The Forestry Inspection Process

DEMLR Local Programs Workshop. April 2019.
Tom Gerow, Jr. -- RF, CESSWI
Water Resources Staff Forester
www.ncforestservice.gov
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
**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
- 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.
- Forestry BMPs can be structural or tactical.
- Incorporated / Institutionalized in forest certification programs.
Is It Forestry?

(no)

(and ...no)
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.
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

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?)

* Construction

Type of Equipment On-Site??
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.
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.
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

<table>
<thead>
<tr>
<th>State FY</th>
<th>Total Timber Harvest Inspections</th>
<th># Out of Compliance</th>
<th>Other Activity Inspections</th>
<th># Out of Compliance</th>
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<td>2017-18</td>
<td>3,172</td>
<td>47</td>
<td>365</td>
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<tr>
<td>2012-13</td>
<td>3,122</td>
<td>105</td>
<td>645</td>
<td>3</td>
</tr>
</tbody>
</table>

*(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 = \textit{What You Do}:
\begin{itemize}
  \item Streamside Management Zones
  \item bridgemats… silt fence… gravel on roads… seed/straw…
  \item waterbars, turnouts, diversions, wing ditches
\end{itemize}

BMPs can also be a “process” = \textit{How You Do It}:
\begin{itemize}
  \item Timing, equipment… layout of skid trail or road… # of decks
  \item How and When was the tract logged? Was soil dry?
  \item Was the SMZ flagged or painted?
  \item Were roads built beforehand, or pushed in on-the-fly?
\end{itemize}
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.
What Can You Do?

- Get to know County Forest Rangers = 1st 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)

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
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?