

WHAT DOES ADAPTATION LOOK LIKE?

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SENIOR PLANNER, TWO RIVERS-OTTAUQUECHEE REGIONAL COMMISSION



STAYING OUT OF THE WAY

- Flood Regulations
- FEMA Flood Maps





STAYING OUT OF THE WAY

- Riverine Erosion Regulations
- River Corridors
- Simple Stream Setbacks

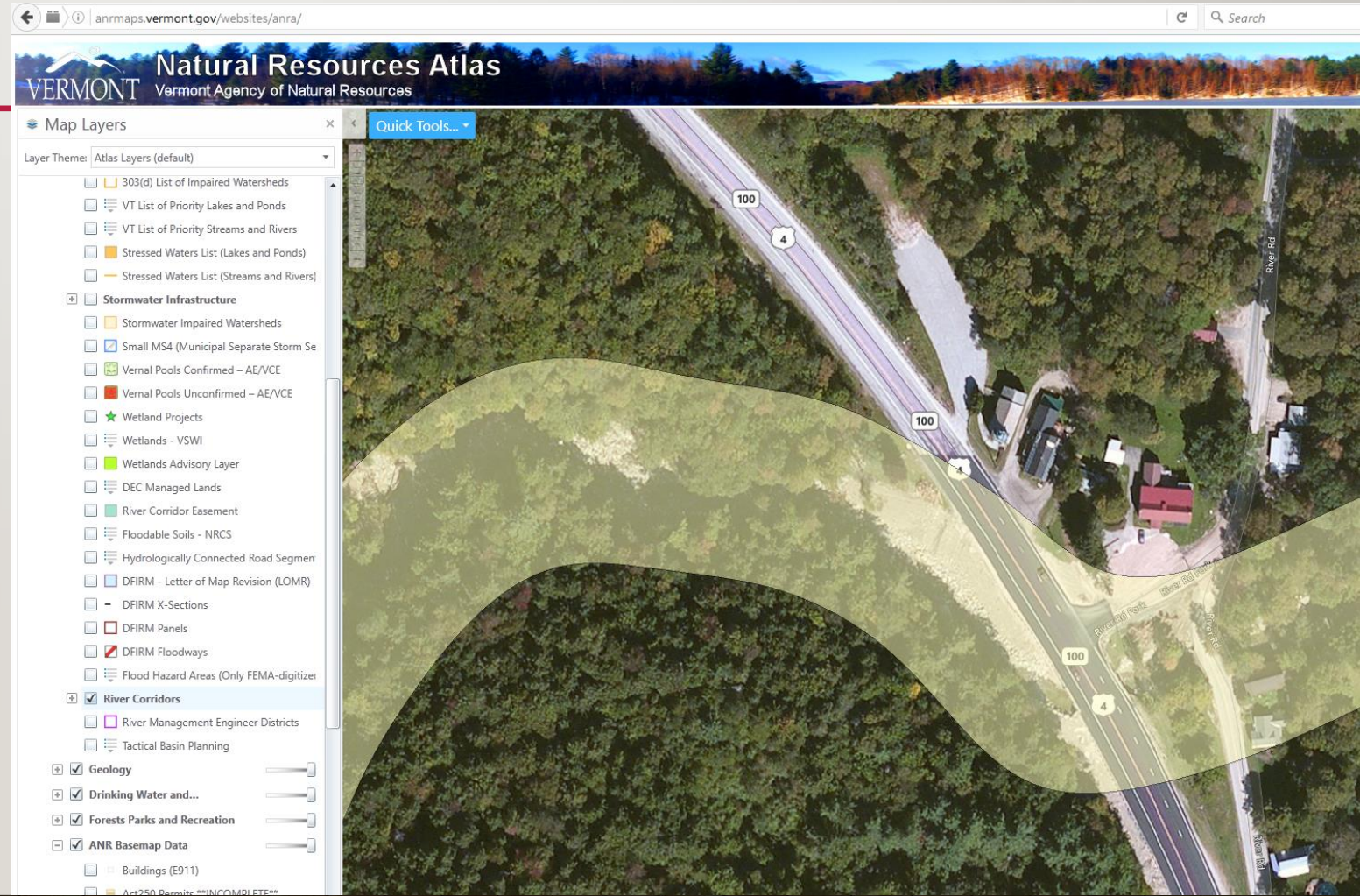


Lochrie House during Tropical Storm Irene, August 28, 2011



Lochrie House being destroyed during Tropical Storm Irene

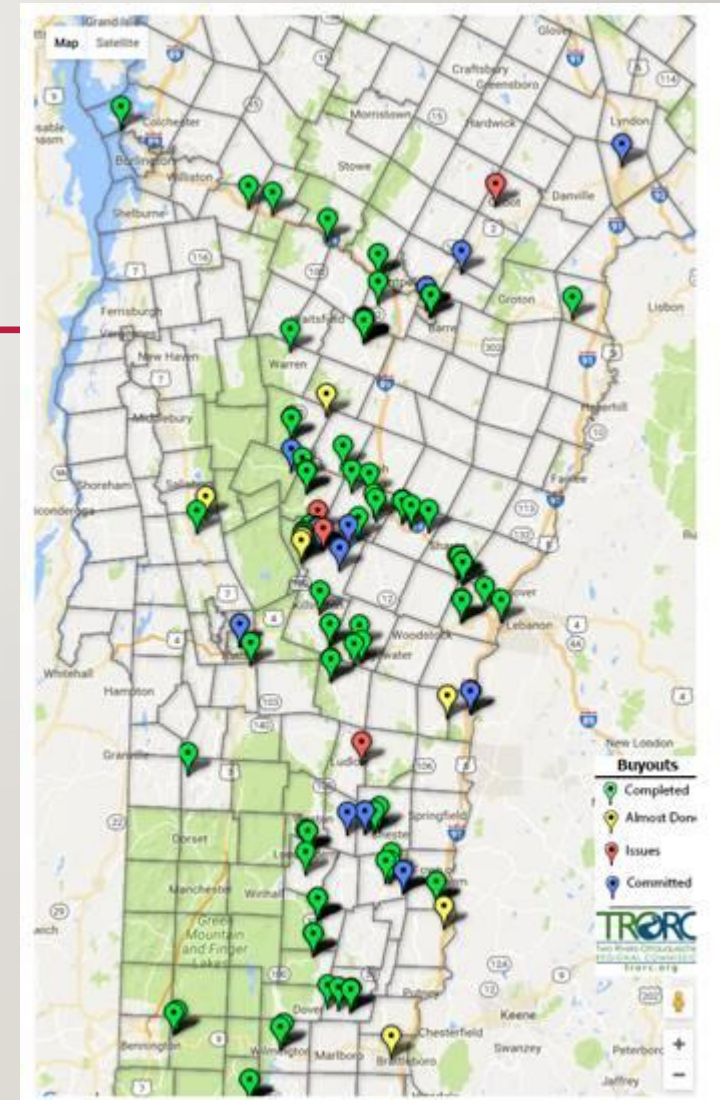
RIVER CORRIDOR MAPS



GETTING OUT OF THE WAY (BEST BAD OPTION)

Flood Buyouts

- 75% \$ - Hazard Mitigation Grant Program (HMGP)
- 25% \$ - Community Development Block Grant – Disaster Recovery (CDBG-DR)
- 150 properties
- About 30 Million Dollars



PROS/CONS OF BUYOUTS

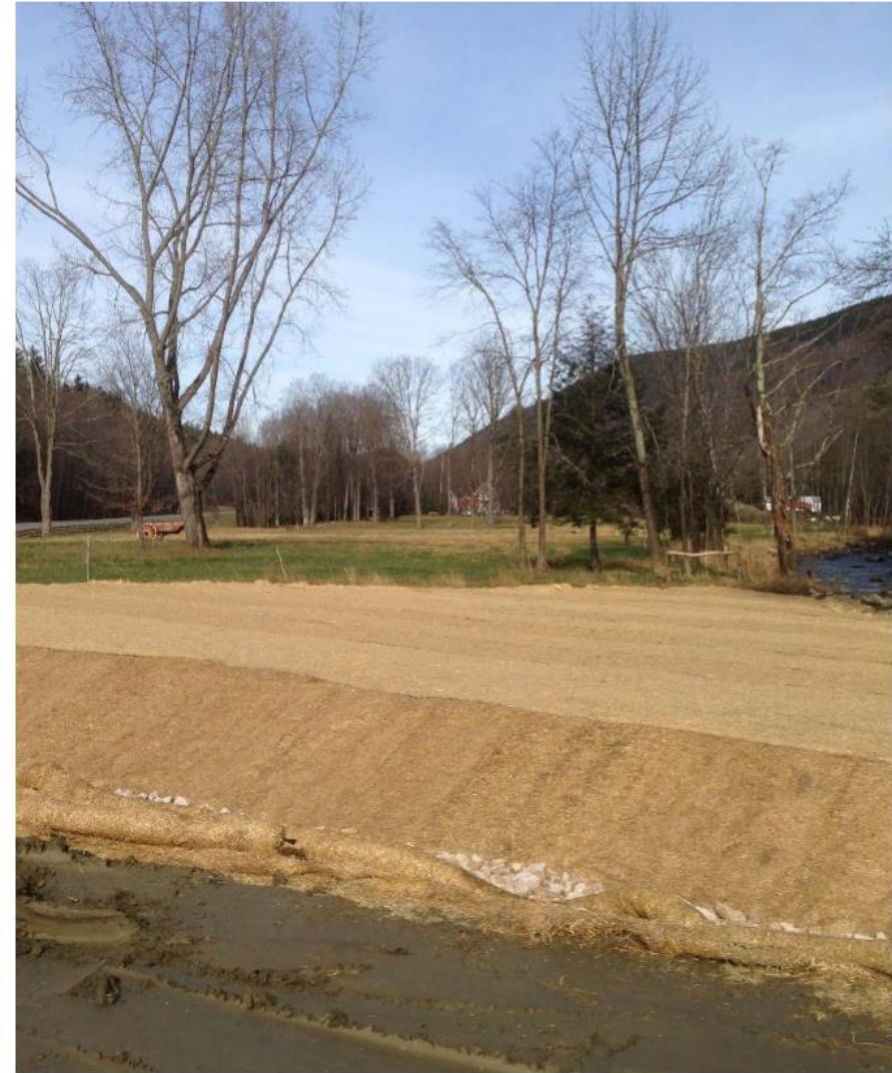
PROS

- Permanent Risk Reduction for Owner
- Less Financial Loss
- Increased Flood Channel
- No Future Responder Threat
- Better Water Quality

CONS

- Loss of Tax Base
- Long Process
- Paperwork Nightmare
- Only Funded During Disasters





Removal of fuel tanks as part of site assessment and cleanup and site with erosion control going into place on final grade.

CULVERTS, GO BIG OR GODOWN THE BROOK

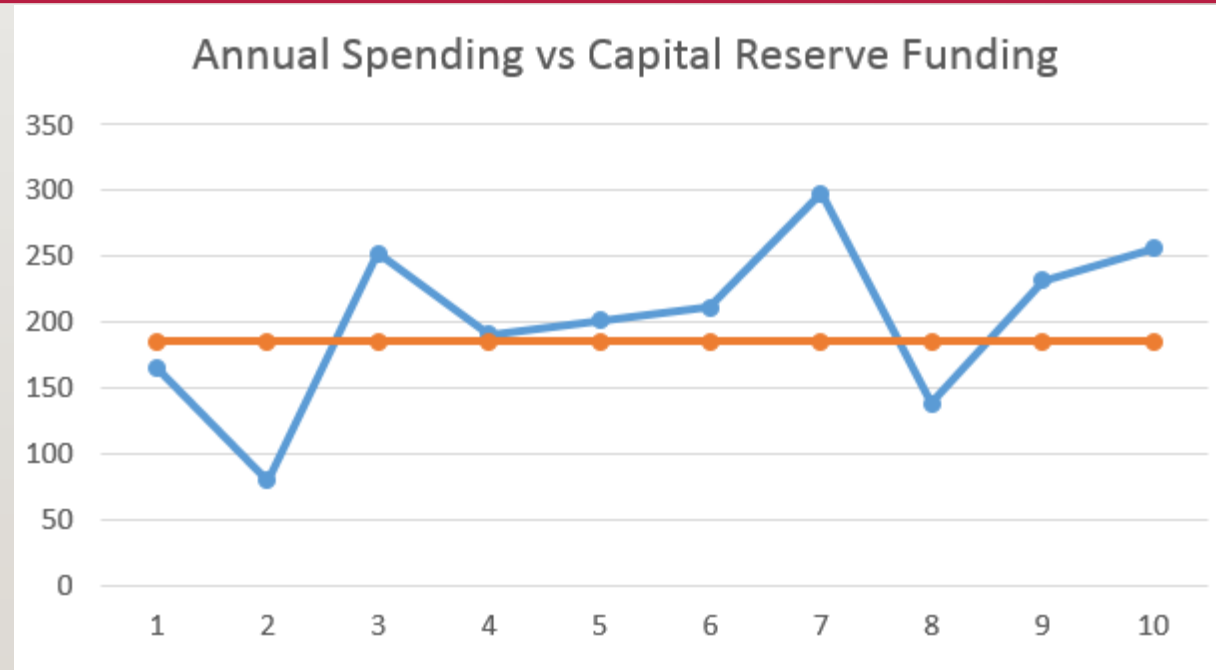
ONE OF THE MAIN THREATS OF CLIMATE CHANGE TO TOWNS IS FLOODS OVERWHELMING DRAINAGE STRUCTURES

- HMGP FUNDABLE WITH DATA
- OTHER FUNDING SOURCES
- NEEDS LOCAL MATCH



CAPITAL BUDGETING

Basic Tool to
Meet Future
Needs With
Steady Funding



CAPITAL BUDGET AND PROGRAM

Title 24 § 4430

- “(a) A capital budget shall **list and describe the capital projects** to be undertaken during the coming fiscal year, the **estimated cost** of those projects, and the **proposed method of financing**. A capital program is a plan of capital projects proposed to be undertaken during each of the following **five years**, the estimated cost of those projects, and the proposed method of financing.”

We suggest going out to ten years to help smooth costs.

CRAWL BEFORE YOU RUN

- Start simple
- Add a few things each year
- Don't sweat the dinky stuff (<\$5,000)
- Good project for Planning Commission in “off” years
- Delegate parts to relevant departments
- Auditors or Budget Committee can help out
- Can operate on a cash basis from annual appropriations or be sustained through **reserve accounts** that help to levelize costs



EXAMPLE

MANY ROAD PROJECTS WITH VARIOUS COSTS CAN BE SPREAD ACROSS YEARS SUCH THAT THE ANNUAL COST IS ROUGHLY EQUIVALENT.

THEN A ROUND FIGURE THAT WILL HIT MOST OF THAT COST CAN BE PUT IN THE BUDGET.

THIS ANSWERS THE “HOW DID YOU COME UP WITH THAT?” ISSUE.

	Cost per road	2014	2015	2016	2017	2018	2019
	Cost per road	2014	2015	2016	2017	2018	2019
FARNSWORTH BROOK RD	\$77,579.00	\$38,789.50	\$38,789.50				
DAVIS ACRES RD	\$10,565.80		\$10,565.80				
GREEN RD	\$35,439.80						\$35,439.80
BLANCHARD RD	\$13,506.00			\$13,506.00			
BRAIN STORM RD	\$49,418.80				\$49,418.80		
JARVIS RD	\$1,054.60		\$1,054.60				
CLOUGH RD	\$681.00	\$681.00					
LABOUNTY RD	\$18,172.60						\$18,172.60
LABOUNTY RD/PETH	\$908.00				\$908.00		
MENARD RD	\$11,269.60					\$11,269.60	
BOWEN HILL RD	\$2,043.00			\$2,043.00			
PETH RD	\$37,677.20					\$37,677.20	
OLD BASS RD	\$5,652.00	\$5,652.00					
WALKER RD	\$35,193.60			\$35,193.60			
	\$299,161.00	\$45,122.50	\$50,409.90	\$50,742.60	\$50,326.80	\$48,946.80	\$53,612.40
	Structure match	\$17,000.00					
	Irene Debt	\$29,000.00	\$29,000.00	\$29,000.00	\$29,000.00	\$29,000.00	\$29,000.00
	Emergency	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
		\$91,122.50	\$89,409.90	\$89,742.60	\$89,326.80	\$87,946.80	\$92,612.40