

## Upper Valley Adaptation Workgroup Overview

**Upper Valley Adaptation Workgroup** is an all-volunteer bi-state regional group started in December 2011 to support communities to build climate resiliency. **Co- Chairs:** Alex Jaccaci, Hypertherm, and Sherry Godlewski, NH Dept. Environmental Services.

**UVAW Mission:** Building Climate Resilient Communities in the Upper Valley through Research, Information Sharing and Education.

**Education:** Educating the working group partners and the community.

- **First Public Forum: September 30, 2013 – *Building Climate Resilient Communities in the Upper Valley.*** Cameron Wake, Climate Scientist from UNH, shared the regional climate impact assessment for southern NH, and a panel discussed implications including built infrastructure, public health, and disaster response and recovery. Over 100 people attended.
- **Second Public Forum: April 28, 2014 – *Is Your Town Ready for the Next Flood?*** Overview by Michael Simpson at Antioch NE on the Lake Sunapee watershed project, a panel on economic and municipal planning, response and recovery from flooding. Presentation by Beth Sawin on building co-benefits of resiliency in the community. 80 participants.
- **Third Public Forum: February 3, 2015 – *Economic Resiliency Workshop,*** with an overview of climate impacts by Dartmouth Asst. Professor Eric Osterberg, business continuity risks and strategies from Bonnie Canal, Managing Partner at The Resiliency Institute in New Orleans, and case stories and local resources from Kevin Geiger, Two Rivers Ottauquechee Commission, Deborah Eibner, VT Small Business Development Council, and Patrick Crowl, Woodstock Farmers Market. 60 participants.
- **Fourth Public Forum: May 1, 2015 – *Nonprofit Partnering for Natural Disasters and Climate Resilience,*** with presentations on lessons learned from Irene and Sandy (Anne Duncan Cooley, Upper Valley Strong), business continuity planning (Bonnie Canal), and collaboration discussion.
- **Upper Valley Business Resiliency Project: Spring 2015 –** University of Vermont students in Adaptation to Climate Change partnered with seven area businesses to help them understand how climate change may affect their individual operations, identify vulnerabilities, and recommend adaptation strategies that address vulnerabilities and promote fast recovery for their operations, employees, and the local economy. The participating organizations are Hypertherm, King Arthur Flour, Dan & Whit's, Upper Valley Haven, Coop Food Stores, Jake's, and Simbex.

**Information Sharing:** Sharing information and serving as a networking hub for community members.

**Website:** <http://uvaw.uvlsrpc.org/>



**Research:** Creating partnership relationships with Dartmouth, Antioch NE, UNH, UVM and (Plymouth State University which has a project currently underway).

**Primary climate risks we're seeing in the Upper Valley and/or are projected to increase, include:**

- **Severe weather** – increase in heavy precipitation events, emergency response
  - Seen increase in 4" rain events over the last 30 years and projected 2-3 fold increase
- **Infrastructure compromise** - due to flooding inc. roads, buildings in floodplains, utilities, etc
- **Health impacts:**
  - Vector born disease –NH is #1 in Lyme infections, ticks are increasing, and mosquito-spread disease (dengue fever, EEE, West Nile) is spreading with warmer weather
  - Mental health – the mental health issues was cited recently by Deb Markowitz as the main public health issue in VT following Irene
  - Respiratory illness – increase in allergies, asthma, due to air quality and allergens
  - Heat illness – effects northern communities on the globe as less accustomed to heat stress
- **Economic** – cost of rebuilding and repair from impacts, lagging federal support for upsizing infrastructure for the “new normal”
  - EPA research shows that for every \$1 invested in adaptation efforts (ex. Rightsizing infrastructure, relocating utilities in buildings, managing storm run-off) saves \$4 in reactive repair
- **Recreation and tourism** – shifting hunting, snow sports tourism decline
- **Agricultural** – maple industry moving northward, longer growing season, more drought
- **Ecosystems, wildlife** – change in habitat and species – migrating northward

**Key opportunities to build more climate resilient communities in Upper Valley include:**

- **Increased public awareness** of the issues, implications and strategies for adaptation
- **Municipal leaders gaining information and process knowledge** to guide their towns to plan pro-actively, and to make investments in resiliency for the “new normal”
- **Climate modeling and decision making tools** to assist communities to create a common plan for action (ex. Climate Interactive, COAST, Nature Conservancy)
- **Business resiliency and contingency planning** to ensure our Upper Valley business and local economy can anticipate, prepare and recover from climate impacts
- **Supporting non-profits** such as the Upper Valley Haven, COVER, and UV Strong to be prepared to support the community members who are impacted
- **Increasing public health** strategies focused on anticipating climate impacts for diagnosis and treatment including mental health
- **Strengthening the emergency response community**, and building more localized – town, neighborhood and family emergency response plans
- **Learning from other communities** who are building resilience
- **Modeling how a region can work together to build resiliency** (another great example is the Coastal Adaptation Workgroup on the NH seacoast)
- **Continue and expand action and investments in clean energy and carbon reduction** (long term adaptation strategy, known as mitigation of climate change)