



NCFS Overview of Activities

Forest Management & Development

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Total Accomplishment Report (TAR)



*"If you can't measure it,
you can't improve it"*

Peter Drucker, Management Guru

*"In God we trust,
all others must bring data"*

W. Edwards Deming, American Statistician

- sound metrics = focused / improved services



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TAR Report

Organization Unit			FOREST ESTABLISHMENT									PLANTING					
Region	District	County/State Forest/Program	SP Mechanical (Acres)	SP Chemical (Acres)	Burn Only (Acres)	SP Burn (Acres)	Plant (Acres)	Natural Regeneration & Direct Seed (Acres)	Total Establishment (Acres)	Seed Collected (Lbs)	Seed Collected (Bu)	QC Inspections (#)	QC Inspections (Acres)	Survival Checks (#)	Survival Checks (Acres)	Land Measure (#)	Land Measure (Acres)
1	4	Beaufort	-	-	-	-	-	-	-	623	3	-	-	10	226	1	12
1	4	Carteret	-	-	-	-	590	-	590	-	-	6	590	6	309	7	292
1	4	Craven	-	-	-	-	110	-	110	140	-	-	110	-	-	3	475
1	4	Jones	-	-	-	-	25	-	25	4	-	1	25	2	54	1	25
1	4	Lenoir	24	24	55	55	461	-	461	320	-	13	461	15	402	13	461
1	4	Onslow	5	27	-	17	5	29	34	-	-	1	5	1	10	5	64
1	4	Pamlico	-	-	-	-	15	-	15	-	-	2	15	2	15	2	15
1	4	Pitt	-	16	-	-	52	-	52	-	140	6	52	7	135	5	52
1	7	Bertie	243	134	-	-	289	-	289	892	-	12	289	23	1,642	14	503
1	7	Camden	-	-	-	-	465	-	465	679	4	1	465	5	80	3	60
1	7	Chowan	-	40	-	-	-	40	40	105	-	1	-	1	32	1	40
1	7	Currituck	30	-	-	-	167	-	167	2,178	21	3	167	4	22	2	91
1	7	Gates	29	107	-	-	353	91	444	-	-	4	353	9	348	8	238
1	7	Hertford	149	438	29	77	870	-	870	87	-	25	870	15	450	31	1,028
1	7	Martin	11	-	2	2	156	670	826	9	50	7	156	5	59	6	182
1	7	Pasquotank	-	-	-	-	3	143	146	200	3	1	3	-	-	2	17
1	7	Perquimans	-	-	-	-	2	-	2	176	12	1	2	1	8	1	3

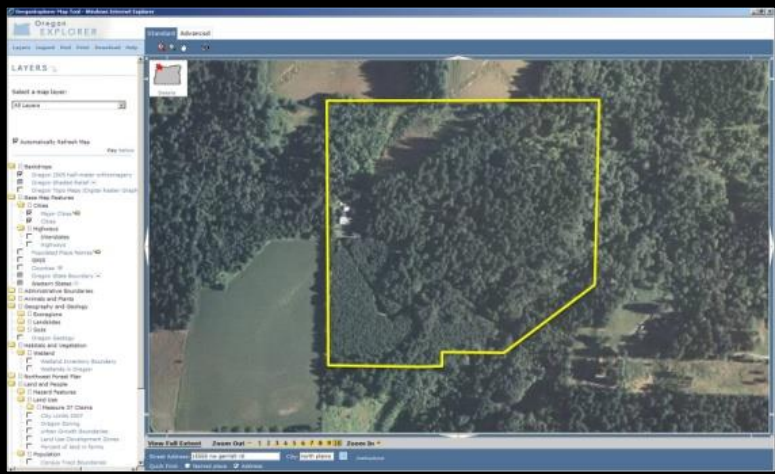
- Efficient tracking of NCFS efforts.
- Represents program & service delivery at county level.
- Diverse counties = diverse NCFS programs.



TAR Report

Examples of metrics tracked:

- ✓ Forest management.
- ✓ Tree planting.
- ✓ Costshare.
- ✓ Water quality assistance.
- ✓ Urban forestry.
- ✓ Forest protection.
- ✓ Prescribed burning.
- ✓ Education & outreach.





TAR Report

Metrics used for:

- ID successes & shortcomings.
- Staff and program reviews.
- Grant deliverables.
- NC Forest Action Plan / NCFS Strategic Plan.

Notable FY14-15 accomplishments:

- Management plans on 186,657 acres.
- 57,428 acres of tree planting.
- \$1,737,086 of FDP costshare.
- 12,056 acres of NCFS prescribed burns.
- 1,922 outreach events.



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Forest Development Program (FDP)



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Importance of Timber to the North Carolina Economy

- 127,000 + jobs.
- #1 export commodity.
- \$24.7 billion - Total Economic Output.
- \$10.7 billion - Gross Domestic Product.
- \$6.3 billion – Payroll.
- \$807 million in local / State / Federal tax generation.
- \$391 million in timber revenue for landowners.



This all began with tree planting decades earlier.

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History of FDP

- Concern over reforestation & timber economy.
- High up-front/carrying costs to landowners; social benefits of forests.
- 1977 Legislation:
 1. Primary Processor Act.
 2. Forest Development Act.
- **Partnership:**
 - A. Forest Industry.
 - B. North Carolina.
 - C. Forest Landowners.
- Site preparation, tree planting & forest improvement practices.

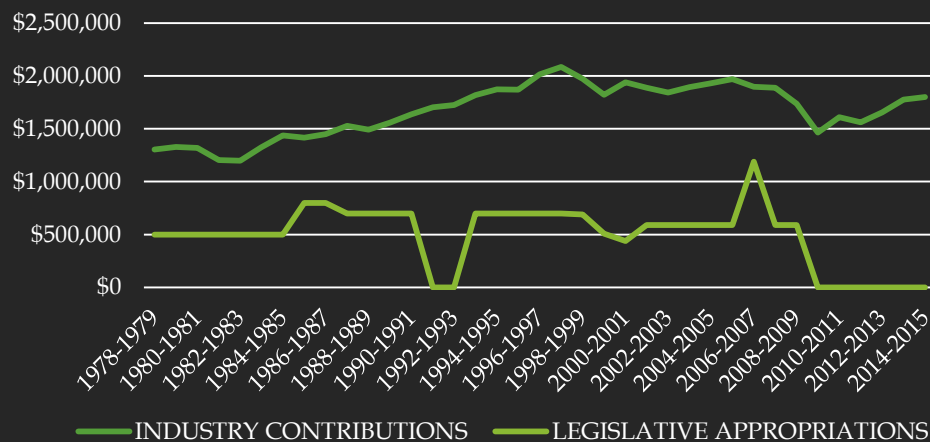


FDP Highlights

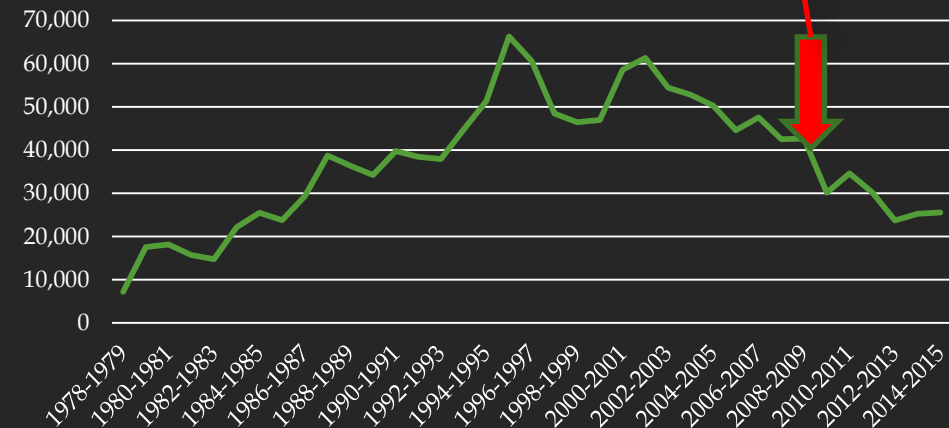
- Landowner-friendly; quality control; on-the-ground results.
- Approved management plan required.
- Landowner typically pays 60+% of costs.
- Millionth FDP acre planted (2004).
- Legislative Continuation Review (2009).

2009 loss of FDP appropriations

Forest Development Program:
Annual Funding



Forest Development Program:
Annual Acres Planted





Current Situation & Need

- Appropriations loss = decreased tree planting.
- Applications (\$3.2 million) far exceed funding.
- 4/1/16 suspension of new applications.
- \$500,000 recurring appropriations request.
- FDP webpage:
http://www.ncforestservice.gov/Managing_your_forest/fdp.htm

“Plant for tomorrow”

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NCFS Overview of Activities

Forest Protection

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The North Carolina Forest Service has had a statutory mandate to prevent and control forest fires since 1915

- The NCFS has always categorized the suppression of an active forest fire as its number one priority.
- Our philosophy is to attack all fires rapidly and aggressively to keep fires small and minimize damage.
- The equipment available to respond to fires varies across the state based upon the unique aspects of fire suppression from the mountains to the coast.
- We are trained and equipped to manage initial attack, extended attack, and long duration wildfires.



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The NCFS consistently ranks in the top 5 state organizations in the nation in terms of the number of forest fires suppressed. This is achieved through rapid response and aggressive initial attack of fires. Highly trained personnel utilizing specialized equipment is a key component in this success.

Years 2005 to 2014			
State	# of Fires	Acres Burned	Average Fire Size
Texas	58,932	7,065,517	119.9
California	57,402	1,603,205	27.9
Georgia	53,941	808,466	15.0
North Carolina	43,644	246,125	5.6
Florida	32,037	1,506,880	47.0





Wildland Urban Interface (WUI) - The critical need for the NCFS to maintain its fire suppression capability is directly related to the changing landscape and demographics of North Carolina. The great majority of forest fires in North Carolina pose a threat to homes and other structures. North Carolina has the most acres of any state in the nation that are classified as (WUI).

State	Total area square miles	Area of WUI square miles
North Carolina	52,670	20,940
Texas	266,855	18,159
Georgia	58,949	16,244
Pennsylvania	45,305	16,094
New York	49,115	15,240





Although ranking 4th nationally and 3rd in the south in fire response, North Carolina ranks 9th out of 11 southern states in equipment capability

State	Fires	Acres	Fire Dozers
TX	58,932	7,065,517	98
GA	53,941	808,466	321
NC	43,644	246,125	95
FL	32,037	1,506,880	275
AL	20,650	322,386	80
SC	18,996	92,809	160
MS	18,038	309,412	120
TN	16,055	351,109	112
AR	16,029	251,033	105
LA	15,604	181,308	104
VA	8,927	105,677	91



Total number of Fire Dozers	Less than age 15	Age 15-20 years	Age 20-25 years	Age 25+ years
95	31	13	40	11

- To maintain a 15 year replacement cycle with the current inventory, on average the NCFS would need to replace 6.3 dozers each year.
- Over the last 15 years the NCFS has been able to replace 34 units. An average of 2.2 units per year. The years of 2009, 2010, and 2011 saw no purchases made. This rate of replacement translates into an untenable 43 year replacement cycle.
- Average replacement cost to establish a 15 year cycle would be approximately \$2 million per year.



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Aviation Patrol and Suppression



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Single Engine Airtankers (SEATS)



- Dromadier M-18 - 650 gallon capacity.
- 20 years old.
- Limited to use in eastern 2/3's of the state. Topography in the mountains exceeds aircraft capability.
- Manufactured in Europe.
- Air Tractor 802 - Current industry standard - 800 gallon capacity and are equipped with turbo prop engines for performance in higher elevation topography.
- Manufactured in the USA.
- Replacement cost, approximately \$2 million dollars.



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