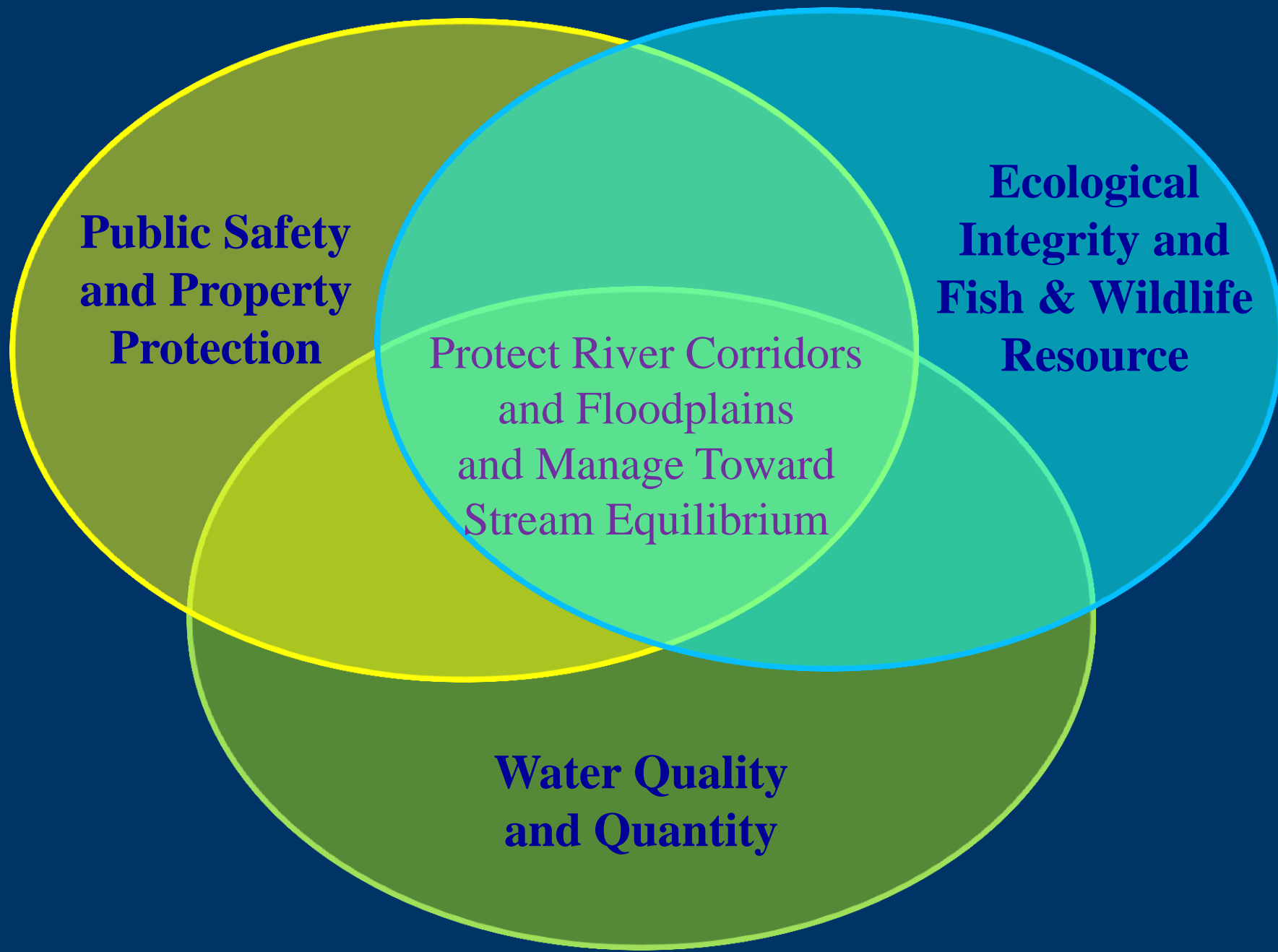


# “Giving Rivers Room to Move” creates public co-benefits



# ~ 50% of Vermont streams historically channelized



draining  
dredging  
straightening  
200+ years



# How DYNAMAMITE

## *streamlines streams*

Practically every farm in the heavy crop-producing areas of the United States needs some ditching, and there is hardly a stream in the entire boundary of the Union that does not need to be corrected to give better service in discharging the large amounts of waste water from heavy rains, and to protect low lands.

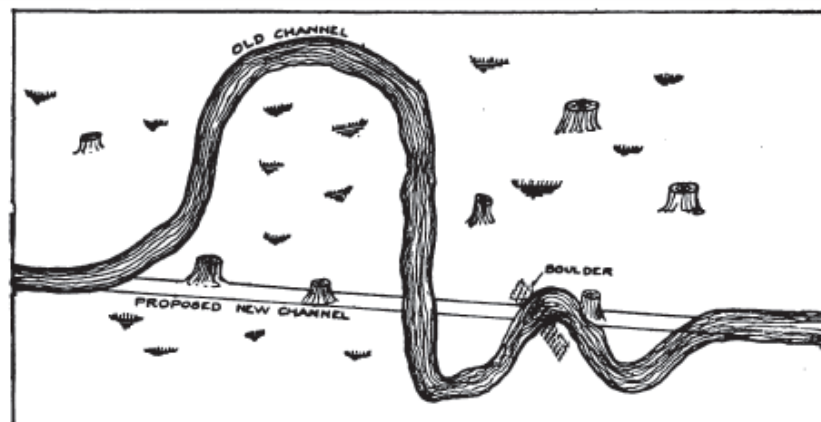


FIG. 54. DIAGRAM OF STREAM TROUBLES THAT MAY BE CORRECTED BY BLASTING.

**CROOKED STREAMS** are a menace to life and crops in the areas bordering on their banks. The twisting and turning of the channel retards the flow and reduces the capacity of the stream to handle large volumes of water. Floods result. Crops are ruined. Lives are lost. Banks are undermined, causing cave-ins that steal valuable acreage.



## Acknowledgement:

Trying to contain flows  
and rapidly drain the  
land.....



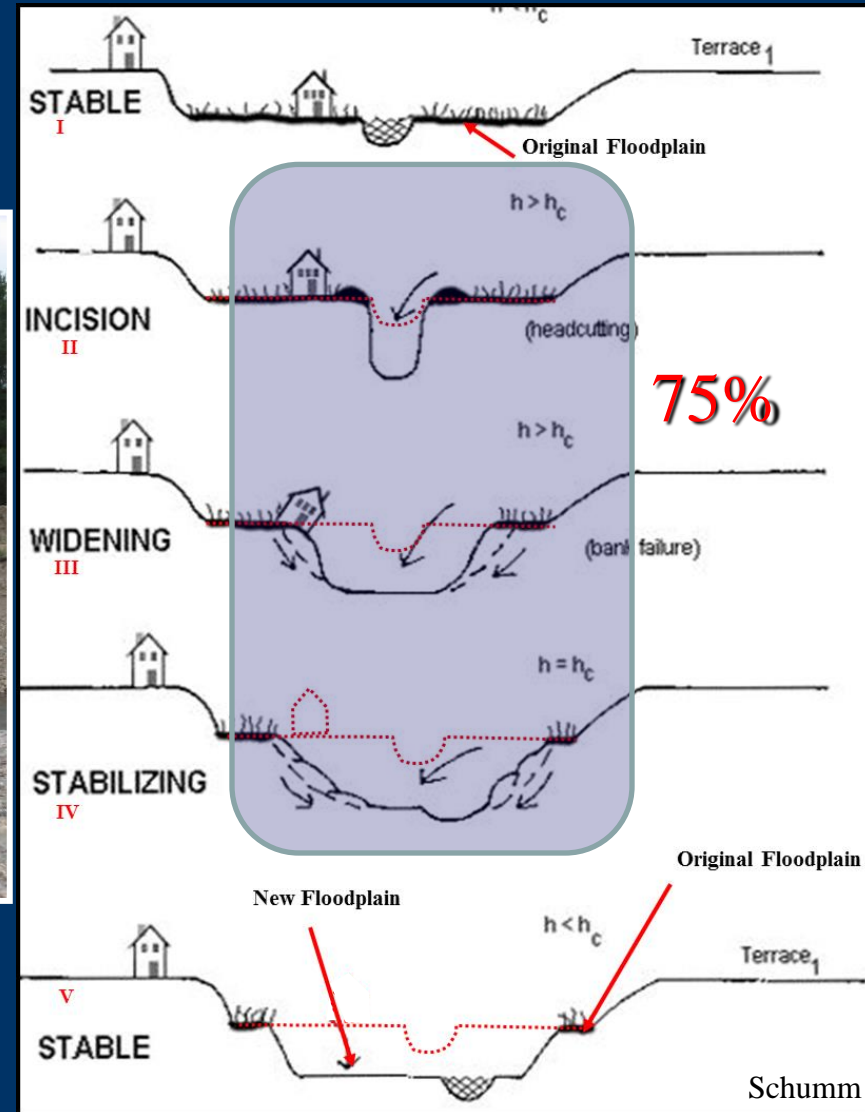
...has been a recipe for  
erosion in Vermont.



Major erosion and depositional processes underway in response to channelization.



Data from 2,200 miles of Vermont river surveys confirm their evolution to a more stable form.





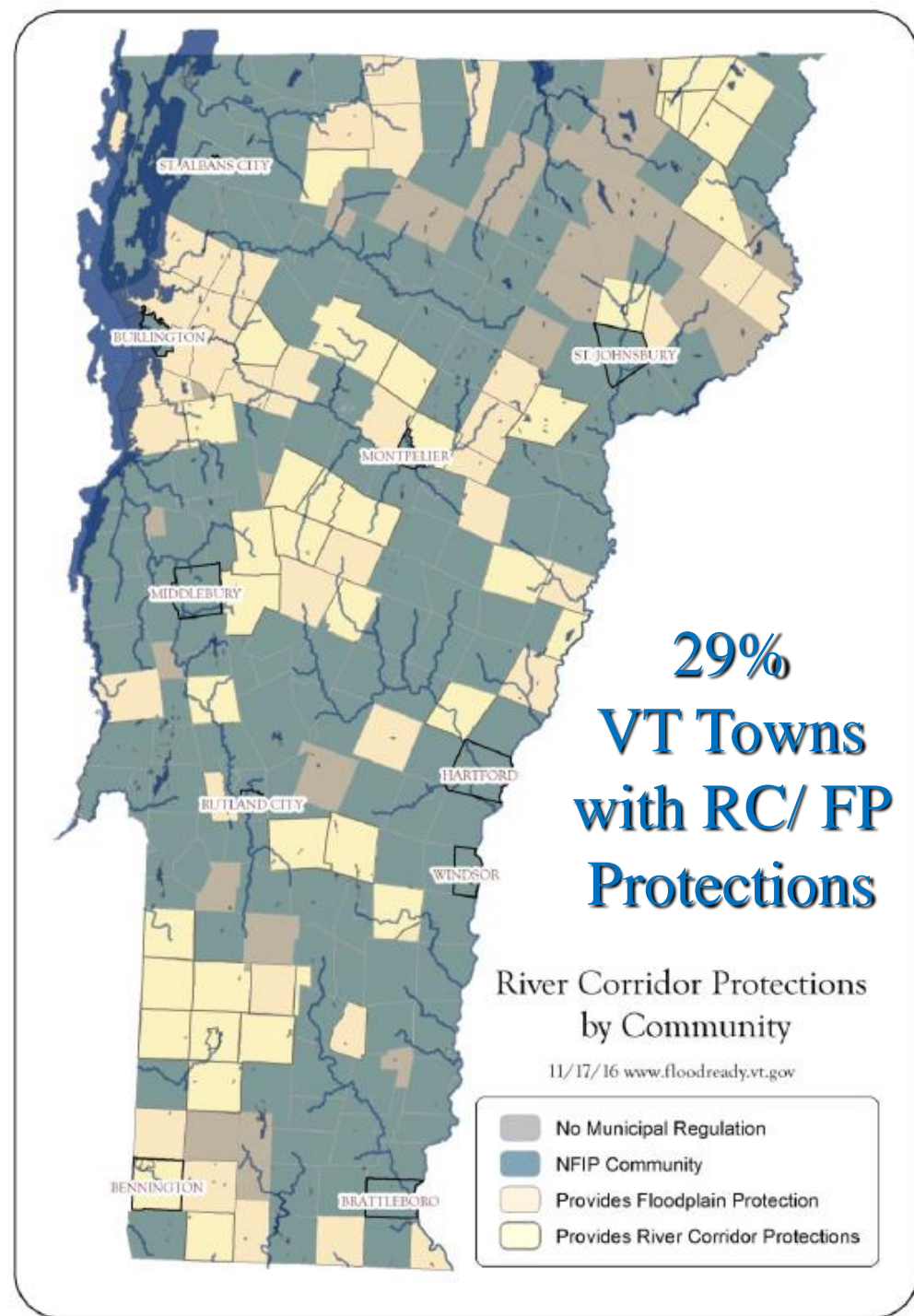
*Acts 110, 138, 16, 107: Enhance State and municipal floodplain regulation and create tools and incentives for river corridors protection.*





## Incentives for Vermont Municipal Actions

1. Support river and floodplain data collection
2. Assist with planning and implementation
3. Increase State and Fed cost share and grants
4. Link disaster recovery cost share funding to municipal protections

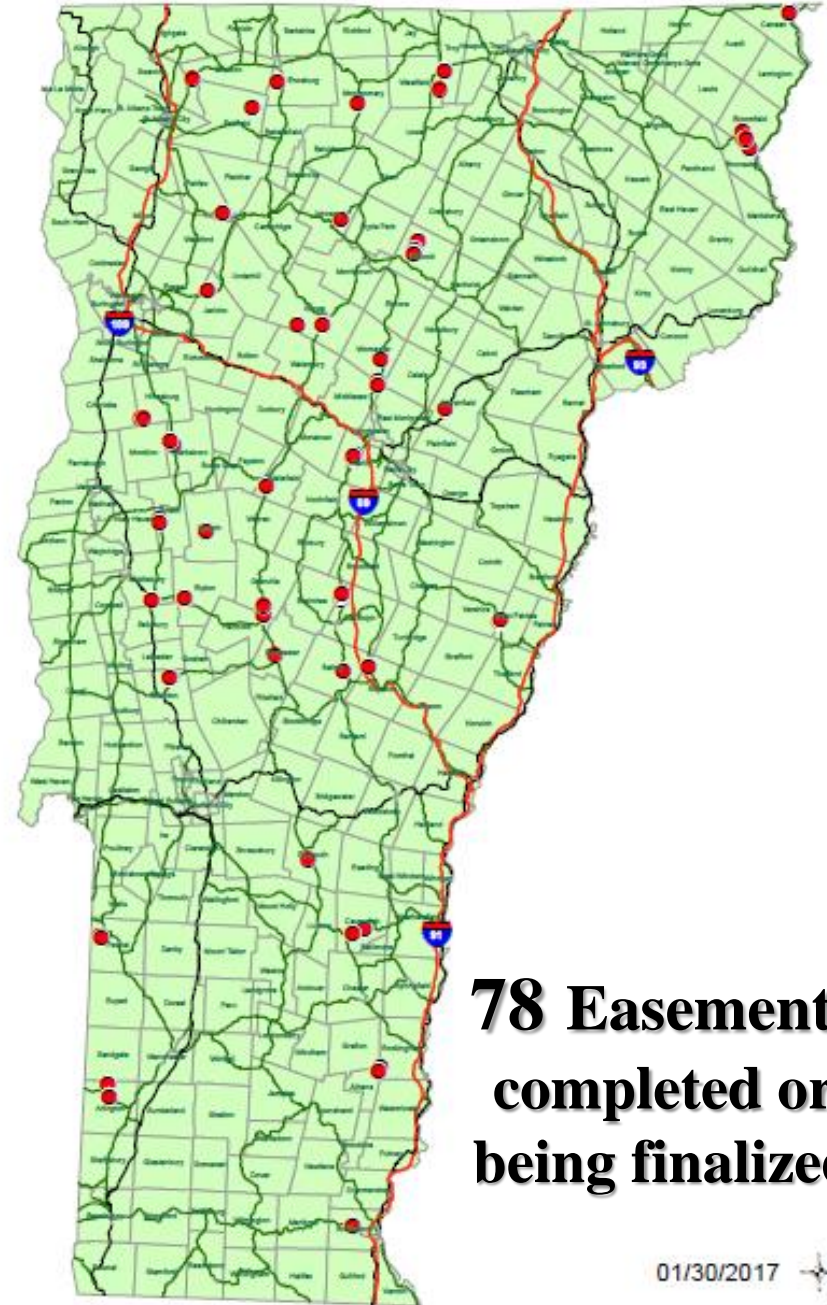


# Avoidance Strategy:

- Protect floodplain function to slow, dissipate and store flood water, erosive energy, sediment and nutrients.
- Protect river corridors to achieve and maintain the least erosive river channel, promote floodplain formation, and restore riparian ecosystems.

**River Corridor Easements:** Buy channel management rights to allow for sediment storage at key watershed locations

Vermont DEC River Corridor Easements



**78 Easements  
completed or  
being finalized**



### Categories of Emergency Protective Measures in VT Stream Alteration Rules and GP

- **Removal of flood-related deposits** to create stream channel conveyance.
- **Streambed or streambank fills** to address critical public access or limit vertical or lateral stream movements that represent an imminent threat.
- **Temporary crossings or berms** to create access or prevent direct impingement of flows against improved property.

## *Vermont Rivers and Roads Training*

Tier 1 – Online training course  
How Rivers Work

Tier 2 – Three day field course  
Rivers and Roads

Tier 3 – Day-long design courses

