



Facing New Challenges in Resource Management for Water Protection

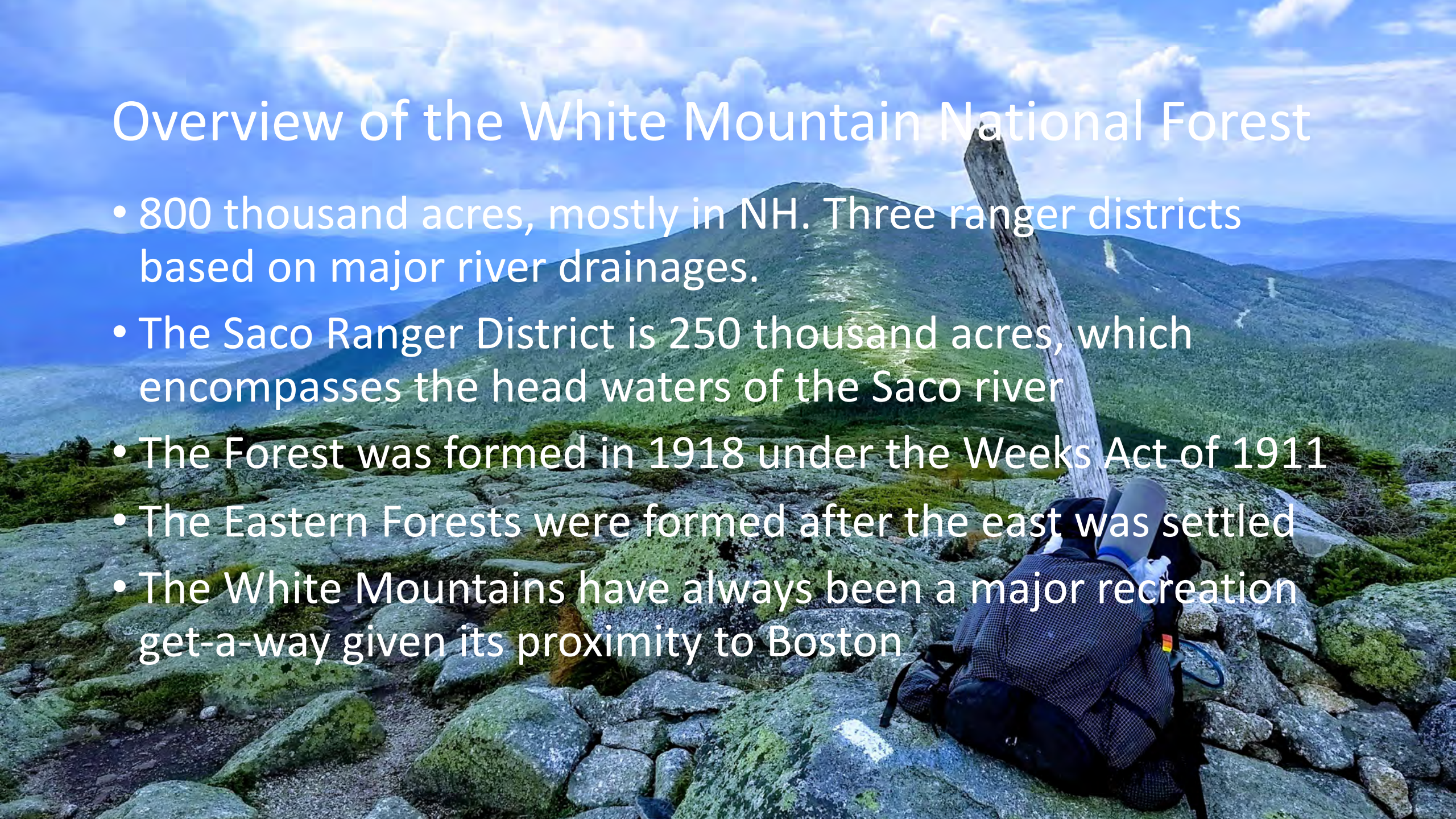
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Overview of the White Mountain National Forest

- 800 thousand acres, mostly in NH. Three ranger districts based on major river drainages.
- The Saco Ranger District is 250 thousand acres, which encompasses the head waters of the Saco river
- The Forest was formed in 1918 under the Weeks Act of 1911
- The Eastern Forests were formed after the east was settled
- The White Mountains have always been a major recreation get-a-way given its proximity to Boston







Management Priorities and Challenges

Priorities

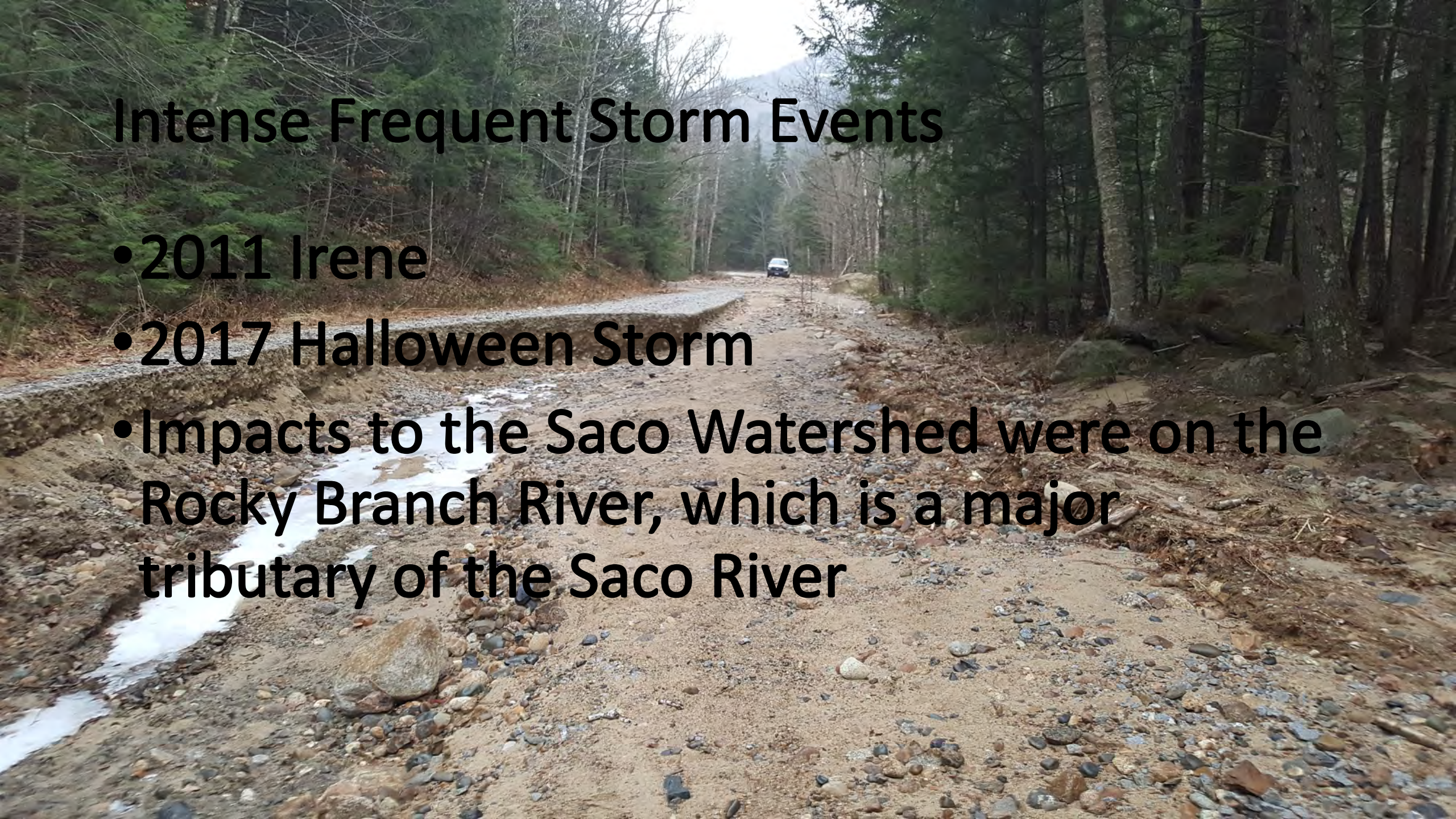
- Clean water
- Recreation opportunities
- Forest and wildlife habitat Management

Challenges

- Intense storm events*
- Very high user visitation (recreation) & associated impacts*

Intense Frequent Storm Events

- 2011 Irene
- 2017 Halloween Storm
- Impacts to the Saco Watershed were on the Rocky Branch River, which is a major tributary of the Saco River













Damaged Bridge

Major Road Damage

Minor Road Damage

**Abandoned Main
Channel**

New Main Channel

Jenks Hill Rd



07/15/2008 - above bridge

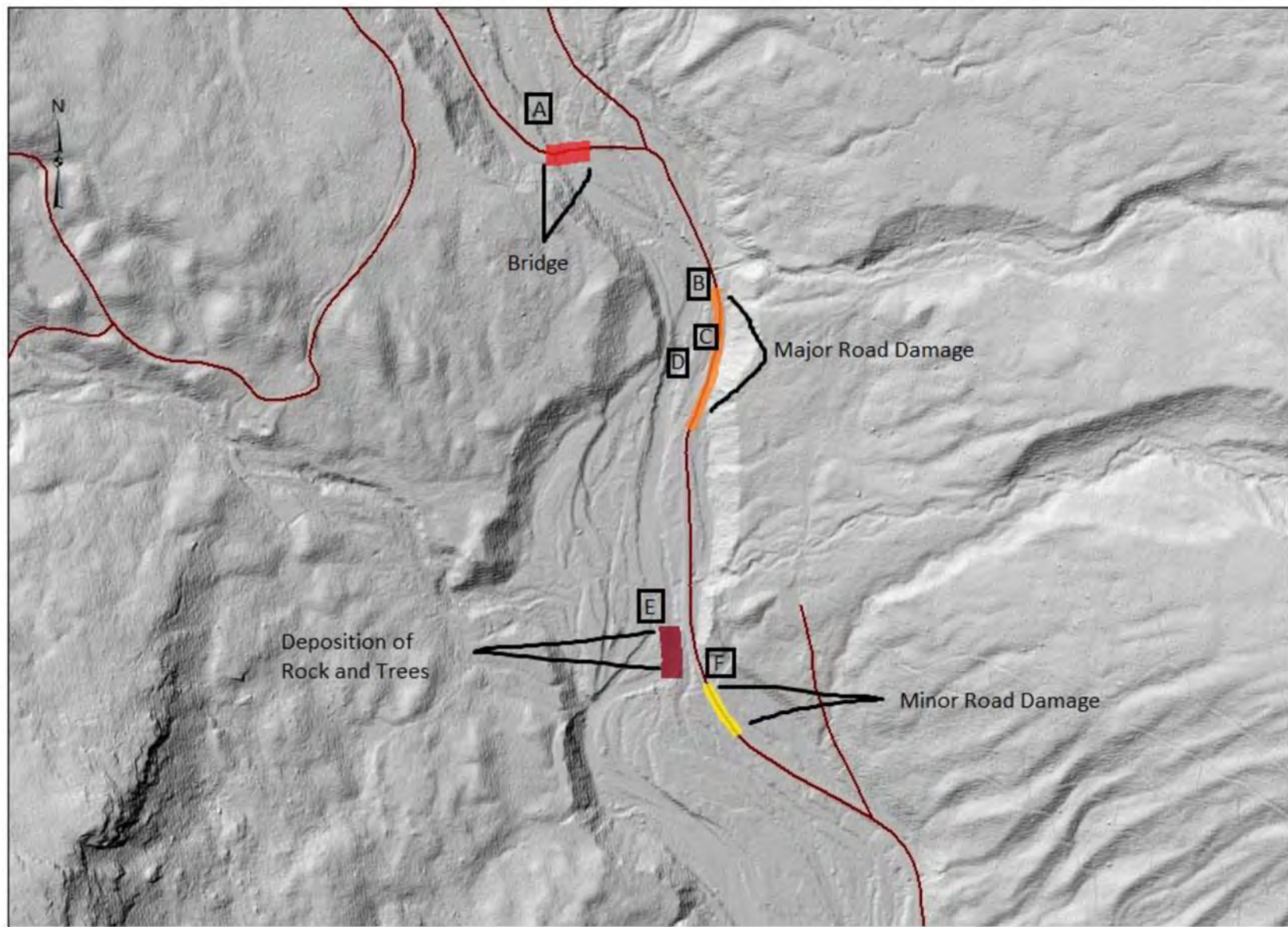


06/02/2018 - upstream of bridge

WILDLIFE REFUGE



Rocky Branch Trail



Current Approach

- The road accesses timberland and a trailhead
- Instead of rebuilding the road (again)
 - Remove the bridge, roll the road back, and relocate the trailhead
 - Restore the floodplain

Are Intense Rain Events the New Normal?

- In the last 7 years we have experienced more frequent intense rain events
- Historically there have been large storms
- Are we in a new climate cycle?
- We suspect that after these storm events rivers remain in a state of flux for some time
 - Repeat events exacerbate instability
- These events are affecting our hiking trails as well

What Are We Learning?

- We cannot continue to maintain roads as we have done in the past
- Rethink the idea of permanent infrastructure
 - The riverbeds have risen from deposition
 - We need to move roads or decommission them
- Permanent roads need to be designed to be resilient
 - Oversized culverts, etc..

Recreation Challenges

- Locally, very high visitor use, which is a positive thing, but is very difficult to manage the expectations and impacts of visitors
 - 6 million visitors every year
 - Infrastructure capacity issues, parking , trails, human waste, etc...



Current Approach

- We are working with stakeholders across the forest to develop alternative transportation options to alleviate parking problems
- We helped stand-up a non-profit group to help maintain our network of trails (the White Mountain Trail Collective <http://wmtrailcollective.org/>)
- Working with local Chambers of Commerce to educate visitors on recreation opportunities
- Formed the Trailhead Stewards volunteer group who provide trail information and hiker preparedness advice at trailheads

A photograph of a mountainous landscape. In the foreground, a dirt trail winds through green grass and scattered rocks. In the background, two people wearing yellow hard hats and backpacks are standing near a yellow measuring tape stretched across the ground. There are several stone structures, including a small pile of rocks and a larger wall-like structure made of stacked stones. The terrain is rugged and rocky.

Questions?

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