Or State -- New England
<b>Status</b>	- Ongoing
<b>Timelines</b>	Date of Completion, April 2013
<b>Lead Agencies</b>	NOAA Regional Integrated Sciences and Assessments
<b>Contacts</b>	Richard Palmer, Department of Civil and Environmental Engineering, University of Massachusetts Amherst, palmer@ecs.umass.edu