



April 5, 2018

Fire Workgroup Coordination Committee
Call for 2016 Fire Inventory

Department of Environmental Quality



Comparison of EPA Alpha Inventory to NC Forest Service (NCFS) Smoke Management Database (SMD)

Calendar Year 2016 Acres Burned in North Carolina

Activity	NCFS Smoke Management Database (SMD) (Acres)	EPA Alpha Inventory (Acres)	Difference (EPA Alpha – NCFS SMD) (Acres)	2014 NEI v2 (Acres)
Prescribed Burning	82,504	374,120	291,616	128,547
Wildfires	78,639	98,384	19,745	25,053
Totals	161,143	472,504	311,361	153,600

Comparison of EPA Alpha Inventory to NCFS SMD

- EPA Alpha inventory based on fire detects from satellites (Hazard Mapping System (HMS))
 - Assumes a fire detect is a prescribed burn unless otherwise identified as a wildfire in ICS-209 Reports or GeoMAC fire perimeter data
 - For NC, appears to overestimate prescribed fire activity and underestimate wildfire activity
- NCFS Smoke Management Database (SMD)
 - Not all prescribed fires and wildfires are reported to the NCFS who enters the data in the SMD
 - NCDAQ is asking NC state and federal agencies to provide 2016 data as a QA check on the SMD
 - Data provided by agencies will be given priority if the data are more complete than what is reported in the SMD
- Conclusion
 - The actual number of prescribed burn and wildfire acres is probably somewhere between the two data sets
 - Cannot perform a direct fire-by-fire comparison between EPA Alpha Inventory and NCFS SMD because the Alpha inventory does not include the start date and time of fires
 - NCDAQ will submit to EPA a new 2016 activity data set for prescribed burning and wildfires to replace the EPA Alpha Inventory

Case Study – Fort Bragg, NC

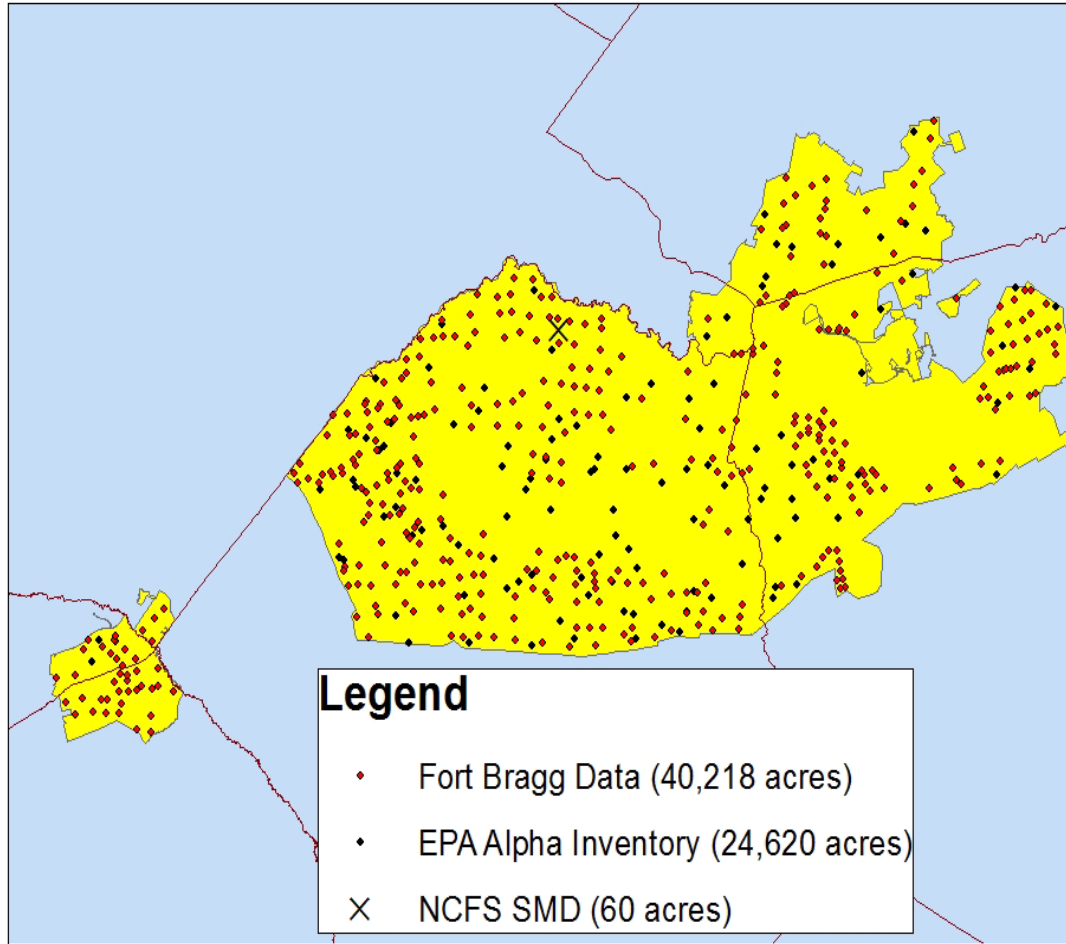
- Fort Bragg keeps meticulous records on prescribed burns and wildfires
- Fort Bragg data typically not reported to NCFS for entry into the SMD
- The following table compares activity data obtained from Fort Bragg to the activity data reported in the NCFS SMD and EPA Alpha Inventory

Comparison of 2016 Acres Burned Data for Fort Bragg

Activity	Fort Bragg Data (Acres)	NCFS SMD (Acres)	EPA Alpha Inventory (Acres)	Difference (Fort Bragg - NCFS SMD)	Difference (Fort Bragg - EPA Alpha)
Prescribed Burning	40,218	60	24,620	40,158	15,598
Wildfires	10,693	92	151	10,601	10,542
Totals	50,911	152	24,771	50,759	26,140

Case Study – Fort Bragg, NC

2016 Fort Bragg, NC Prescribed Fires



2016 Fort Bragg, NC Wild Fires

