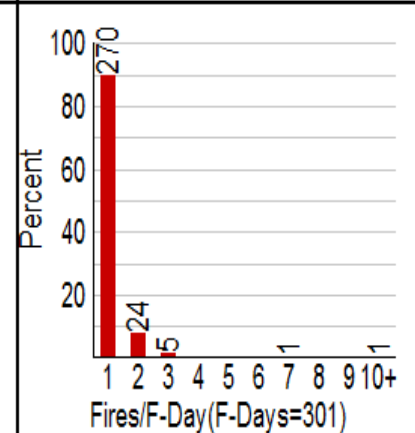
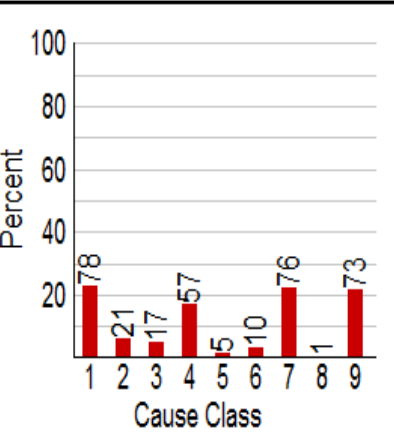
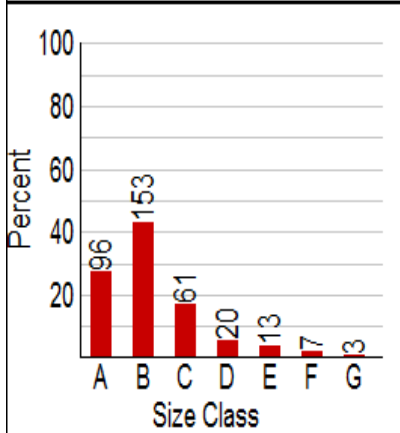
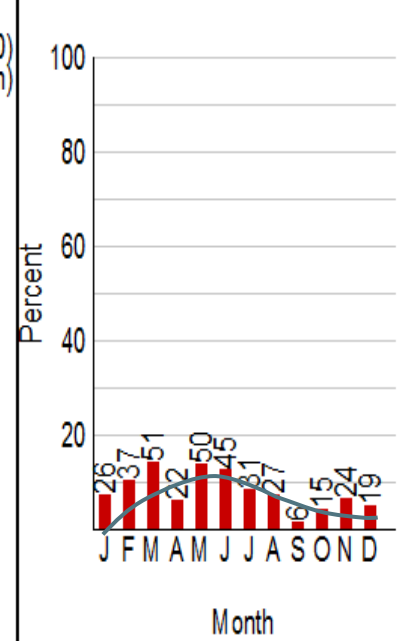
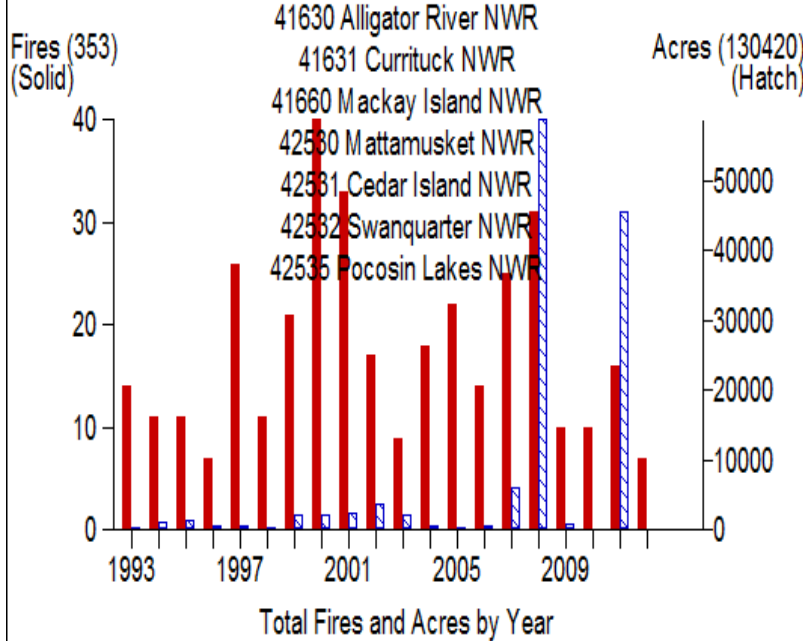
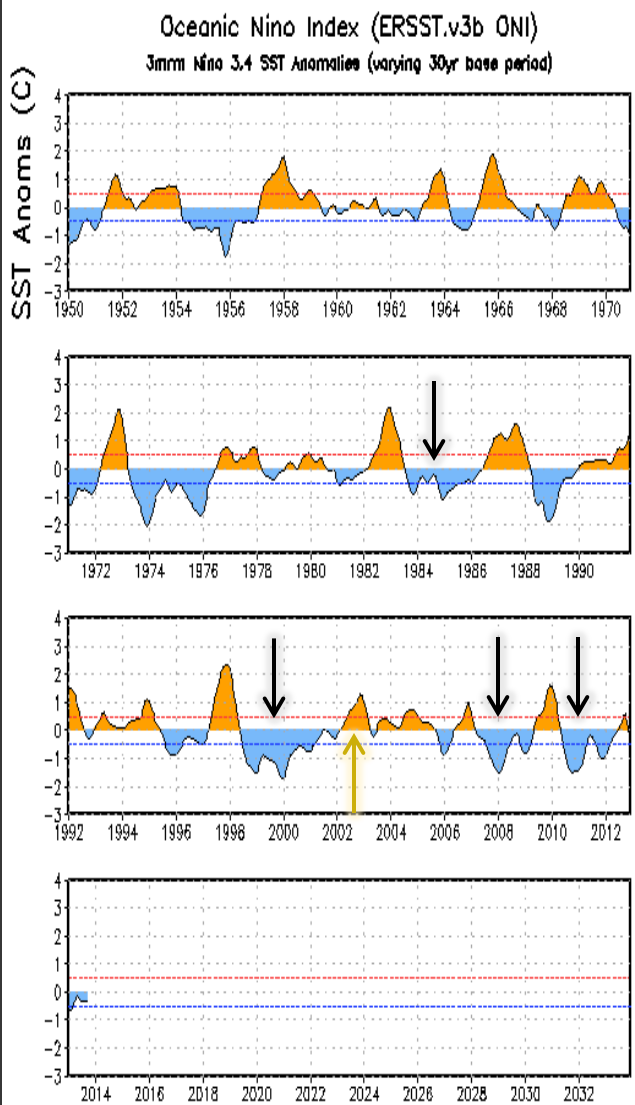


A photograph of a road next to a forest of bare trees under a cloudy sky. The road is paved and has yellow dashed lines. The trees are tall and thin, with no leaves. The sky is overcast and grey. The text is overlaid on the image in a light blue, sans-serif font.

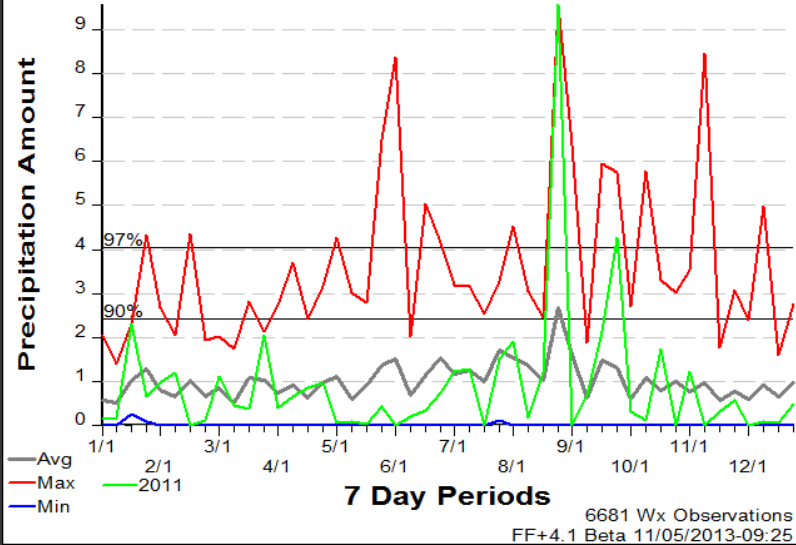
**WILDLAND FIRE
CONSIDERATIONS
ON
PEAT SOILS**

Fire History

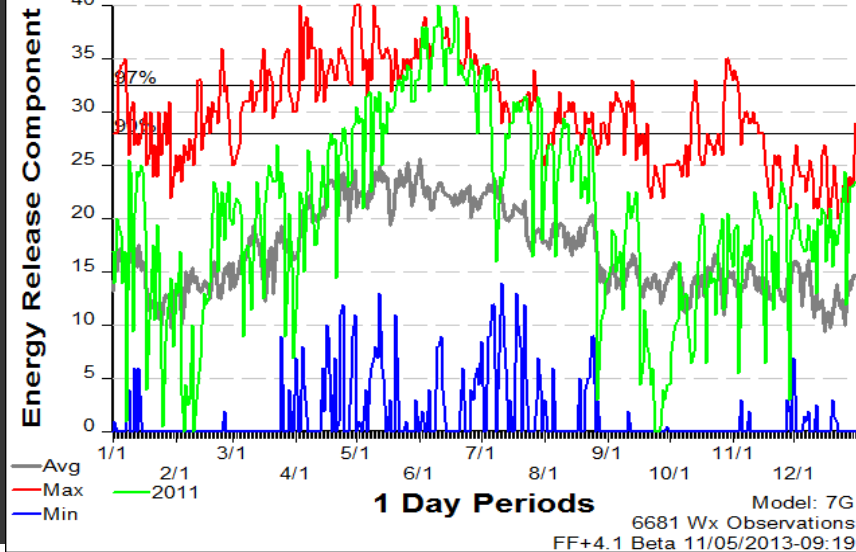


Climatological Factors (2011 Example)

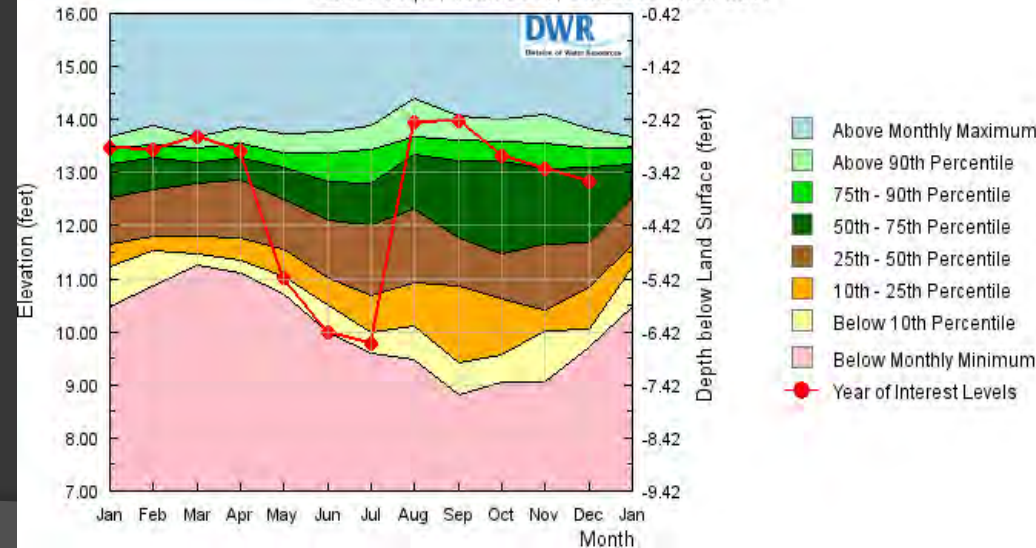
**SIG - POR & ALR
1993 - 2013**



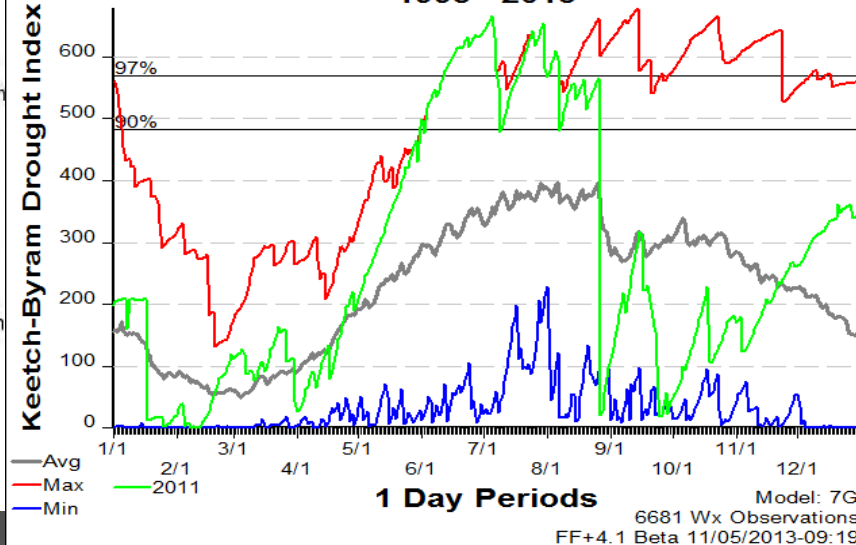
**SIG - POR & ALR
1993 - 2013**



Lake Phelps, Year: 2011, Statistics Thru: 2011



**SIG - POR & ALR
1993 - 2013**



Challenges and Risk

- ◎ Sea level rise
 - Salinity
 - Tidal issues coupled with drought
 - Vegetation change or loss
- ◎ Peat Soil (baby charcoal)
 - Hydrophobic
 - Fire
 - Suppression actions
 - Loss of land (topography changing events)
- ◎ Insects and Disease
 - Southern Pine Beetle
 - Laurel Wilt Disease



Challenges and Risk Continued...

- ⦿ Funding (projects, personnel, etc.)
- ⦿ Other state/federal agency lands
 - Different missions/priorities



Challenges Presented

- Hydrophobic (water management)
- Disturbed soils are more prone to ignite
- Geologic time for development
- Topography changing
- Duff (ESP) vs. Sapric Muck



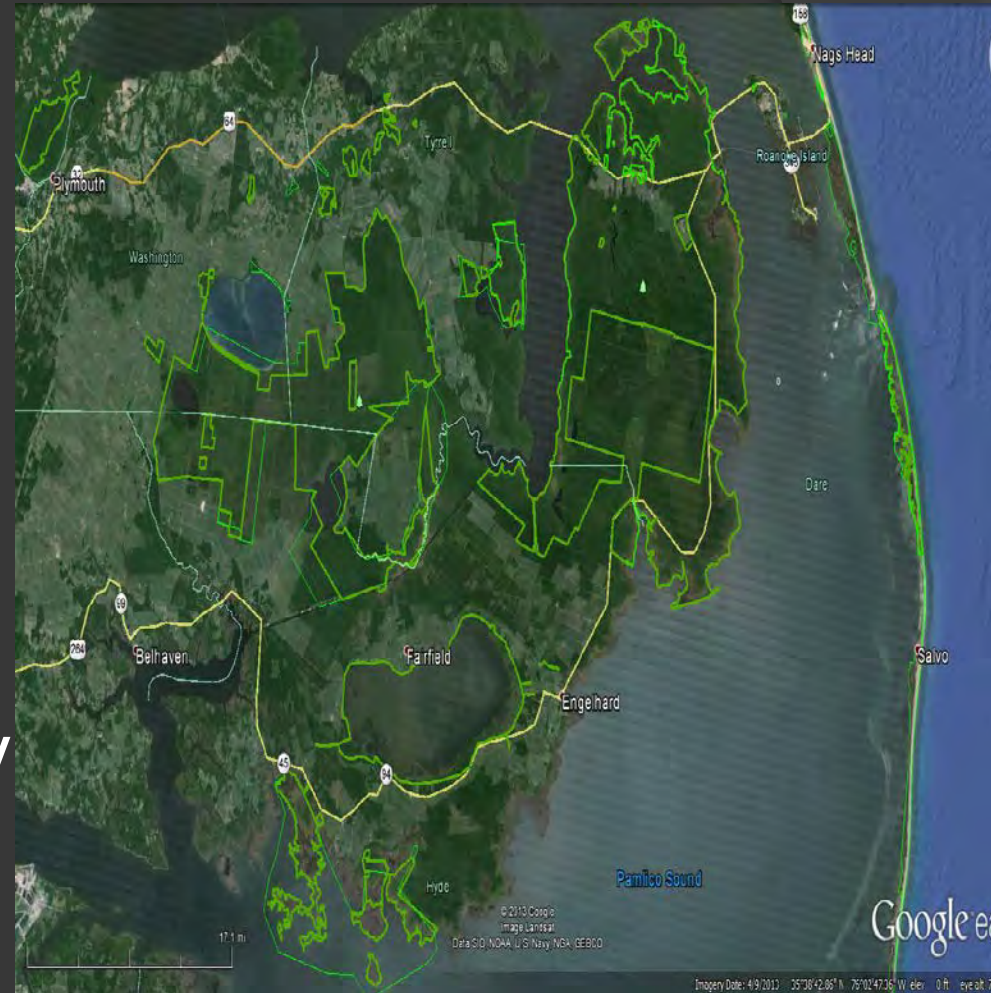
Fire Effects on Susceptible Organics



06/04/2008

Fire Management Concerns

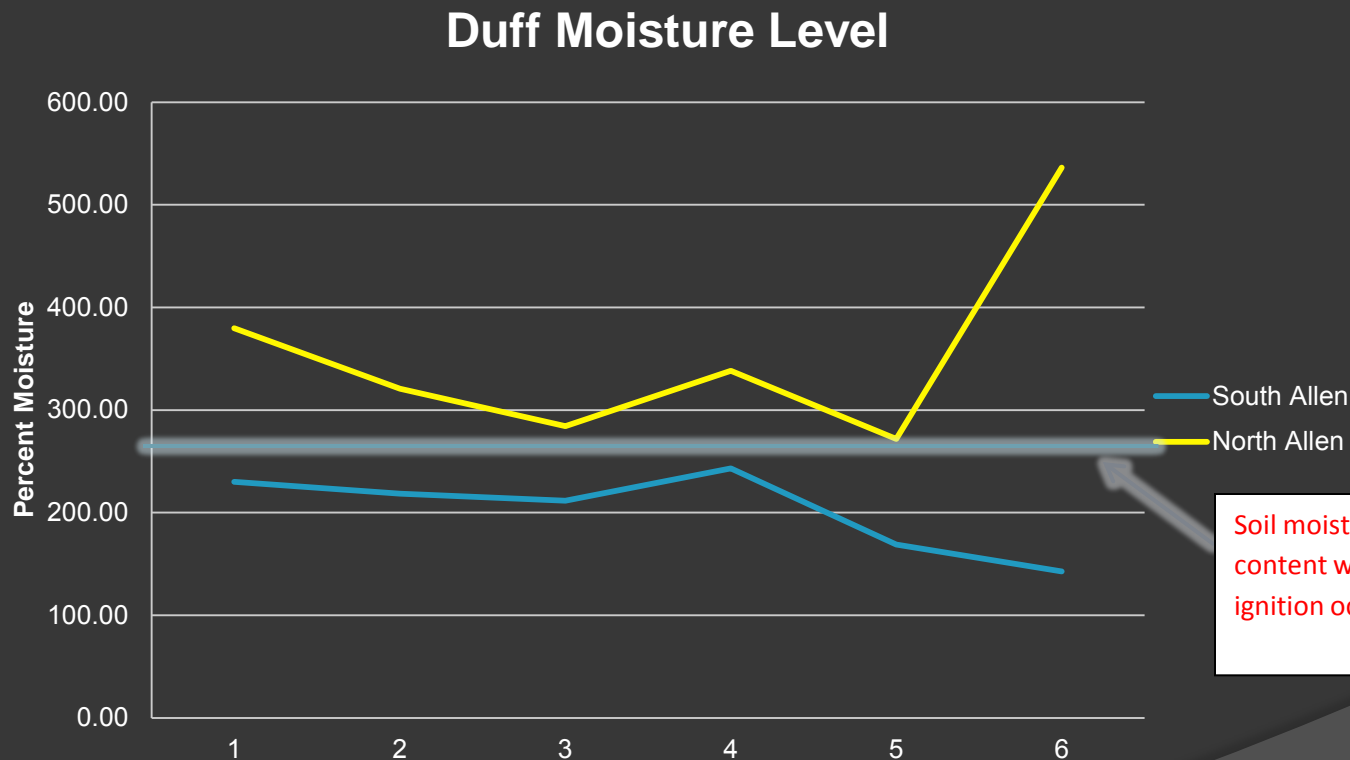
- Public and Firefighter Safety
- Water Sources
- Cost Containment
- Logistics
- Wildfire History
- Prescribe Fire History
- Smoke Management



How can you mitigate decades of soil drainage?



Soil Moisture and Ground Water Table Differences



Ground water table differences: North Allen @ ~4 inches below the surface while South Allen is at ~22 inches below the surface.
What does the sapric layer tell us?

Opportunities

- Advance knowledge of peat soils
- Hydrology restoration
- Less soil disturbance (ex. Pungo Rx 2013)
- Measuring peat soil creation
- Working cooperatively



Questions?



North Pungo Rx
2/6/2013