Forest Operations on the University Forest in a Changing Climate

Forest Climate Change Initiative Webinar

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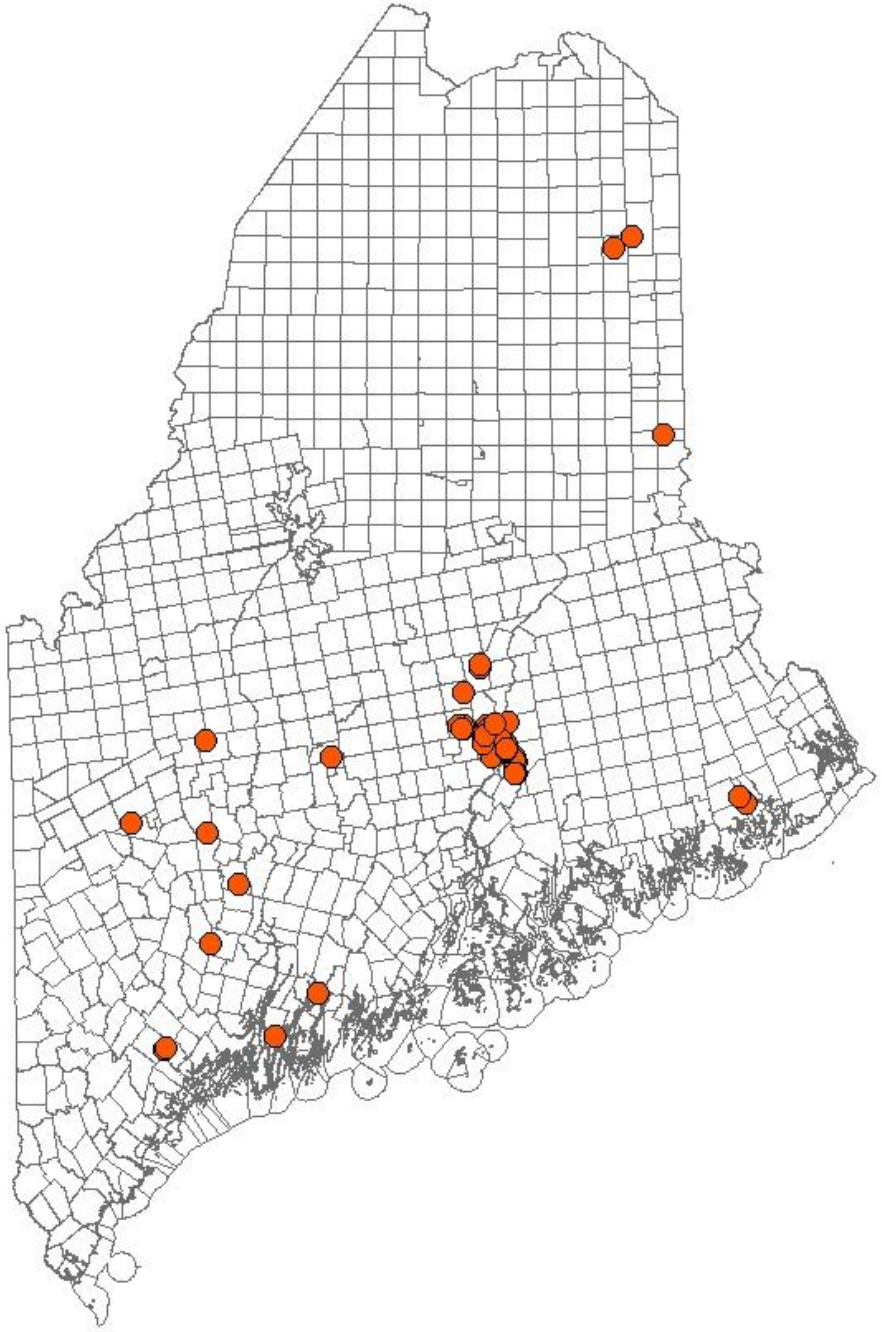
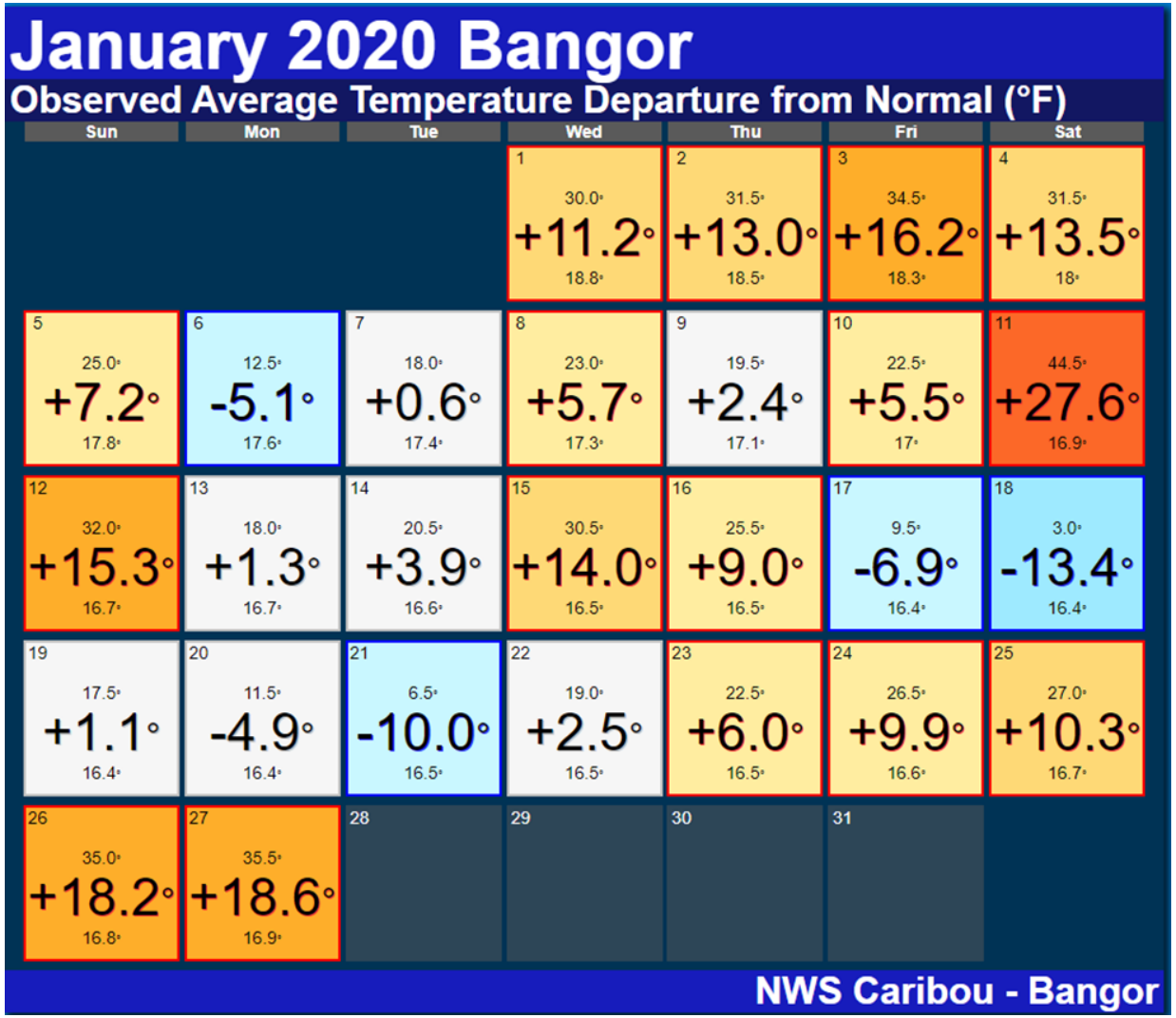
University Forests

- Landbase:
  - Small and scattered
    - ~14,000 Acres
    - Across climatic zones
    - Parcels range in size from 4000 ac to ½ acre



My stress level indicator……..



Our Operational Goal

- Extract wood efficiently while minimizing environmental and regulatory risks

Given greater climate uncertainty

How can we maximize the amount of “safe” wood we have available to harvest and best manage the risks associated with the “risky wood”?

Our strategy such as it is

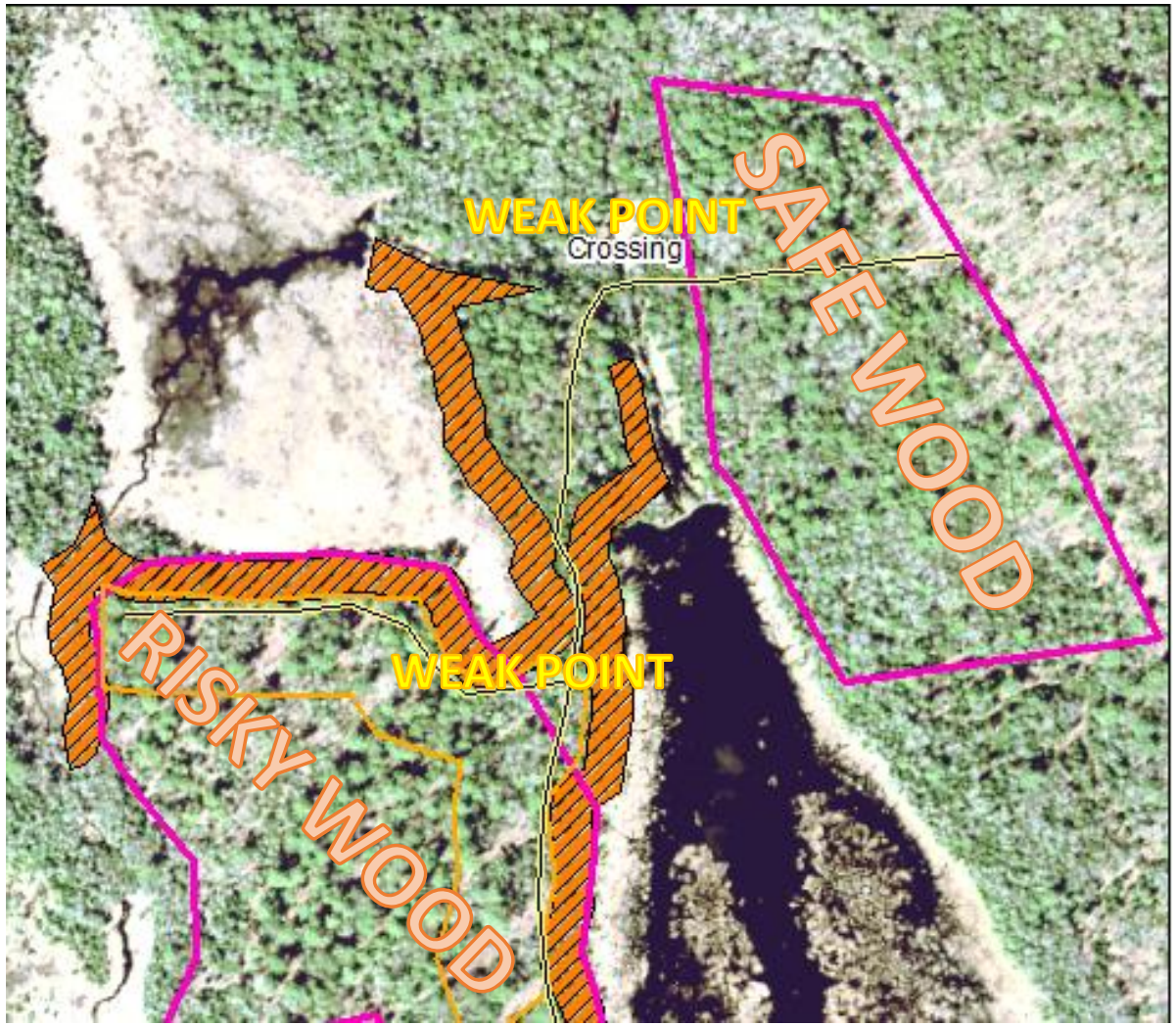
- Short term
  - Day to day reactions
- Medium term
  - Seasonal harvest planning
- Long Term
  - Infrastructure investments
  - Getting up to speed on new technology

Operational Responses - Harvesting

Short Term

- Responding to weather just like we always have - just more of it.
- When cold comes we use it.

- Medium Term
  - We always try to have backup wood if risk is high.
  - Pay close attention to our BMPs and their maintenance.



Operational Responses - Roads

- Longer Term
  - Roads – Aggressively working on maintenance of drainage systems
    - Ditch maintenance
    - Surface maintenance and grading
    - Culvert upsizing as opportunities come along
    - Retiring or moth balling roads – pulling drainage structures
  - Rethinking daylighting roads – if the road accesses mostly winter ground.
    - Its still good in the woods but the road is going to pieces…..

Make use of the Opportunities

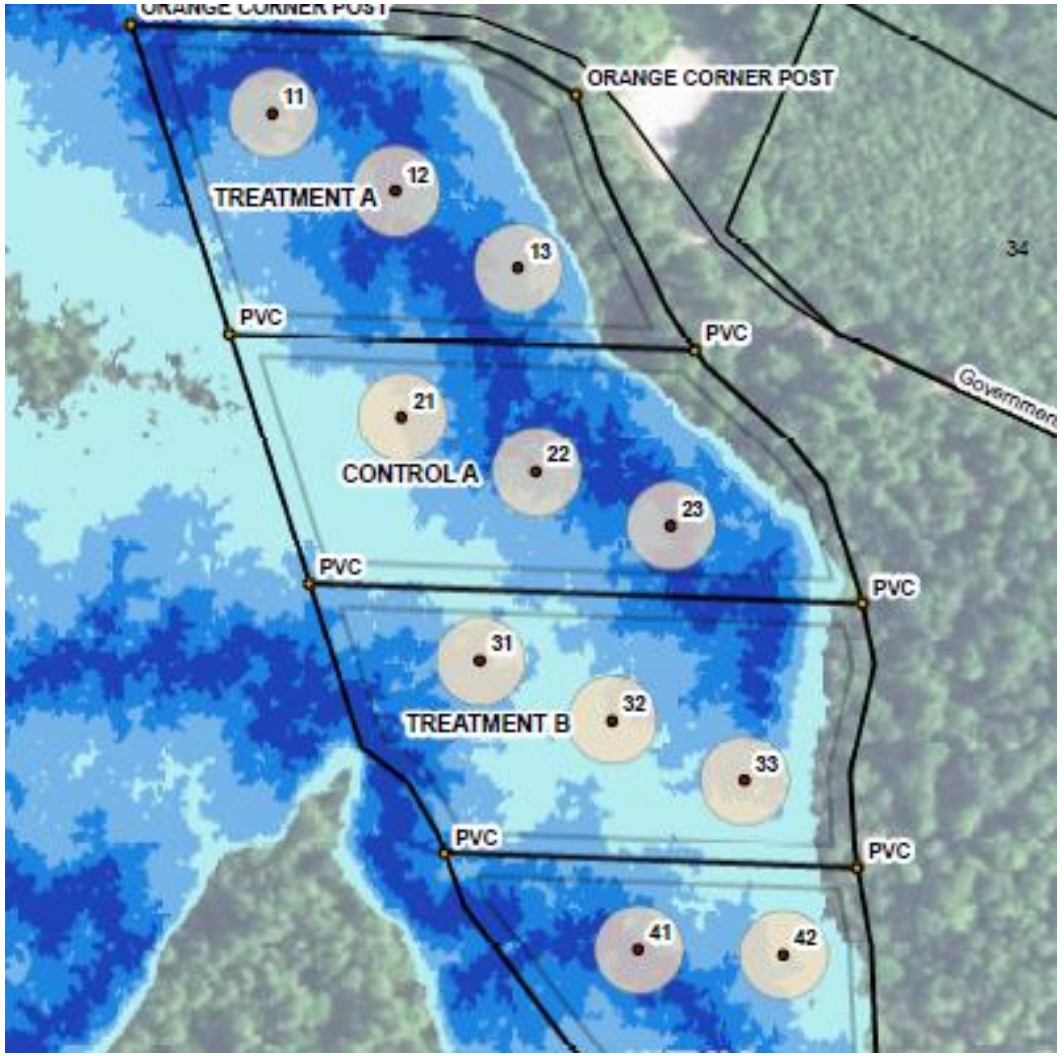
- Reduced snow pack meant we could do PCT and some herbicide work in January and February this year!
- Repeated rain on snow events followed by cold last season actually froze some extremely wet sites very well.
- Drought this summer has made for good operating conditions

What has helped

- Wet areas mapping has proved useful where we have used it
- LIDAR derived 2’ contours
- Availability of Cut-to-Length contractors and hybrid 3-piece systems.
- Knowledgeable contractors

What Would Help

- Better long term weather forecasting
  - 30-60 days out would actually help planning



Virtual Harvest tour

- 25 acres 3 stage pine shelterwoods (one stage 1 and one stage 2)
  - Volume Remove ~450 cords
  - Cable skidder
- Started December 2017. Completed Winter of 2019-2020.
- Significant Stream Crossing
- Large regulated riparian areas
- Mixed soils, from very prooly drained peat-muck to well drained tills.


N
Stop 2
Stop 1
Stop 3
Legend
ME_Streams_29mar10_L
OPID_201_Harvest_area
Wood_Yards
Main_Trails
Haul Road
Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geograp
AeroGRID, IGN, and the GIS User Community


WEAK POINT
Crossing
SAFE WOOD
WEAK POINT
RISKY WOOD


CLARK
RANGER 666B