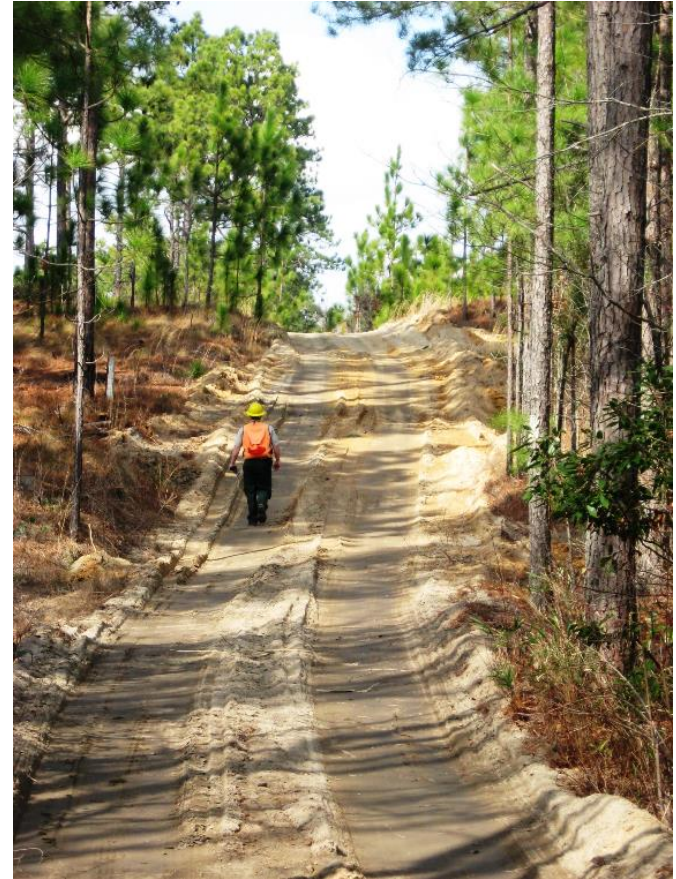


# The Forestry Inspection Process



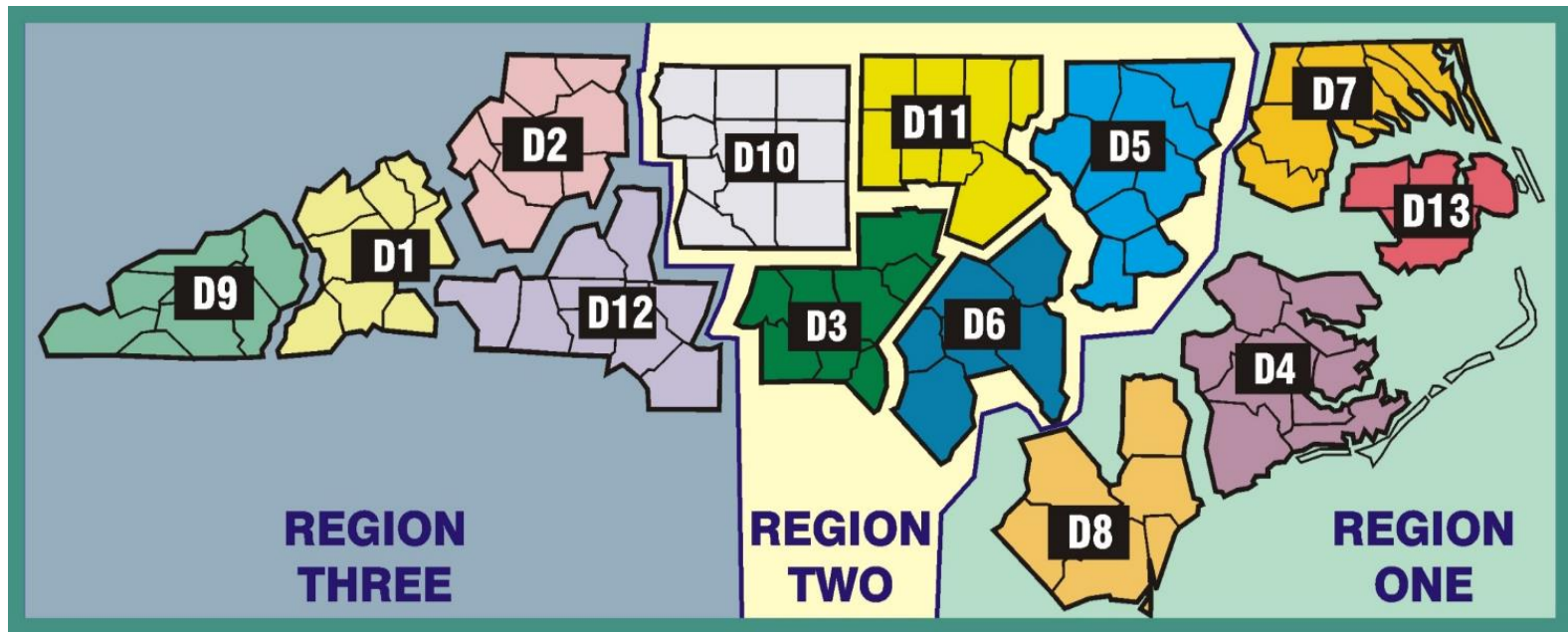
***DEMLR Local Programs Workshop. April 2019.***

***Tom Gerow, Jr. -- RF, CESSWI  
Water Resources Staff Forester***

***[www.ncforestservice.gov](http://www.ncforestservice.gov)***



# N.C. Forest Service Organization



**NCFS, an agency of the NC Dept. of Agriculture & Consumer Services.**  
**Customer service focus: *prevention, consultation, education, assistance.***  
**District Ranger + County Ranger + Asst. County Ranger (+/- 200).**  
**Water Quality Foresters (6) + other Foresters (+/- 50).**  
**State-Level “Central Office” Water Resources team (4).**  
**Educational State Forests + State Forests (11).**  
**All field-office personnel are involved in water quality program delivery.**



# NCFS Water Quality Actions

## Forestry Site Inspections & Assessments

- Site compliance inspections
- BMP monitoring assessments
- Respond to complaints
- Inspect cost-share projects

## Technical Assistance & Training

- Develop BMPs, monitor, study
- NC ProLogger, college instruction, workshops
- Online free Forest Preharvest Planning Tool

## Stream Restoration on State Forests

- Enhance overall forest resources under agency's stewardship

***Learn More: [www.ncforestactionplan.com](http://www.ncforestactionplan.com)***



# Forestry E&SC Alphabet Soup

**SPCA**: forestry-related, land-disturbing activities are exempt from plan / permitting, as long as that activity meets the standards of the *Forest Practice Guidelines Related to Water Quality* (FPGs).

**FPGs**: 9 narrative standards, codified 02 NCAC 60C .0100 to .0209

- Enacted 1990, Re-Adopted 2018. Apply statewide.
- North Carolina Forest Service (NCFS) is the lead agency.
- The NCFS conducts +/- 6,000 inspections annually statewide.
- Interagency protocols for handling non-compliance issues.

**BMPs**: non-regulatory management measures

- Non-point source pollution prevention.
- North Carolina Forestry BMP Manual & Field Guide.
- Forestry BMPs can be structural or tactical.
- Incorporated / Institutionalized in forest certification programs.



# Is It Forestry?

(no)



(and  
...no)



# Is It Forestry?

**Not all tree-cutting / logging is for forestry purposes.**

**The FPGs and forestry BMPs only apply to “forestry-related” (silviculture) activities.**

If purpose & intent of logging is not clear:

1. NCFS + DEMLR joint site visit.
2. DEMLR decides.
  - We work with DEMLR, not local programs (no offense...)

So, how do we know?

NCFS -- what we see & what we're told.

DEMLR -- same, but can also request an affidavit from owner.



# Is It Forestry? ...Some Site I

## Development

- “Coming Soon” signs
- Permit box
- Grubbing, mass soil grading
- Intensive survey lines
- Tree protection fencing
- Utility installation
- Stormwater / E&SC installations
- Overly intensive roadway or stream crossing\* construction
- Grandiose extravagant gateway entrances
- Perimeter walls / fancy fence

*Type of Equipment On-Site??*



## Forestry

- Stumps left in place
- Road built to typical forestry standards (or no road at all...)
- No major earthworks (except at log decks...skid trails...site prep)
- Tract is in Forestry PUV and/or has a forest management plan (how to know?)



# Forestry Site Prep





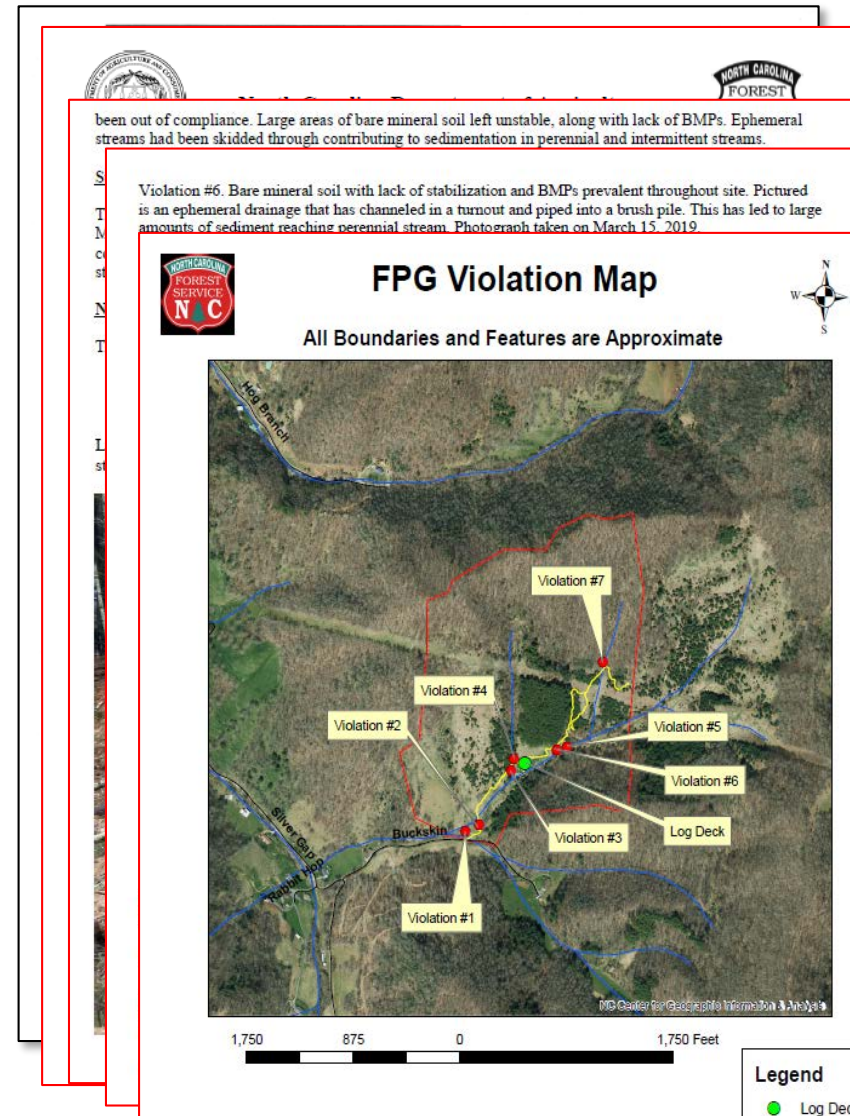
# NCFS Inspection Process: *Where & When*

## How Do We Know Where Logging is Occurring?

- Local Awareness
- Routine Site Exams
- Satellite Imagery GIS Tools
- Requests / Notifications / Complaints

## Agency Policy

- Inspect within 5 days
- Prioritize active timber harvests
- Inspection form, + Site Summary Report
- Share findings and expectations with directly-involved parties\*.



# NCFS Inspection Process: *What & How*

## **Compliance with:**

- FPGs
- State Laws on waterway obstructions
- (Riparian Buffer Rules)

## **Strongly Encourage Actions for:**

- Mud/Dirt on road (if safety/aesthetics issue)
- Obstructed DOT road ditch
- Wetland ditching (beyond normal silviculture)

## **Compliance Determinations:**

- ✓ In Compliance
- ✓ Temporary Compliance
- × Out of Compliance / Not In Compliance (aka 'violation')
- × Potential Violation (Riparian Buffer Rules)

Additional follow-up inspections made through the end of the harvest....  
Even more re-inspections after completion, to monitor stabilization.





# NCFS Inspection Process: *NonCompliance*

Provide a timeframe to make repairs. Depends on severity of the situation and other factors. Agency policy gives guidance.

Our instructions should mimic the text of the applicable FPG standard:

- ✓ *Provide sufficient groundcover within the Streamside Management Zone (stream buffer) to restrain visible sediment and prevent potential accelerated erosion from entering the stream.*

We point them to the NC Forestry BMP Manual & Field Guide for guidance and recommendations, and verbal recommendations.

If enforcement action required:

- Market-Based Process....*forest certification, wood procurement, mills.*
- Government Process.....“Water Quality Referral” to appropriate agency.
  - NCFS has authority to handle waterway obstructions on woodland sites.

# NCFS Inspection Process: *FAQ's*

## What is “Temporary Compliance” ?

- BMP work is done, and currently no erosion or sedimentation...but groundcover vegetation has not yet become established.

## What is the Statute of Limitations ?

- Until the site is permanently stabilized as a result of the forestry-related activity.

## Who are the Responsible Party(ies) ?

- Those who have direct financial interest.
- We focus on who is ‘in operational control’...often not the owner.

## Do we Regulate Soil Rutting?

- No, the FPGs do not address rutting.
- But, if ruts will deliver sediment to Int. or Per. Stream, then must be fixed.





# NCFS Inspection Results

State FY	Total Timber Harvest Inspections	# Out of Compliance	Other Activity Inspections	# Out of Compliance
2017-18	3,172	47	365	0
2016-17	2,937	64	310	0
2015-16	3,538	63	385	2
2014-15	3,590	62	457	0
2013-14	3,570	70	549	3
2012-13	3,122	105	645	3

*(Does not include # of follow-up, re-inspections)*

**Annual Average: 6-8 Referrals for FPGs,.... 6-8 for Riparian Buffer Rules.**

# Forestry BMPs

**Even when forestry BMPs are used, the logging job may appear “messy” to the un-trained eye.**

**BMPs can be tangible things = *What You Do*:**

- Streamside Management Zones
- bridgemats... silt fence... gravel on roads... seed/straw...
- waterbars, turnouts, diversions, wing ditches

**BMPs can also be a “process” = *How You Do It*:**

- Timing, equipment... layout of skid trail or road... # of decks
- How and When was the tract logged? Was soil dry?
- Was the SMZ flagged or painted?
- Were roads built beforehand, or pushed in on-the-fly?



**Skid Trail Stream Crossing. Logging job is completed. What's the Determination?**





**Steel bridgemats for a stream crossing.**





**Logging debris w/mounds (L) and Waterbars (R) -- 'slow it down & spread it out'.**





**Primary skid trail. Looks messy. But this is an excellent example of BMP implementation. Exposed soil is covered, sedimentation prevented.**





# Forestry BMP Life Cycle



[www.ncforestservice.gov](http://www.ncforestservice.gov)

( Programs & Services >> Water Quality )

- County / District / WQ Forester Contacts
- Quarterly BMP Newsletter
- FAQs About Logging
- Summary of WQ Rules & Briefing Doc
- Inspection Process
- Forestry BMP Manual
- BMP Monitoring Findings
- Forest & Watershed Studies
- Water Quality Refresher SlideShows
- BMP Training Videos (via Youtube)
- Lists of Forestry Consultants, Timber Buyers, and Service Providers

## What Can You Do?

- ❖ Get to know County Forest Rangers = 1<sup>st</sup> point of contact.
- ❖ Recognize “the process”: NCFS <<+>> DEMLR (DWR).
- ❖ Educate your constituents: *not all tree-cutting is bad...forestry has a place on the landscape.* (Educational State Forests -- [www.ncesf.org](http://www.ncesf.org))



Will this still be a forest in 10y...20y?



**Forestry ver.2.0**  
How can the urban /  
suburban fringe forest  
be managed to meet  
water resource goals?