

Three Lessons from Irene And How Vermont Responded

Outreach and Training are needed:

In the wake of Irene many people were in the river working without any training or guidance. Since that time several new initiatives have greatly expanded the training and support available:

- [Rivers and Roads Training](#) – online and in field work for municipal, contractual, and state transportation workers;
- [Flood Ready Vermont](#) – data and resources for community leaders to wisely address flood vulnerabilities;
- [River Flume Curriculum](#) – stream table to demonstrate stream, sediment and encroachment dynamics.

Oversight of Emergency Measures is needed:

During the response to Irene the River Management Program lacked enforceable authority over emergency instream activities. The legislature responded with Act 138 and now Vermont has stream alteration rules providing technical guidance, design requirements and specific authorities for towns and agencies regarding imminent threats to public safety:

- [Reporting Emergency Protective Measures](#)
- [River Management Principles and Practices](#)
- [Stream Alteration Rules](#)
- [Stream Alteration General Permit](#)

River Corridor and Floodplain Protection are needed:

Avoiding damage is far less costly than repair and restoration. Our new shared goal of flood resilience identifies how communities and state agencies may all act to protect river corridors and floodplain functions. Act 138 directed ANR to provide communities with river corridor maps, guidance, and incentives:

- [Flood Hazard Area and River Corridor Protection](#)
- [Statewide River Corridor Maps](#)
- [Flood Resilient Community Incentives \(ERAF\)](#)

For success, each of these lessons from Irene requires a change of practice and a greater commitment at the project, community and state level.

Irene filled many river channels, and some needed to be re-opened to protect public safety (A). Most were dredged more than was necessary or prudent from a stream stability and river health standpoint (B and C). Some were restored to equilibrium dimensions and will be less prone to erosion in the future (D).

