

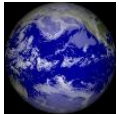
The Vermont Water Resources and Lake Studies Center

A Brief History...and a Look Ahead

The Vermont Water Resources and Lake Studies Center at the University of Vermont is one of 54 institutes established by Congress through the Water Resources Research Act of 1964. Throughout its history, the Vermont Water Center has served the citizens of Vermont by supporting research on major issues of concern to the state, by distributing information on water resources throughout Vermont, and by helping to educate students about water resources.

Early Water Center research programs included USDA-SCS funded projects of more than 10 years duration on issues related to agricultural water quality and best management practices. Recent efforts have focused on Lake Champlain and non-point source pollution.

Serving Vermont



Through Recently Completed USGS-supported Research Projects

Professor Tom Manley of Middlebury College's Geology Department, collaborating with French scientist Dr. Jacques Gascard, has identified and tested an innovative way to measure complex flow patterns at different depths in Lake Champlain. His approach, based on free-drifting "SOLO" floats, will help scientists better understand how pollutants move through the lake.

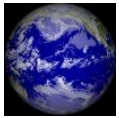
Professor Leslie Morrissey of the University of Vermont's School of Natural Resources used multi-spectral satellite data to map vegetation patterns along several Vermont streams exposed to agricultural runoff. By adding existing GIS databases on soils and land cover to her data set, she has been able to pinpoint areas along stream banks where riparian vegetation is most effective in trapping pollutants.



Through Privately Funded Initiatives

In the 3rd year of a project supported by Green Mountain Power Corporation, the Water Center is tackling some of the key issues important to the many Vermonters who enjoy the Burlington Bay portion of Lake Champlain. Our sampling of storm water runoff indicates that high levels of bacteria and nutrients still enter the bay during periods of wet weather.

As a service to the angling community, we performed a census of fish in the bay and found a wide array of species present during different seasons. While yellow perch and rock bass were the most frequently captured species, rainbow trout and largemouth bass were also taken in smaller numbers. For more details, visit the project web site at snr.uvm.edu/bbay.



Through Outreach

In October 2001, our annual meeting featured presentations detailing our various research initiatives. In addition, the 50 attendees enjoyed a panel discussion on the implications of global climate change for Vermont's waters. Speakers discussed likely impacts of climate change on Vermont's weather and water and on fisheries and other aquatic resources. It was apparent that there is much to learn about this important issue.

In January 2002, the Water Center tackled the controversy surrounding storm water runoff. Responding to a need for more information about this issue, the Water Center hosted a full-day session for various stakeholders and state legislators on the scientific, engineering, policy and legal aspects of the issue. A highpoint was the participation of Dr. Bob Pitt of the University of Alabama and Dr. Ed Herricks of the University of Illinois by video conference.

For more information about this workshop and the Water Center in general, visit our web site at snr.uvm.edu/vtwater.

Recent Publications

Papadopoulou, M.P., G.F. Pinder, and G.P. Karatzas. 2002. A Dynamic Approach to Groundwater Remediation Design. 8 pp.