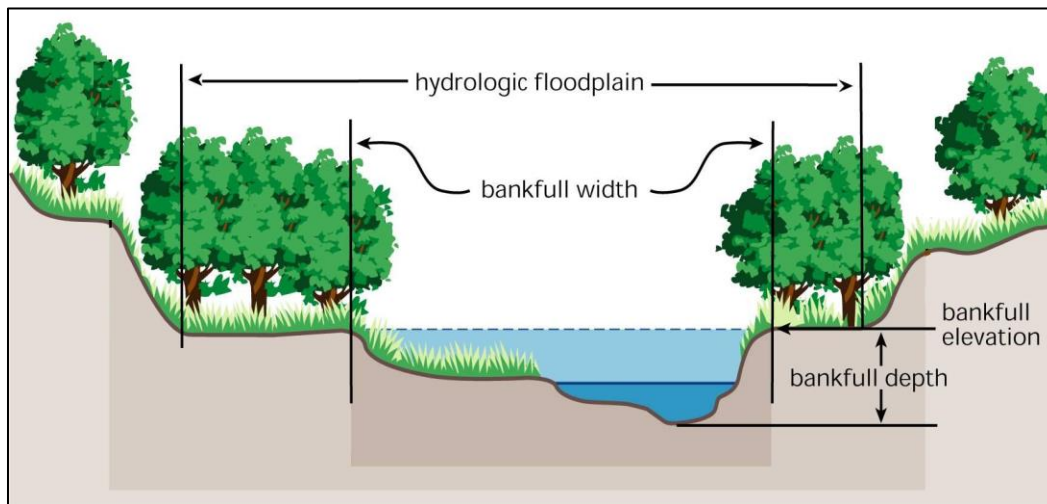


Vermont Applies Fluvial Geomorphic Science in Managing Rivers and Floodplains as a Functioning System

Over the past twelve months the Rivers Program has guided the adoption of a [Stream Alteration Rule](#) (12-23-13) and a [Flood Hazard Area and River Corridor Rule](#) (10-24-14). These coupled with the recent publication of a [Statewide River Corridor Base Map](#) (11-25-14) and a set of [Flood Hazard Area and River Corridor Protection Procedures](#) (12-05-14) cap a landmark year in Vermont's commitment to protect and restore the river and floodplain systems of Vermont.

Emerging from the Irene disaster, the Vermont General Assembly passed a series of bills recognizing the vital importance of floodplains and river corridors in managing streams toward a naturally stable, least erosive (i.e., equilibrium) form. Streams that can meander and access floodplains are part of riparian systems that store water, sediment, nutrients, and woody debris during flood events. The work of many WsMD partners over the past decade to assess these fluvial geomorphic conditions has resulted in new public policy that recognizes how critical it is that we integrate our river and floodplain management programs in order to achieve the state's water quality and public safety objectives.



The Division is now poised to more seamlessly manage stream alterations and river/floodplain encroachments to:

- reduce the sediment and nutrient loading that impairs water quality;
- maximize storage and distribution of woody materials and coarse sediments that create rich and diverse river and riparian ecosystems; and
- minimize flood damages from flood and fluvial erosion hazards.

The new Rules and Procedure set performance-based standards for stream equilibrium and connectivity, river corridor protection, and compensatory flood storage, all of which promote the fluvial processes that connect rivers and floodplains as one functioning riparian system.