# Incorporating Climate Adaptation & Resilience in Day-to-Day Planning

Kevin Geiger, AICP CFM

kgeiger@trorc.org

Senior Planner

Two Rivers-Ottauquechee Regional Commission



## Climate Adaptation

#### **Proactions**

 Getting ready for increased floods, heat waves, and ecosystem shifts and the associated business, human health, and financial impacts

#### Reactions

 Changing our reactions to meet the changed conditions we find ourselves in

## Resilience

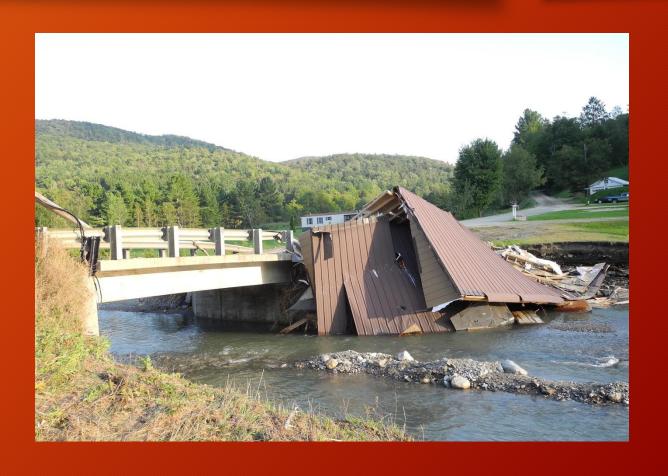
#### A State of Being

• Being able to *withstand* (mentally, culturally, physically, financially) the current and future impacts of heat, water, wind, ice, kudzu, and Burmese pythons

•

# Day-to-Day Planning

- Written Plans
- Planning Processes
- Land Use Regulations
- Codes



## Plans

- Municipal Comprehensive Plans
- Hazard Mitigation Plans
- Climate Adaptation Plans
- Capital Budgets (a plan on how to spend)
- Economic Development Plans

## Planning Processes

- This is where you get yelled at gather together people and find a common reality so as to make decisions
- A good process builds bridges between people
- The process alone is a product if done well

#### **FLOODS**

- Flood Regulations: National
   Flood Insurance Program (NFIP)
- No net fill
- How high? +1' +2' +5'?



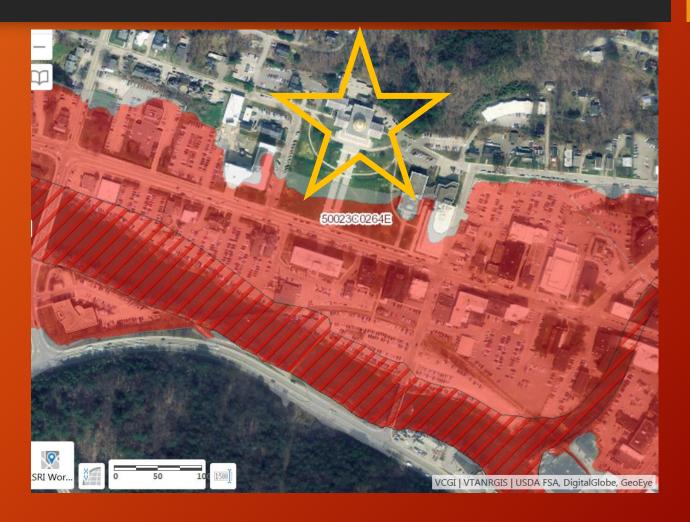
#### **FLOODS**

- Lateral erosion
- When retreat is not an option



#### **FLOODS**

- When retreat is not an option
- Floodproof



#### Site Plan

- Build with the likely future in mind
- Reduce impervious cover
- Increase on site storage of rain
- Shade the buildings

## Codes

#### Stormwater/Drainage

- Require no net change from pre-construction
- Require 90% impervious cover, offsite mitigation
- Make new roads and culverts pass the 2% (50year) storm or last storm if greater.
- Require replacement of culverts if road was made impassable due to culvert not passing flows

## QUESTIONS??

Should you buy a house right on the ocean at sea level?

Not unless it is really cheap.