

*The Timber Reform Research Project
Introductory Report*

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Introduction

Over the years, the West Virginia Highlands Conservancy has received many complaints from citizens about unsightly and environmentally destructive logging by companies in West Virginia. In 1992 a coalition of citizen groups, including the West Virginia Highlands Conservancy (WVHC), worked on and passed The Logging Sediment Control Act (LSCA). To this day the Act remains the one piece of legislation in the law books in our state that acts as a watch guard to logging companies working in West Virginia. Since 1994 there have been 4,705 complaints filed with the Division of Forestry detailing bad logging jobs in the name of that law. The amount of complaints becomes even more noteworthy when you learn the Division of Forestry has done little to advertise telephone numbers and information detailing the fact that they are the agency to contact if you witness a bad-logging job.

Coalitions of citizens have worked every legislative session since 1992 to fine-tune the LSCA to see that it becomes more effective. Legislators working on logging reform during the 2000 session were met with telephone death threats. More and more logging trucks are on our roads and more and more of our state's beautiful view sheds are being destroyed by bad logging jobs. This year the legislature addressed the problem of loggers coming over our state lines and stealing trees. We have at least one state senator who is really miffed about roads in her district being torn up by heavy logging trucks. As a result of these complaints the West Virginia Highlands Conservancy, with funding from the W. Alton Jones Foundation, has initiated the Timber Reform Research Project (TRRP). The TRRP will spend the next few months examining logging on private lands in West Virginia and offer solutions on how to improve those practices.

This introductory report, which is the first in a series of four, includes a background of forestry in West Virginia, the role of the Division of Forestry and an explanation of the Logging and Sediment Control Act. The report writers, Sandy Fisher and Kasey Russell, continue to seek answers to our state's logging problems. Please help by contacting us by telephone or e-mail. Both numbers are on the cover of this report.



Background of Forestry in West Virginia

Interesting Fact: West Virginia has the third highest percentage of forested land in the United States.

Type of Land	Amount of Land in Acres
Forested	12 million (est. 75 billion board feet of harvestable timber)
Forested Public	1,200,000 acres
Forested Wood Product (corporations)	2.6 million acres (note: the rate of harvest and replacement of timber inventories is higher on forest industry land than on other ownerships.)
Non-industrial Private Landowners/Individuals	7 million acres

Table 1: Land Type in West Virginia

By 1910 A.B. Brooks reported in the state's geological survey that the 15-½ million acres of West Virginia's virgin forestland that had existed in the state 200 years before had been reduced to 1-½ million acres of virgin timber. There were 3 million acres of cutover forests left and 5 million acres of farmer's woodlots. The previous 150 billion feet of timber that had been estimated in the 1700s had been reduced to 25 billion feet.

Forestland Lost Temporarily	Amount of Land Lost:
Logging	300,000 acres per year (according to timber notifications received by the DOF)
Forest fires	53,000/year

Table 2: Forestland Lost Temporarily

Forestland Lost Permanently:	Amount of Land Lost:
Conversion to urban use	178,300 of forested lands were lost between 1982 and 1997 because of conversion of agriculture and forest lands to urban lands
Strip mining	According to a 1995-limited inventory of the state's forests, 111,000 acres of permits had been issued for surface mining since 1987. It is now being reported that the total acreage being destroyed by mountain top removal mining is 300,000.

Table 3: Forestland Lost Permanently

Forestland being gained :	How much?
Natural regeneration	1.3 trees for every one removed. Note: in 1992, the total removals in the state were at a 2 to 1 ratio; a change from 3.6 to 1 in 1989.

Table 4: Forestland Gained

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According to Ed Murriner, Deputy State Forester, Division of Forestry current figures on the regeneration rate for West Virginia will not be available until March of 2002, if then. In other words, there has been no public announcement from the DOF about a regeneration rate for the past six years. William Maxey, former State Forester, stated that he felt a mid-cycle partial inventory was needed in 2000 because the growth to removal ratio had fallen below 2 to 1 in 1989. **It is essential that the WV Division of Forestry and/or the USDA Forest Service do an immediate survey and release the findings to the public. Good policy decisions cannot be made without an informed legislature and public.**

Importance of Forests

Why all the concern about our state's forested land? Forestry employs many people in our state; 30,000 families depend on forestry for their livelihoods. According to the WV Forestry Association, forestry contributes \$3.2 billion to the state's economy. However, forests offer the state a lot more than logging jobs – forests contribute to the state's tourism, wildlife, air and water quality, flood reduction, climate moderation, scenic beauty, wildlife habitat, and recreation.

FACT: Recent research indicates that 120 acres of tree canopy can absorb up to 170 pounds of particulates a day. One tree can absorb up to 50 pounds a year. This is significant when faced with realities of global warming. While logging is necessary and vital to the state, our state's forested land does have other values that need to be considered.

Forest Oversight

Several agencies have oversight of West Virginia's forests. The WV Division of Forestry (DOF) is charged with overseeing the commercial harvesting of timber and watching that the process does not cause soil slippage in our forests, gulying, or sediment deposition in our streams. The WV Department of Environmental Protection (DEP) has a role if and when there is a water quality problem. There are organizations that monitor forestry in the state.

These include the several government agencies, nonprofits and others:

*USDA Natural Resource Conservation Service
Forest Management Review Commission
West Virginia University Extension Service
USDA Forest Service
Appalachian Hardwood Center
West Virginia State Soil Conservation Agency
WV Highlands Conservancy
WV Sierra Club
Timber Reform Coalition
The WV Council of Churches
The Woodland Owner's Association of West
Virginia, Inc.*

*Natural Resources Commission
Catholic Committee on Appalachia
Religious Campaign for Forest Conservation
Trout Unlimited Mountaineer Chapter
Trout Unlimited State Council
WV Environmental Council
WV Highlands Conservancy
WV Organizing Project
WV Rivers Coalition
Private forestry consultants
Center for Economic Options
Isaak Walton League*

The West Virginia Division of Forestry

The DOF’s Mission

The DOF mission is to regulate and coordinate forestry activities of private industries and forest landowners with the goal of developing the state’s forest resources to their maximum potential.

The DOF coordinates the following program areas:

Technical forestry services: forest fire prevention; technical assistance to nonindustrial private forest landowners; administer the logging sediment control act including training, certification, and enforcement; weigh and certify ginseng for export; and manage eight state forests.

Fire mobilization and suppression: fighting fires; training volunteers; investigating cause of forest fires; improving local fire protection through cooperative agreements with local companies; maintaining emergency fire tool caches

Forest tree nursery: grow forest tree seedlings for sale to landowners for reforestation and reclamation purposes; operate a forest tree nursery on a self-sustaining basis; maintain forest tree production areas

Urban and community forestry: assist urban residents with conservation education by proper care of shade and street trees; assist communities with urban tree planting and maintenance programs; conduct training for communities and tree care firms; promote the “Tree City, USA” program

Cooperative forestry assistance: promote and expand forest management activities through use of private consultants; provide technical assistance for several federal forestry cost-sharing programs; provide environmental education assistance to schools and other groups; administer the federal rural development grant program.

DOF Employees

Type	Full-Time
Foresters	65
Rangers	22
Forestry Aides	1
Administrative	18

Table 4: DOF Employees

To contact the DOF, call one of its seven offices – six district offices and the headquarters located in Charleston (558.2788). The district offices are in:

- **District I, Fairmont** – 304.367.2793
- **District II, Romney** – 304.822.4512
- **District III, French Creek** – 304.924.6266
- **District IV, Beckley** – 304.256.6775
- **District V, Milton** – 304.743.6186
- **District VI, Parkersburg** – 304.420.4515

Mandatory Training

According to the LSCA, a certified logger must supervise each active logging operation and can only supervise one crew at a time. He or she must be at an active logging job daily, but not continuously. To become a certified logger, the following training is required:

- First-aid (First Aid card must be current)
- Best Management Practices (BMPs)
- Logging Safety

Retraining is required every three years. It appears as though the DOF sends out notices to loggers when they need to renew or complete the mandatory training.

The DOF conducts the BMP Training, the Logging Safety Training, and other workshops.

BMPs are voluntary techniques that may be used by loggers to prevent soil erosion and sedimentation.

The 8-hour certification training consists of two required 2-hour classes (BMP Update and Safety Update) and two additional classes, which may include:

- Log job planning
- Log job reclamation
- Map reading
- Log truck safety

The BMP Workshop is open to loggers several times each year. The BMP workshop trains loggers on how to implement BMPs, how to fill out timbering notification forms, and logging site safety measures.

The Appalachian Hardwood Center and the WV Forestry Association offer three additional workshops that have been approved for partial qualification for recertification training. The sessions and credits earned are:

- **Logger safety initiative** – This satisfies the Safety update and both optional classes. The BMP update class is still needed.
- **Professional skidder operator workshop** – This satisfies the Safety update and both optional classes. The BMP update class is still needed.
- **OSHA compliance workshop** – This satisfies the Safety update and both optional classes. The BMP update class is still needed.
- **Loss control workshop** - This satisfies the Safety update and both optional classes. The BMP update class is still needed.
- **Repeating the original BMP and chain-saw safety workshops** – This satisfies all mandatory training.
- **Completion of all four levels of the Game of Logging** - This satisfies the Safety update and both optional classes. The BMP update class is still needed.
- **Completion of Game of Logging Refresher** – This satisfies either initial chainsaw/PPE training or 2-hour review and 4-hour optional training. BMP class is still needed.

The Logging Sediment Control Act

The DOF is charged with overseeing the administration and enforcement of the Logging Sediment Control Act (LSCA). The LSCA is currently the state's only step towards regulation of the timber industry. The LSCA contains three major provisions.

First, the LSCA requires that anyone conducting a logging operation, buying timber, or buying logs for resale be *licensed by the DOF*.

LSCA History

The LSCA, Article 19-1B, was passed by the legislature in 1992 and amended in 1994.

The LSCA is regulated and enforced by the Division of Forestry. The Department of Environmental Protection is mandated to report water quality violations to the DOF, submit an annual report to the Governor and Legislature, and receive notification of all timber jobs.

There are a few exceptions, one of which states that if you are logging on your own land you need not be licensed or certified if the value of the timber does not exceed \$15,528.

To get a license, a person must be registered by the WV Department of Tax and Revenue. The applicant must supply their tax number to the DOF. Acceptance of the license by the DOF implies that the operator will voluntarily apply Best Management Practices. The annual license fee is \$50.

Second, the LSCA requires that loggers be *certified*. The fee for certification is also \$50 annually. The requirement for certification includes a completion of courses in tree felling safety and personal safety equipment, first aid, and silvicultural best management practices.

After reviewing the materials used by the DOF for the logger certification classes, we suggest adding materials that discuss the ecological and resource values of the waters of the state. Such a class is offered in Maryland. Also, the Department of Environmental Protection should be involved in the logger training to help teach water assessment methods.

Third, the LSCA requires that a *timber notification form* be submitted to the DOF within three days of starting to harvest trees. Maryland has a stronger law, which states “erosion and sedimentation plans shall be approved by the commission before the issuance of a permit.”

According to W.Va. law “the notification shall be made in a manner designated by the director.”

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Therefore, the director should require that the notification be completed before harvesting begins. The logger is also required to post his operation with a sign listing the logger's name and license number in letters that are at least 3 inches. **This sign is posted on the log landing, which is usually out of the public's sight.**

How does one fill out a *Timber Notification Form*?

The logging operator can get a timber notification form from the closest DOF District Office. The form is supposed to be filed with the DOF within three days after a logging operation begins. *The notification form includes the following information:*

- Name of logging company
- Contact information, including the person who owns the timbering license
- Timbering license number
- County and nearest town
- Drainage area (watershed) in which logging will occur
- Harvest method
- Severance tax – whoever is in charge of where the logs are sold (more on this in the Severance Tax section)
- Planned starting date and planned date of completion
- Owner of timber
- Agent or consulting forester
- Property owner
- Certified logger in charge
- Best Management Practices that will be used
- Sketch map of operation including roads, landing, boundary lines, and directions to harvest area

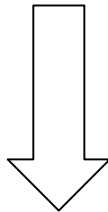
Where is all of this information kept? How would a concerned citizen find out about a particular logging job?

Each district office keeps track of all logging jobs in its area. The district offices do enter the information from the notification forms into a database, which is housed in the Charleston Office. Suspension forms and license revocation forms are housed in Charleston, with copies in the district offices. See page 4 for contact information.

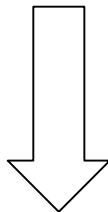
Process Flow Chart

Before a logging operation begins, an operator must:

- Obtain a timbering license from the DOF – license fee is \$50/year
- Obtain logger certification by completing the DOF training program (if the operator of the logging site and the certified logger are the same person – the operator can hire or have a certified logger on site)
- Post a sign with company name and timbering license number at timber landing



Within three days of timbering, the company must file a timbering operation notification with the DOF



During the logging operation, the following must take place:

- Supervision of logging operations by a certified logger (Note: this person does not have to be a certified forester)
- Enforcement capability for activities causing erosion and/or stream sedimentation
- Reclamation to be completed within seven days of planned completion date on notification form

Best Management Practices

The LSCA recommends the use of BMPs (Best Management Practices). The goal of these techniques is to prevent soil erosion and sedimentation and to insure clean water during and after the harvesting of timber. **Loggers are expected to use BMPs.**

BMPs should require loggers to develop a plan that identifies all streams, lakes, rivers, and other bodies of water in the area and implement measures to protect them. The plan should also include the following:

- *Road and landing locations*
- *Harvest boundaries*
- *Terms of the timber sale contract*
- *Volume and location of timber to be removed*
- *Topography and soil characteristics*

Best Management Practices also include:

- Twenty-five foot filterstrip between streams and haul roads, landings, and skid roads
- Haul roads grades not to exceed 10% or 15% for more than 200 feet
- Haul roads that intersect main highways shall be rocked and graveled the first 200 feet from the highway
- Skid road grades that expose mineral soil shall not exceed 15% except short, steep segments not to exceed 20%
- Road grades exceeding above limits will receive special water control treatment, such as water bars
- Stream Management Zones (SMZs) is the “land adjacent to perennial, intermittent, and ephemeral streams and ponds or lakes requiring special attention during forestry operations.”
 - Perennial and intermittent streams are protected by 100’ wide filter strips.
 - Ephemeral streams are protected by 25’ wide filter strips.

Filterstrip: Protective strip of undisturbed forest soil between a truck haul road, trail, or landing and a stream. Any or all trees can be cut in a filter strip; however, heavy equipment is not allowed in these areas. The minimum width of a filterstrip is 100’ slope distance from streambank to toe of fill or lower edge of exposed soil on each side of perennial and intermittent streams. The minimum is 25’ on each side of ephemeral streams.

Landing: A place where trees are skidded to and sectioned into logs. Logs are accumulated, sorted, and perhaps scaled prior to loading and hauling by truck to market. They should be no larger than ¼ - ½ acre in size, out of the filterstrip, with all road and trails having a gentle slope up to them.

Reclamation: The act of returning the land to near its original state.

Skid Road or Trail: A road for use by wheeled skidders or tractors to move trees and logs from the cutting area to a landing. The should be constructed less than 15% grade, but can be up to 20% for short distances and up to 40% if soil is not exposed.

Streams: Perennial – identified by well-defined banks and natural channels and have continuously flowing water most years. Intermittent – Have well-defined banks and natural channels, but typically have flowing water from a headwater source for only a portion of the year. Ephemeral – A flow as a result of wet weather conditions when the ground is saturated. The channel is characterized by being free of leaf litter showing bare rock or soil that has been exposed by flowing water.

Truck Haul Road – Constructed under a 10% grade and only up to 15% grade for no more than 200’. A minimum road surface of 12’ on cut.

Enforcement of the LSCA

Site Inspections

DOF personnel randomly inspect licensed logging sites (or unlicensed ones if they receive complaints or run across them on their own). They also investigate complaints from citizens and the Division of Environmental Protection and other agencies. The DOF must investigate every complaint within three days. **In 2000 the DOF received 3,204 timbering notifications. One quarter of these jobs were out of compliance. The timber project recommends that the DOF inspect all 3,204 sites before logging begins, during the operation, and after the job is complete.**

Type of Inspection	# Not in compliance (problem found)	# In Compliance (no problem found)
Random	347	1,380
Complaint	479	162

Table 5: 2000 Inspections of Logging Sites by DOF personnel

The most common problems found on both complaint and compliance inspections were no license, no notification, muddy water, and job not reclaimed.

Who inspects logging jobs?
DOF foresters or rangers with a two-year forestry degree inspect logging sites. They are trained to recognize potential problems and to offer solutions to the logger in charge.

Immediate Corrective Action

In 2000, during inspections (both random compliance and complaint) foresters were able to recommend immediate corrective action at 204 sites. *This means that the inspector told the logger how to correct the problem and the logger was able to be in compliance after fixing the problem.*

More Serious Problems

Compliance orders were issued by the inspecting forester 569 times – this means that the forester had to fill out a compliance order form with more detailed instructions on how to fix the problem(s). The forester also has to do this if no one is present at the logging site while the forester happens to be inspecting the site and happens to find problems. Compliance orders are typically hand delivered and explained to the logger in charge.

SUSPENSIONS

Foresters suspended logging operations 435 times. This means that all logging activity is suspended until the job is brought into compliance.

Since 1992, there have been 29 timber licenses and 17 certified logger licenses suspended. There have also been three timber licenses and one certified logger license revoked.

If the LSCA is not being followed, the DOF and the DEP have the authority to issue:

- **Compliance orders** – detail corrective actions to fix problems within 1-10 days. The operation can continue while corrective action is taken.
- **Job suspension orders** – suspends all logging activity until operation is brought into compliance.
- **License suspension** – operators are not allowed to conduct timbering for 30-90 days.
- **License revocation** – operator cannot conduct timbering for the rest of the license year.
- **Civil penalties** – can be sought in an amount up to \$2,500 for the first offense, and up to \$5,000 for any further offense.

Logger Pay Scale and Dangers of Logging

Besides the question of sustainability, there are other downsides to the forest industry. According to reporter Ken Ward of the Charleston Gazette, timber jobs in West Virginia pay less than other manufacturing work and less than similar forest product jobs in other states. For example, WV loggers made an average of \$270 a week in 1995, but loggers in the United States averaged \$448 per week. The latest figures from 1999, show WV loggers still making less than the national average at \$319/week compared to \$518/week nationally.

Logging is also dangerous work. In 1997, it was the most dangerous occupation in the country, with 128 deaths per 100,000.

Between the years 1992 and 1997, there were 31 logging fatalities in West Virginia. West Virginia was in the top ten states in the number of fatalities.

The West Virginia Highlands Conservancy's Comments on Initial Research

We concur with the Division of Forestry in affirming that a big problem currently exists with unlicensed logging operations and repeat offenders. It is also clear that with one quarter of all logging operations not meeting standards set by the state, new and/or additional preventative measures are needed.

The goal of the Timber Reform Research Project is to collect and analyze information on the status of logging on private lands and its affect on West Virginia waterways in order to effect positive change.

Further, DOF records tracking enforcement of the Logging Sediment Control Act have not been uniform from field office to field office. This has made it difficult to determine what is being logged, who is doing the logging, and what companies are or are not following best management practices and/or putting sediment in streams.

Presently, it is possible for a logger to get suspended in one district, but still be actively logging in another. This would be less likely to happen if a statewide and uniform database for tracking problem loggers was established and used by the DOF to suspend logging licenses.

In addition, the duties of the DOF as outlined in current law can not be performed under the agency's current financial conditions. The DOF is both under funded and under staffed.

To address this situation, it is our initial finding that:

- The Logging Sediment Control Act needs to be strengthened and enforcement needs to be improved, including giving the Director more power to suspend logging company licenses and logger licenses.
- To curb many of the current enforcement problems, more "teeth" need to be put in current regulations, such as increased fines.
- The Division's database needs to be updated and improved including linking all district offices. The information on repeat violators should be used to suspend timber licenses.
- Each logging operation needs to be pre-approved and then inspected at least twice during the job to curb the high violation rate and to ensure compliance.
- In order to perform its mandated activities and inspect all logging operations, the DOF needs increased funding and additional personnel in the field.

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Appendices