





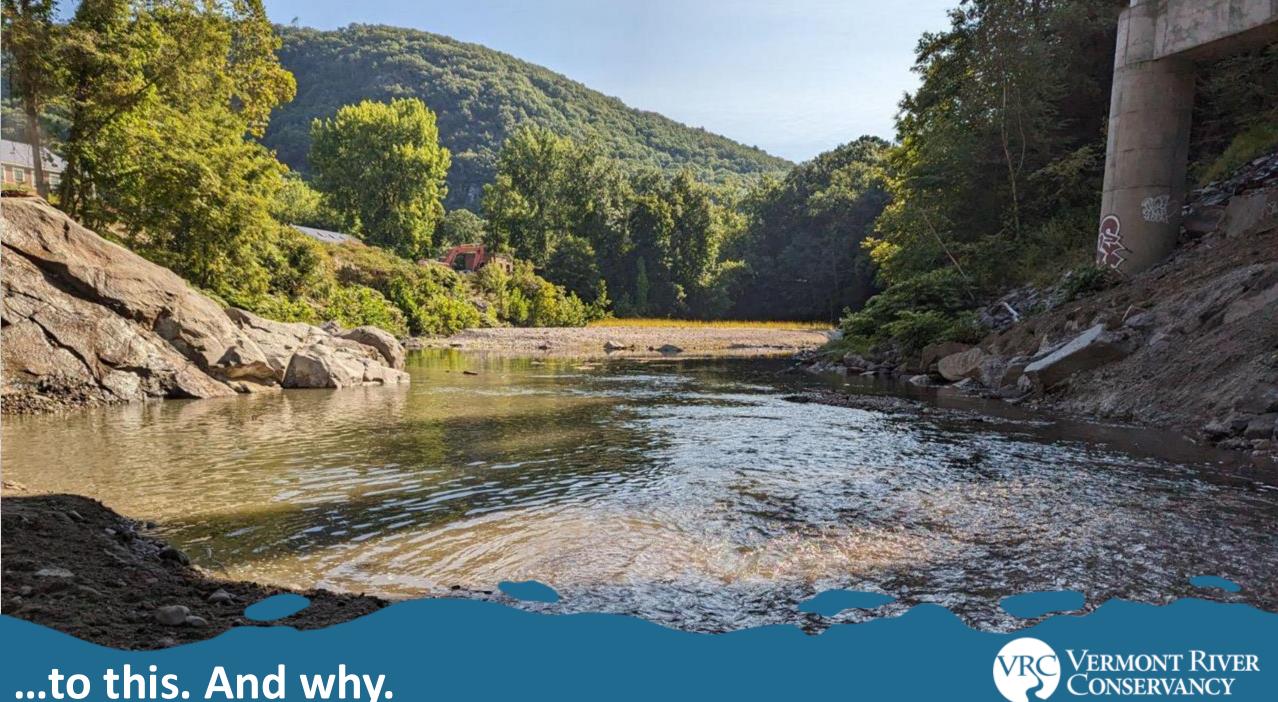


How we get from this...



...to this...

VRC VERMONT RIVER CONSERVANCY



...to this. And why.



#### The Vermont Dam Removal Initiative

- Raise awareness
- Identify derelict dams
- Prioritize projects
- Collaborate



"Vermont has removed more dams per capita than any other state" American Rivers, 2024

(16)

reevermontrivers.org

#### 72 Dams Removed From Your Waterways as of 2024 Dam Name, Town - Year Removed Newport Remnant Dam, Newport City -2006 (37) Norwich Pool, Norwich -2017 (2) Newport-11, Newport City -1996 (38) Kendrick Pond, Pittsford -2014 (39) Beaver Pond, Mendon -2013 (3) East Highgate, Highgate -2017 (40) Hurricane Lower Reservoir, Hartford -2012 (4) Johnsons Mill, Bakersfield -2021 (41) Hurricane Upper Reservoir, Hartford -2010 (5) Orleans, Barton -1980 (42) Pelletier, Castleton -2022 (6) Lyman Falls, Bloomfield -2021 (43) Dunklee Pond, Rutland City -2021 Johnson State Upper, Johnson –2003 (4) Castleton State College, Castleton -(8) East Burke (Lumber Co.), Burke -2017 (9) Wyoming Valley, Guildhall -(45) Lower Eddy Pond, Rutland City -Mill Pond, Colchester -2019 (46) Rockefeller (Peggys Pond), Plymouth -2024 (1) Lyndon State College (Lower), Lyndon -1996 (47) Pinney Hollow Brook, Plymouth -2007 13 Stevensville Brook, Underhill -2008 (48) Connolly, Shrewsbury -2023 UVM (Lower), South Burlington –2024 49 Ascutney Snowmaking Diversion, West Windsor -2018 (4) Sweet Farm, Waterbury -2016 (50) Harrington Road, West Windsor -2017 (is) Marshfield-8, Marshfield -2012 (51) Weston (Lower), Weston -2019 (is) Franconia Paper Co., Groton -2014 (52) Simpson, Dorset -2024 (17) Groton-9, Groton -2015 (3) Wallace, Dorset -2021 (18) Pierson, Northfield -2008 (54) Lower Chester Reservoir, Chester -(ss) Reynolds Lower, Dorset -2021 (19) Union Brook, Northfield -2010 (20) Camp Wihakowi, Northfield -2020 (56) Reynolds Upper, Dorset -2021 21) Hands Mill, Washington -2024 (57) Magic Mountain Dam, Londonderry -2020 2 Shashoua, Warren -2018 (58) Magic Mountain, Londonderry -2021 Dow Pond, Middlebury –2023 (5) Dufresne Pond, Manchester -2013 Bobbin Mill, Chelsea -(6) Montagna/Wooburn Road, Windham -2021 3 Wainwright, Salisbury -2024 (61) Kidder Hill, Grafton -2019 (26) Main Street (formerly SOR), Randolph -2016 (a) Blake & Higgins (Island Corp), Westminster -2024 (27) Camp Killooleet Diversion, Hancock -2018 (B) Dalewood, Jamaica -2006 28 Geer, West Fairlee -2017 (4) Red Mill Dam, Arlington -1974 Montague Rod and Reel Co. (Lower), Thetford -2022 (6) Podunk, Wardsboro -3 Pomainville, Shoreham -2017 (6) Bagatelle, Dummerston -2017 (3) Hyde Mill, Bethel -2021 (67) Johnson, Dummerston –2019 (32) Eaton (Upper), Royalton -2019 (8) Old Grist Mill, Bennington -2013 3 Eaton (Lower), Royalton -2019 (69) Ruhl/Cold Brook, Wilmington -2018

(70) Gannon/Hall Road, Wilmington -2023

(7) Lawrence, Guilford -2021

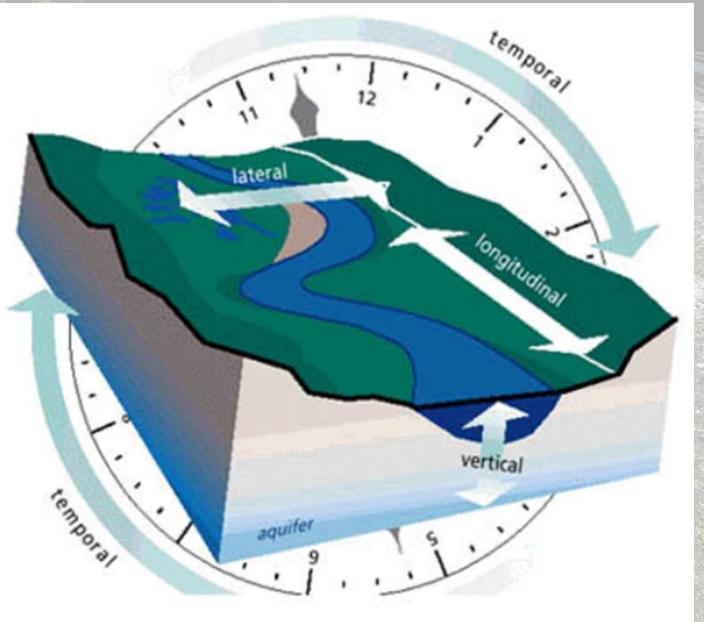
(72) Britell, Windsor -

3 Thetford Hill Reservoir (Lower), Thetford –2010

3 Hillside Farm, Norwich -2003

(3) Norwich Reservoir, Norwich -2018

#### Watershed Science



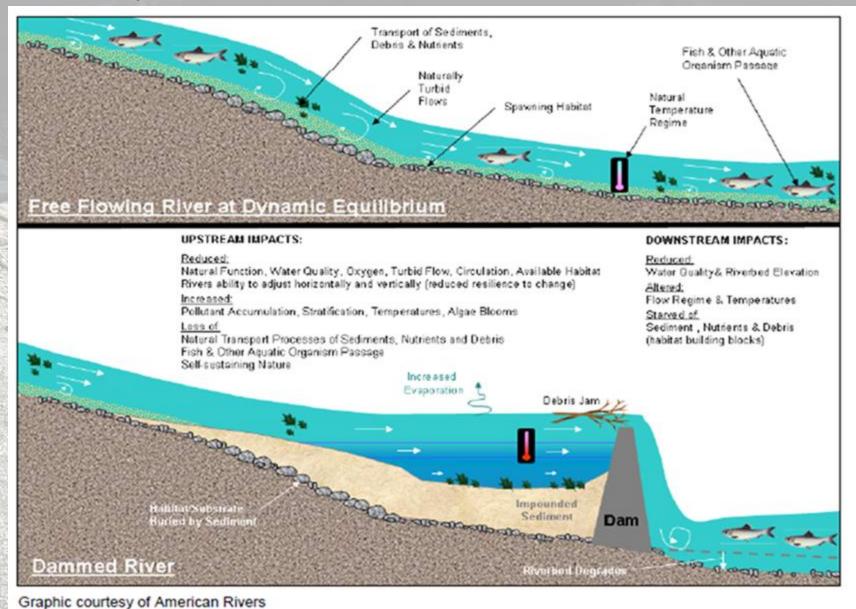
The four dimensions of river connectivity. (Source: Annear et al. 2004)



#### Reconnecting River Systems

#### Dams:

- disrupt the river
  continuum Biota
  flow-habitat
- degrade water quality and aquatic habitat
- restrict the movement of AOP including fish and other wildlife.
- cost \$ to maintain
- liability to landowners and neighbors
- public safety risk

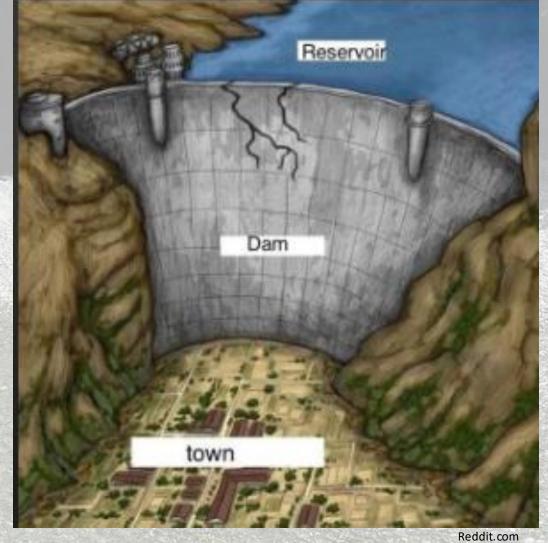




### Project Selection

- Ecological impact (AOP, Flood Mitigation, Wetland Restoration, Water Quality benefits)
- Hazard Potential Classification and Condition of the Dam
- Owner interest
- Partner support
- Urgency is real





"Unstable dam has town on edge" Times Argus, July 18, 2023 - Rouleau Pond Dam

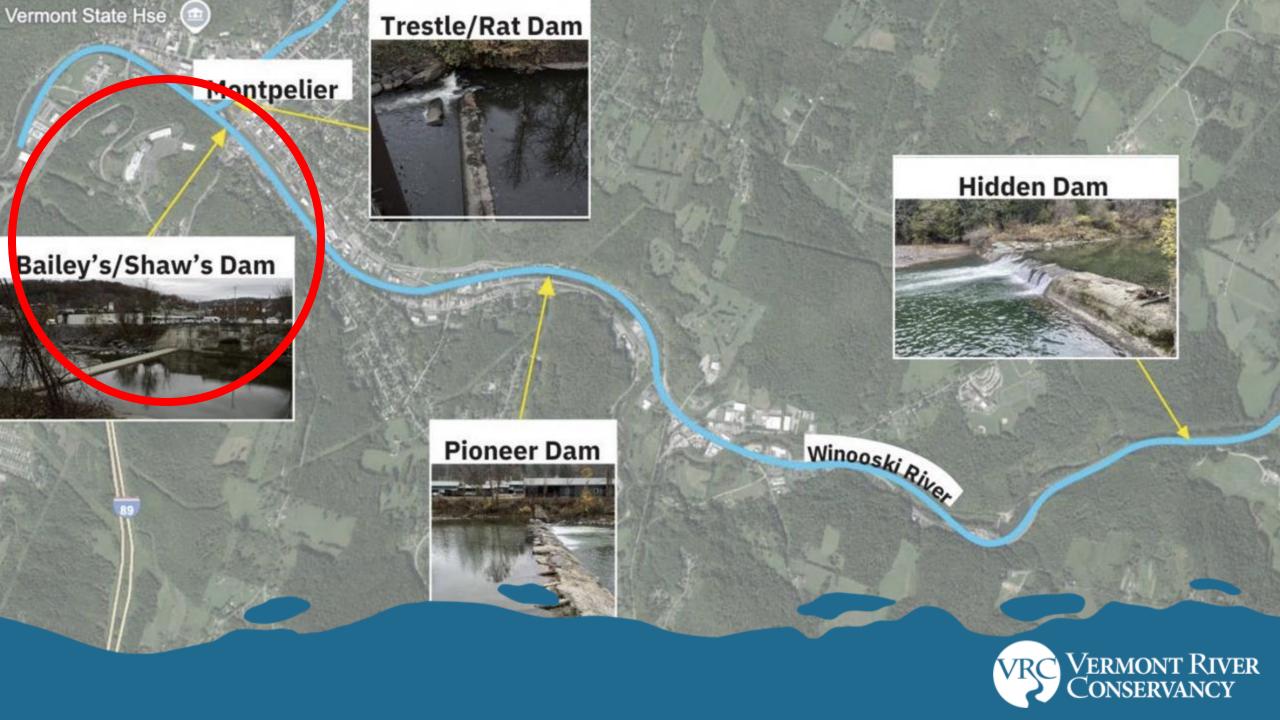
"Dam Scary: Intense Storms Push Vermont's Aging Structures to the Brink" Seven Days, July 26, 2023

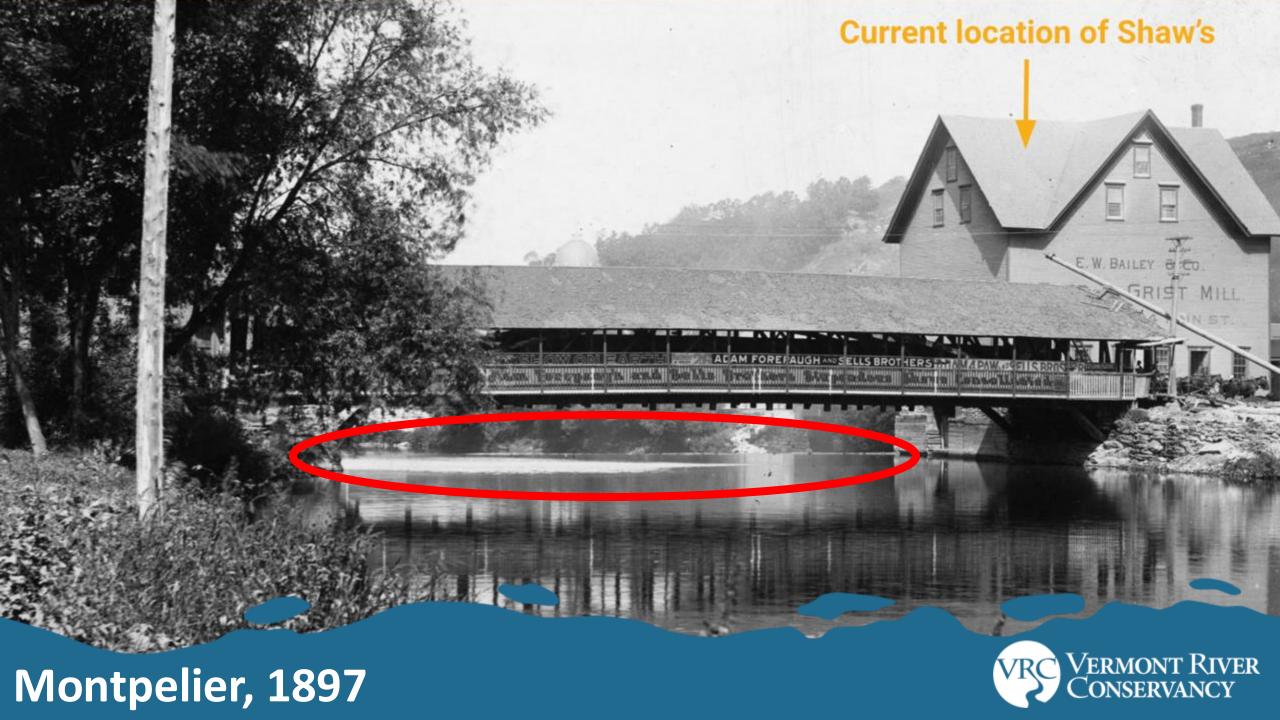
#### Dam Removal Process

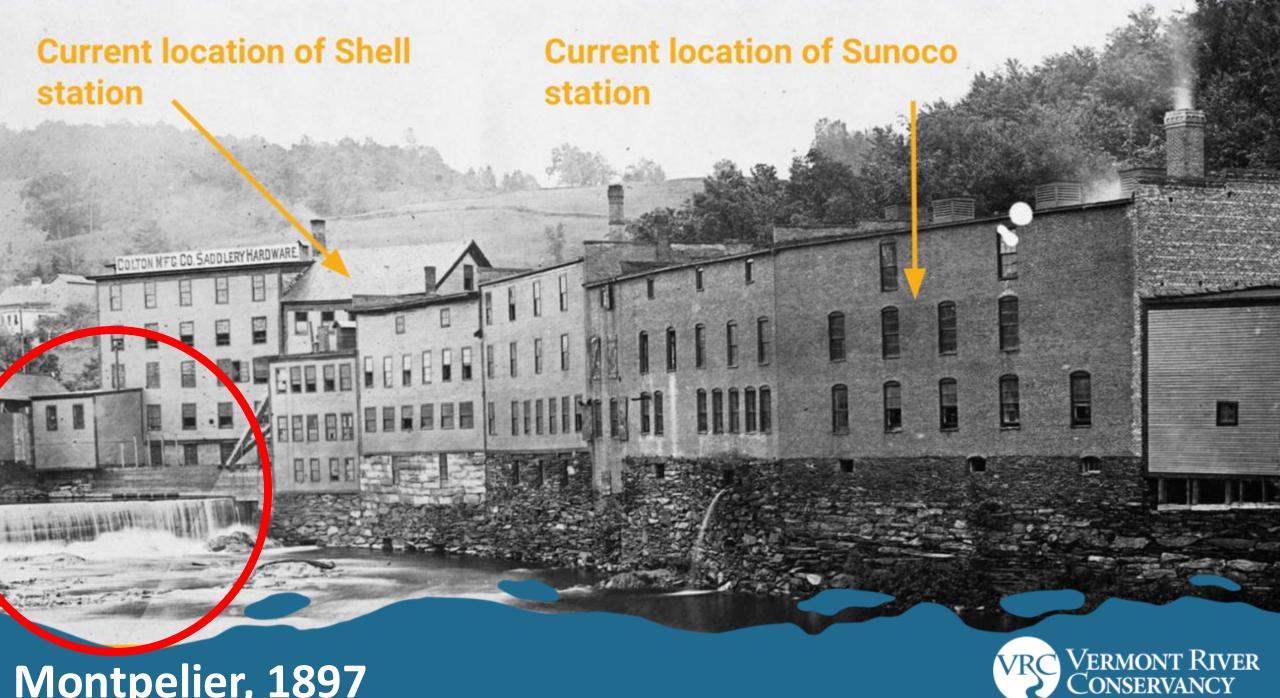
- 1. Project Selection
- 2. Develop support
- 3. Fundraising
- 4. Design
- 5. Permitting
- 6. Outreach
- 7. Removal
- 8. Restoration
- 9. Monitoring
- 10. Time!





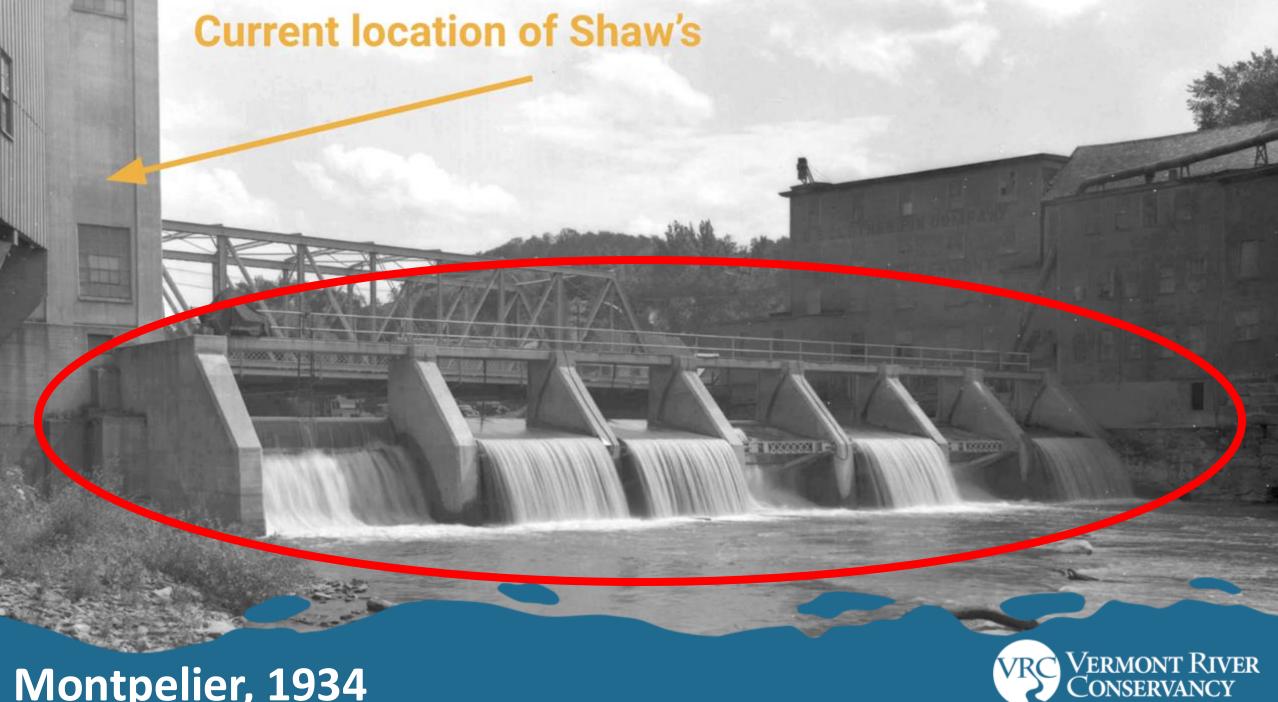


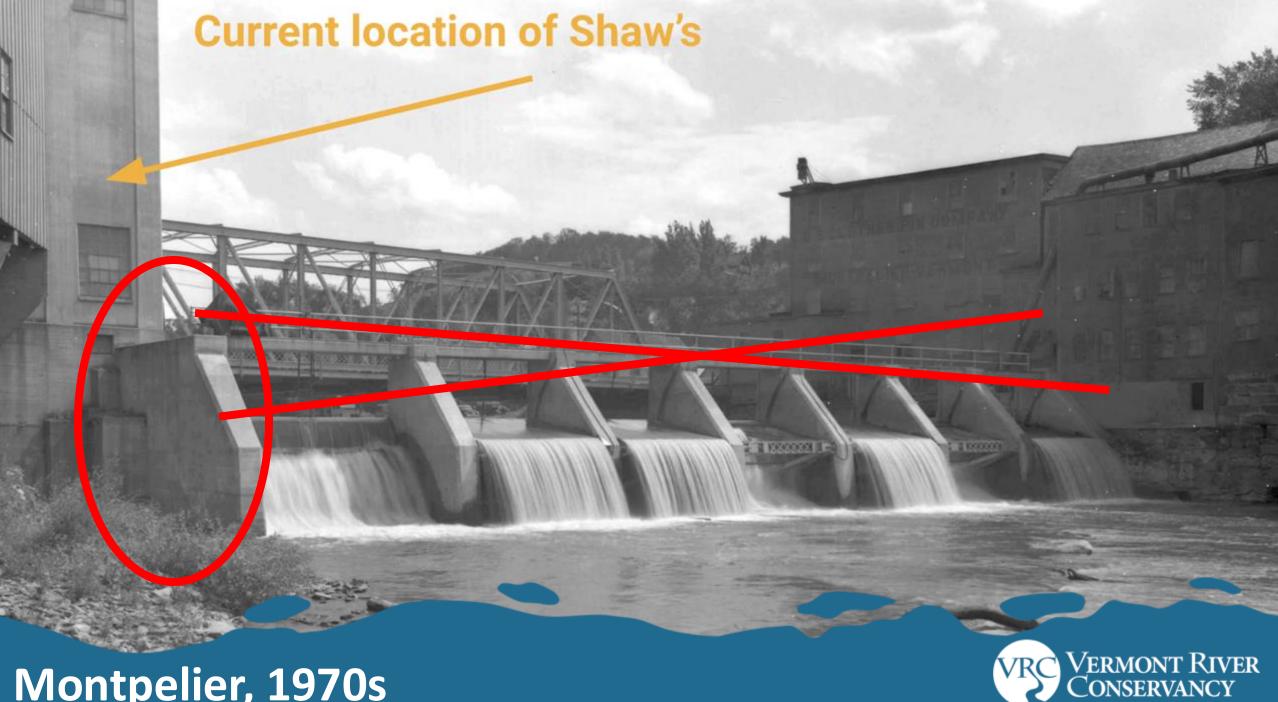












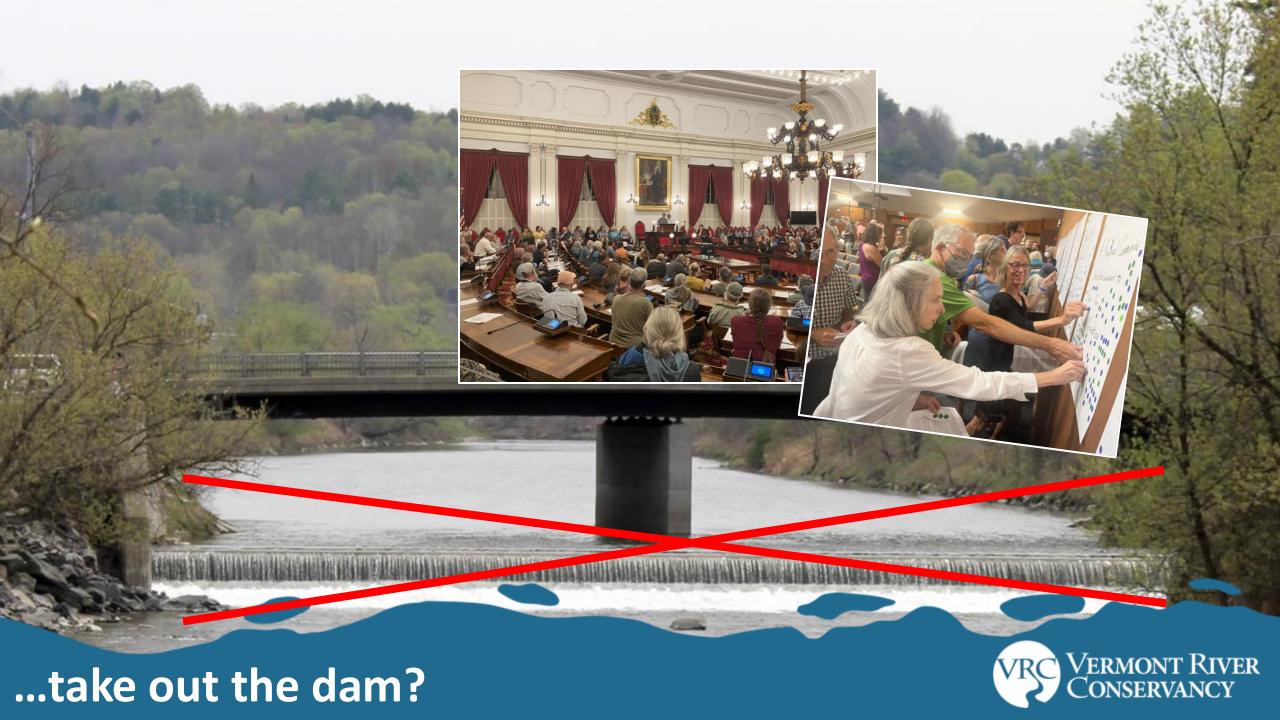
Montpelier, 1970s













How? What do we need to know?





What would the river be like? = Why



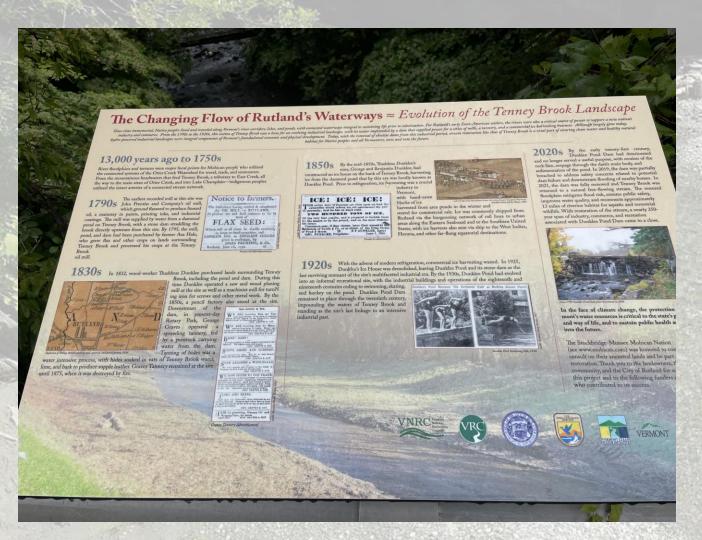
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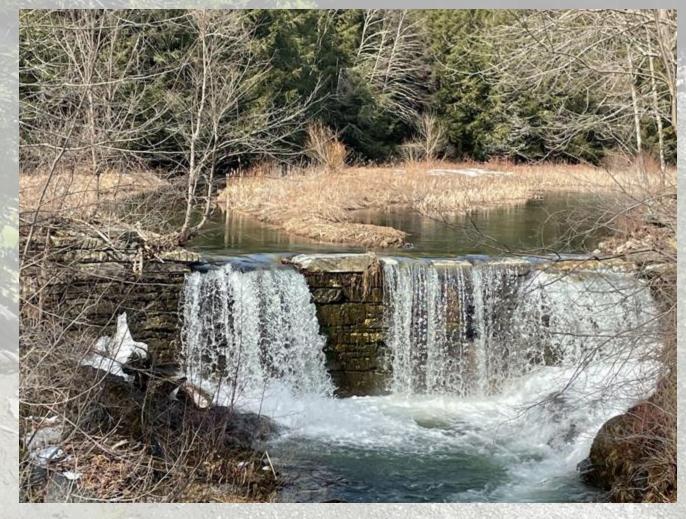
#### Dunklee Dam, Tenny Brook -Rutland - 2021



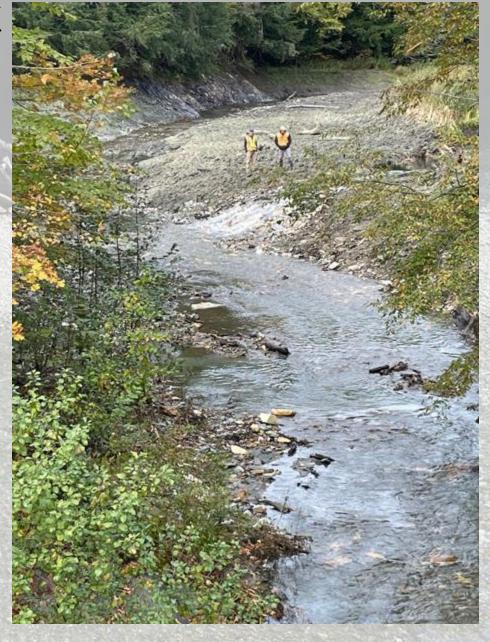


## Pelletier Dam, North Breton Brook

- Castleton - 2022



North Breton Brook - Pelletier Dam, March 2022



Post Dam Removal - North Breton Brook, October 2022

Connolly Pond Dam, Mill River Tributary -

Shrewsbury - 2023



Connolly Pond Dam Removal, Photo by Marc Cimonetti

# Wainwright Mill Dam, Tributary #10 Salisbury (2024)



- 13,000 yrs. ago to 1750's –People used the river for travel, trade, food
- 1790-1817 Jon Wainwright sawmill developed using waterpower
- 1826 Charlie Eager used hydro power for blacksmith shop
- 1901 Landowner Ingalls used as trout pond and creamery
- 1926 Lake Dunmore Creamery abandons dam power
- 2024 Betsy Gossens reconnects the river

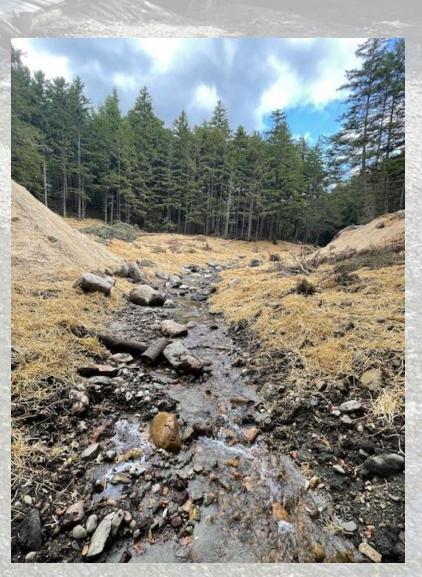




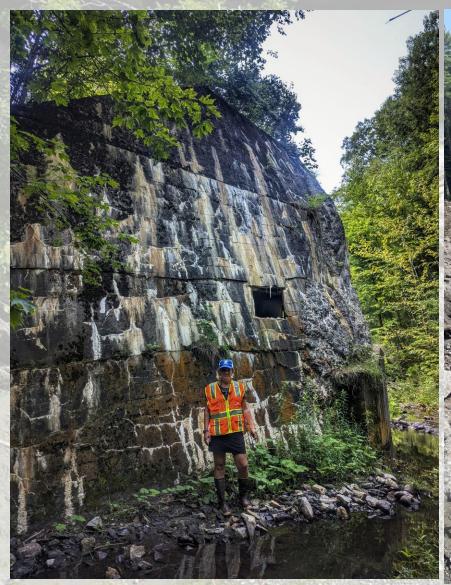
### Breadloaf Dam Removal, Brandy Brook, Ripton - 2025







### Youngs Brook Dam, West Rutland - 2025







## Cross Brothers Dam, Dog River, Northfield – Coming soon





#### Outcomes of Dam Removal and Restoration

- Eliminates expensive ongoing maintenance costs
- Removes liability for dam
- Decreases flood risk to keep communities safer
- Allows rivers to flow onto floodplains and wetlands to safely store and slow water
- Habitat connectivity for increased ecological diversity
- Improved water quality for drinking and swimming
- Added recreation opportunities to leverage a growing outdoor recreation economy and foster community wellbeing









