

## FIRE ENVIRONMENT COMMITTEE

May 23<sup>rd</sup>-24<sup>th</sup>, 2017

### Weymouth Woods Preserve

#### Day 1

Meeting commenced at 1:08 PM with introductory remarks by Cabe Speary and quick round of introductions.

\* **Minutes** from the last meeting (November 2, 2016) were reviewed and no changes necessary.

\* **Review of the Charter**

>presented to NCFS management for approval. Once voted on, it will be placed on the web page.

>under Membership, a list of appointees or designators for each agency would be beneficial.

>clarification made to designation of chairman.

Charter sent to Kevin for advancement ASAP.

\* **Agency Reviews**

>**State Parks**

- 42 prescribed burns performed, at 16 different parks, totaling 5k acres. Also had 7 areal burns.

- Hard hit by wildfire season, with 100 personnel responding.

>**Fire Council**

- Annual Meeting September 5<sup>th</sup>/6<sup>th</sup> in Asheville.

- Committees working on prescribed burners contact information.

- Burning demand increasing, especially by private land owners.

>**The Nature Conservancy**

Approved 11/15/17

- 52 burns conducted, totaling 5k acres; assisted in other burns statewide, totaling 38k acres.

- Actively recruiting seasonal employees.

- Working with land managers in mountains of NC/SC.

#### **>National Parks**

- Above average fire activity for the year; 25 wildfires in the GSMNP.

- Have developed cooperation with partners to combat fires

- Rely on mechanical treatment due to limited resources at coastal parks.

- Fire budget slashed by 67%

- Assessment for the Chimney Tops 2 fire should be issued by mid or late summer.

#### **> Division of Air Quality**

- discussed structure of organization

- Overview of Regional Haze Program (improve visibility to natural conditions by 2064 in national parks and wilderness areas classified as Federal Class I Areas per 40 CFR Part 81). States must update their State Implementation Plans every 10 years to demonstrate reasonable progress toward meeting natural visibility conditions for each of the five Federal Class I Areas in North Carolina. NCDAQ is starting to work on revising its regional haze SIP that is due to EPA by July 2021 and will be coordinating with other state and federal agencies in doing so. The revised plan will include progress goals for 2028. It is important to note that in the EPA's Regional Haze Rule visibility impairment associated with wildfires is considered as a part of natural conditions and impairment associated with prescribed burning is considered anthropogenic (controllable). It will be important to understand how best to develop an emissions inventory for wildfires and prescribed burning for 2028.

- NCDAQ staff worked at USFS Joint Information Center (JOC) in Asheville to coordinate information about wildfires in Western NC during October-November 2016. The JIC serves as an internet blog and call center to answer phone calls for individual fire updates/status, air quality, burn-bans, donations, road closures, media resources, fire prevention, etc.

- Developing contacts/projects with NCFCS.

**>NCFS Region I**

- Below average prescribed burn though activity picking up recently.
- Short staffed across entire region.

**>NCFS Region II (representatives from District VI and District III)**

- Lowest prescribed burn output though number of wildfires up.
- A lot of personnel involved with Matthew clean-up efforts, heavy timber loss in the region
- Personnel heavily engaged with wildfires in western NC. Fires highlighted great interagency cooperation.
- Dealing with a turnover in key positions, training ongoing for many folks.

**> NCFS Central Office**

- Several vacancies; jobs being bid internally.
- Nothing on horizon as far as policy.

**> National Weather Service (Jim Merrill of NWS Morehead City)**

- Standardization of mixing height methodology still in the works though delayed due to vacancies at development offices.
- Mixing height issue (MSL vs AGL) at Morristown NWS still unresolved; no mention of update.
- Red Flag may be modified to include a temperature threshold/floor. ACTION ITEM: FEW members will look into matter, research wildfires and correlated temperatures. Item may be included in 2018 AOP.
- Next Cooperators Meeting in January 2018.
- 2 IMETs in NC (Scott Kennedy/MHX and Terry Lebo/NWS Wilmington, with Phil Manual/NWS Blacksburg, VA)

**\*Wildfire Activity Review**

Approved 11/15/17

- 4272 wildfires from November 2016-April 2017, burning a little over 670000 acres. Ten year average for the same period is 3400 fires and a little over 18000 acres.

- Over 48500 acres burned in November, 78% occurred in the mountains. During the last 10 years, the next highest total is 2000 acres.

- Party Rock fire was difficult to predict the spread; took a few days to get an idea on fire behavior.

- Fires tested state resources, particularly NCSP.

## DAY 2

1. Review yesterday's notes- Corey from SCO present
2. Summer Fire Season Outlook
  - a. June-Aug
  - b. Average daily temps forecast above normal, esp. on coastal plain
    - i. Not necessarily record daytime highs, but warmer nights
    - ii. Precipitation normal
  - c. Drought conditions are all clear as of 5/23
  - d. ENSO- likely moving into weak El Nino or Neutral.
  - e. Takeaway: Significant fire potential above normal in Coastal Plain/ Coast for June.
  - f. Hurricane Forecast out soon.
3. SCO: Organic Soil Moisture Monitoring Project
  - a. Funded by CISA (data collection) and later NIDIS (data processing)
  - b. Building on work by Reardon and Curcio (2015)
  - c. At least three sites to be run by SCO for at least three years
    - i. 15 ML3 Thetaprobe soil moisture sensors per site (5 different depths)
    - ii. Cell phone data upload
    - iii. Station to include Temp, RH, Wind @ 6', & Rain
  - d. Data to be integrated into FWIP to help with ESP calculations
    - i. Corey needs formulas for some of those calcs- from Reardon or Curcio?
  - e. Group Recommendations for sites
    - i. Dismal Swamp, Green Swamp, Alligator River, Swan Quarter, Holly Shelter, Pettigrew, NCWRC Office near J&W Pocosin.
    - ii. Pick sites with common soil series if possible
  - f. Other Group recommendations
    - i. Include solar radiation sensor
    - ii. Include groundwater depth well
    - iii. Consider satellite upload option

- iv. Work with hydrologists at Dismal Swamp
  - v. NCFS may be able to help fund (Cabe)
  - vi. TNC may be able to help fund (Margit)
- 4. Training Needs/ Opportunities
  - a. S290 for non-NCFS cooperators
    - i. 25 spots at Haw River State Park
    - ii. Oct 30- Nov2
    - iii. TNC funded, Margit to act as lead instructor
  - b. NCDRS 2016 ( with WIMS, Fire Family Plus)
    - i. June 6-8 @ Gatlinburg, TN (Twin Creeks)
    - ii. Aug 9-11<sup>th</sup> @ Jordan Lake, NC
  - c. ADM Course June 12-14? (Cabe to Verify)
    - i. Side Note: General agreement that current ADM standards should stay as written and require three model runs AFTER the class for certification.
  - d. SFE Webinars – generally recommended
  - e. Fire Ecology Conference- Orlando, FL in Dec. 2017
  - f. S219- Ignitions Training
    - i. Oct 23-27 @ Carolina Beach State Park
    - ii. TNC hosted
- 5. Fire Environment Projects Update
  - a. Fixed RAWS
    - i. Drowning Creek site archived
    - ii. House in the Horseshoe site now active
    - iii. 1 mountain monitor available to redeploy to new site- maybe South Mtn?
    - iv. A few old surplus without battery/ transmitter going to auction.
  - b. Portable RAWS
    - i. 5 quick deploy available for use
    - ii. NWS interest in using for Haz-Mat incidents when better wind data is needed locally.
  - c. Live Fuel Moisture Project
    - i. Part 1 was via email
    - ii. Part 2
      - 1. Sampling to start in Mtns in June
        - a. Data to go from Field to Cabe to website.
      - 2. Will focus on Mtns to begin with
- 6. Fire Danger Operating Plan
  - a. RP Level
    - i. Raleigh will give “Hazard” rating to Districts
    - ii. Districts will look at “Risk” and “Readiness” to set RP level
  - b. Adjective Rating- to become to more public facing risk indicator

- i. Should help FD's & public understand risk based on fire danger, rather than including NCFS staffing levels in the mix.
    - ii. Based on Ignition Component and other relevant measures.
  - c. Severity Requests
    - i. ability to request & mobilize resources based on adjective rating or similar, before wildfires start
    - ii. Would help bring in high-demand resources (aviation, etc) in time to be useful and before they are assigned to other fires in the region- though cost could be an issue.
- 7. NC Smoke Management Plan – Review
  - a. Some things to cater to new/ private burners
    - i. Better explanation of SSA and the fuzzy nature of these for non-agency burners?
    - ii. More explanation of available tonnage vs present tonnage?
  - b. Open vs In-stand burns (NCWRC stuff mostly)
    - i. Cabe to check on research about smoke dispersal in relation to canopy height/density
  - c. ADM Burns in close proximity
    - i. Potential for airshed overload unless Ops Officer is very attentive.
    - ii. Bill Jackson, etc can model multiple burns to check.
    - iii. Web-based data system will help with this. Timeline for this? Funding need?
  - d. No Flow Chart
    - i. NCWRC (Ryan) misses this- multiple day burns in Mtns may be impacted.
    - ii. Growing pain of young ADM system.
- 8. Next Meeting- Nov 14-15 in Mtns?