

Tour Route, 2013-08-12

## Auto Tour Directions, Clarence Moore Lands

Meet at I-180, exit 21 (Route 87). Assemble at the Walmart end of the shopping center, near Wendy's. Remember to pack lunch, snacks & water. Carpool.

A. See Map #0a, overall route, [3 stops]



Map #0a

B. Brief history of the Clarence Moore Tracts:

- 1933 purchase by the state of 26,000 acres; mineral rights retained by seller. The deeds on 74% of those tracts limited surface access to 50 years (affirmed by Commonwealth Court, 1989 CM Decision).
- DCNR seems reluctant to annoy the present owner of the mineral rights (Anadarko) by using their power of complete surface control on those acres (known as the "yellow tracts" on some maps).

C. See **Commentary for Clarence Moore Tour Stops Preface**

## **Driving Directions to Stop One:**

**Starting from shopping center, Exit 21:**

**Zero odometers:** drive north for **23.2 miles** to Hillsgrove. Shortly after passing the fire hall (on the right), go left on Mill Creek Road. It is after a small bridge, and easy to miss.

As soon as you get on Mill Run Road, stop and Reset odometer - Mill Run will later become Hillsgrove Road.,The first stop is **6.7 miles** from Rt. 87. If you forgot to reset just do the math.

PARK on the right side, 50 yards past OLP crossing sign.

Walk back to the OLP, turn left (up the bank) and enter woods. Go about 80 feet, stop and appreciate the quiet woods.

- Then imagine a fenced, lighted 500'x500' Compressor Station running 24/7. Walk west (left of the OLP) to the headwaters of Mill Creek.
- See map "1a OLP East". Pinpoint your location. Note the two wellpads and 14.8 million gallon water impoundment proposed for just north of the wetland. A heavy duty road and pipelines for gas and water would obliterate the Old Loggers Path here.
- Note the proximity of the large wetlands just west of where you stand. While DEP regulations require a 200' setback from streams/wetlands, gas companies always ask for a variance. And those requests are often granted. Do you want the Loyalsock to be an Industrial Forest?

## **CONCERNS**

See **Commentary for Clarence Moore Tour Stops: Stop One**

1a Recreation / Hiking

1b Air Quality

1c Wildlife / Hunting

1d Forest Management

1e Water Resources / Fishing

===== *END OF STOP ONE* =====

## **Driving Directions to Stop Two:**

Rock Run @ Camp Lease 2456

Continue west for another mile (**7.7** miles from Rt.87). Note a large clear area on your left. This is the hairpin turn that is the north end of Cascade Road. Turn sharply left. **Reset odometer.**

Follow Cascade Road downhill (south).

**Pause** briefly at John Merrill Road on your right (west) at **mile 0.9.**

We will not enter here, but merely note that John Merrill Road will be converted to a very wide industrial road. Gas lines and water lines will be buried on the south side for the length of the road. Red/white/blue flagging indicates the road/pipelines.

Two wellpads (12 wells), a compressor station and a large water impoundment will be built along John Merrill Road between here and Sharp Top Vista. We do not know if we will have access to the vista. West of Sharp Top Vista, the OLP will be severed again and \_\_\_ wellpads, a 14.8 million-gallon water impoundment, compressor station and a long north-south pipeline will connect to Anadarko operations south of Ellenton Road, east of Yellow Dog Road.

**Continue south on Cascade.** This road will be converted to an industrial road, the southerly access to the Anadarko operations

Note the OLP crossing at **mile 3.1** This trailhead on the right will be destroyed by the widening of the road.

Turn sharply **right at mile 4.2**, then **left at mile 5.3** - This is Cabbage Hollow Road.

**At mile 8.4**, T-intersection; **turn right.** This is Hoppestown Road.

**At mile 12.6**, follow **Freimeyer Road.**

**At mile 13.9**, **turn right** on Kellysburg Road.

**At mile 16.7**, follow **Slacks Run Road (SR 1006).**

**At mile 20.7** you have reached Bodines and Rt. 14.

**Reset odometer to zero**, turn right on Rt.14 and go **4.5 miles** to Ralston. About 50 yards past the firehouse [on your right], you will **turn right** on Thompson Street, **then immediately left**, across a bridge. At mile 6.8, you cross a very small bridge (just a landmark).

**At mile 6.9**, look for a white sign denoting camp 2456 on your right. Park on your left (room for 7 cars).

If camp 2456 owners **Herb & Barb Selman** are home, introduce yourselves and politely ask for permission to access the creek.

## STOP TWO: CONCERNS

### See **Commentary for Clarence Moore Tour Stops: Stop Two**

Map #2b, West OLP has been deleted

2a Hunting / Fishing / Paddling / Swimming

2b See PFBC data re water quality of Rock Run, its tributaries and the headwater wetlands upstream.

2c Effects of nearby development on erosion, sedimentation, water temperature and water quality

Point out our location on the map and note the proximity to Anadarko's holdings at the headwater wetlands of Buck Run and Doe Run where Anadarko pads "R" and "S" are to be located.

- Discussion of the a, b, c above and what is at risk.

===== END OF STOP TWO =====

#### **Driving Directions to Stop Three:**

Bodine Mt. 1/2 mile north of security shack #310

Return to vehicles. Drive back to Rt 14 @ Ralston.

**Reset odometer.** Turn left on Rt. 14 and drive south **7.1 miles** to Upper Greys Run Road. **TURN RIGHT.** Follow Upper Greys Run Road to a Kerrington Security shack (on your left) at mile 8.0 This is the intersection of Upper Greys Run Road and Bodine Mt. Road.

If you are stopped, tell Security that you are inspecting the Anadarko operations on lease 551,north of Seneca Pad "E".

#### **Turn Right on Bodine Mt. Road.**

*Note:* Bodine Mt. Road may be one-way if any really big equipment is on the road. Just wait your turn & feed M&M's to security. The wait is preferable to pulling in your side mirror and putting a wheel into a ditch.

Drive up Bodine Mt. Road. At **mile 10.3**, stop at Security shack #10. Tell the guard that you are inspecting the Anadarko site B. Offer M&M's as your toll. **Go straight.**

**Stop at mile 10.6, along the road/pipeline.**

## STOP THREE: CONCERNS

### See **Commentary for Clarence Moore Tour Stops: Stop Three**

**3a** This is the “after”.

Think of what you saw at stops #1 and 2 and compare. Seneca operates the gas lease for tract 100 (to the west). Anadarko owns the gas rights on the two Clarence Moore Tracts to the east. Bodine Mt. Road is the approximate boundary between the two companies. Seneca can't drill S/E and Anadarko can't drill N/W. It has been reported that they have refused to cooperate on sharing a wellpad. The northern Clarence Moore tract operates under the B&B (Belden & Blake) court decision, while the southern tract is under the 1989 CM decision and DCNR has enjoyed full surface control since 1983.

- DESCRIPTION, discussion, implications . . .

**Continue north on Bodine Mt. Road to mile 10.9** (a pulloff on the right at a stop sign). The leader should smile and take a bag of M&M's to the guardshack on the left. You will be asked for your name, vehicle license number and names of your group members. They do not check I.D., so your real names and affiliations are optional.

Anadarko's pad A is behind the stop sign on Bodine Mt. Road. You could tell the guard that you want to see that (show map #3a). Explain the Seneca/Anadarko holdings if you want to educate the guard.

To the left is Seneca Pad E (blocking access to the Scenic Vista). The wells were being fracked in July 2013. You are not permitted to see that area.

You may ask to look at the pig launcher and other above-ground pipeline equipment behind the guard shack. A “pig” is a torpedo-shaped device that cleans the pipes. Just behind the guard shack is a new 500 x 500 foot pad [barren as of 8/11/13] that will probably be a compressor station.

If you **look again at map #3a**, you see that Bodine Mt. Road continues north as a narrow lane to the planned Anadarko sites on Tract 551. Since Seneca owns the rights to the west, they have a 14.8 million gallon reservoir one mile north of the stop sign where you parked.

While this is the end of the tour, you could drive up to see the reservoir. Two large water pipes lie along the west berm of the road, making turn-arounds more difficult. Heylman Trail's yellow gate a mile north of the reservoir is an easy spot for multiple vehicles to make a u-turn.

**Retrace route to Rt. 14**



# Commentary for Clarence Moore Tour Stops , V07

## Preface

See map #0a, Overview of Clarence Moore Tour (below)

Outdoor recreation has long been a powerful economic force in Pennsylvania, but one that has been subjugated by natural resource extraction for more than a century.

Communities across the commonwealth have a rich heritage of hunting, fishing, trapping and other outdoor traditions and they derive substantial economic benefit from tourists who come to take part in these activities on public and private lands —the very places where Marcellus Shale gas drilling is occurring right now and will persist.

The future of Pennsylvania's environment and economy depends on how Pennsylvania state officials manage and regulate the gas industry from this point forward. Without strict guidelines in place, the state's rich natural resources are at risk. Drilling must occur far enough away from the state's 85,000 miles of streams and rivers to keep them from again becoming collateral damage in another energy exploration and extraction boom. Headwater wetlands must be protected. In the rush for economic gain, state officials must not lose sight of the need to protect these areas so important for Pennsylvania's local economies and our outdoor heritage.

The U.S. Fish and Wildlife Service has determined that more than \$4.3 billion in revenue is generated each year in Pennsylvania from fishing, hunting and wildlife-related recreation. Much of these activities occur in our state parks and forests, and our leaders and regulators must recognize the economic and social costs to communities from developing the Marcellus Shale. That 2011 USFWS survey detailed the dollars spent on gear, fuel, motels and meals. This spending creates thousands of jobs, supports countless local communities and provides taxes and vital funding for conservation.



**Map #0a:** Overview of Clarence Moore Tour

## Tour stop #1

### 1a Recreation

See map #1a East OLP V07 (opposite)

Most of Pennsylvania's major hiking trails are in the Marcellus gas play. Here, the Old Loggers Path is due to be severed in up to six places by Anadarko's development. Anadarko plans a 500x500' [5 acre] compressor station at this spot. The OLP north of us will be obliterated by gas lines and an industrial access road to multiple pads and a reservoir.

Long-distance hikers and hunters typically use water from streams such as Mill Run (immediately west of where we are standing). There are two wellpads (typically 12 wells) scheduled to be built just uphill from the Mill Creek wetlands. Other state forests have had water sources contaminated by gas drilling (Moshannon 2010, Tiadaghton 2013).

### 1b Air quality

Trucks and other diesel equipment used in the drilling operations emit particulate matter, volatile organic compounds and other dangerous air pollutants. This industrial activity, in areas that are primarily rural, forested and open space, is a new source of air pollution that can adversely affect local camp owners, hikers, hunters, anglers and trappers.

### 1c Wildlife

See map #1b Headwater Wetlands (next)

This large expanse of Loyalsock State Forest is an especially valuable woodland habitat and is a National Audubon Society Important Bird Area (IBA). It provides critical habitat for a number of eastern deciduous-forest species such as the Scarlet Tanager and Yellow Bellied Fly Catcher (a USFWS Migratory Bird of Conservation Concern and a PA endangered species). The Yellow Bellied Flycatchers is protected under the Migratory Bird Treaty Act and breeds in only nine areas of the state, two of them near here.

All of these songbirds migrate to Pennsylvania from the tropics of Central or South America to raise their young in the summer months. Also nesting here is the Northern Goshawk, a rare raptor of northern Pennsylvania that requires large, quiet, older forests to successfully raise young. This forest contains the high-density nesting site of a dozen other species of "interior forest species" which require unfragmented forests for nesting success. Development & fragmentation of this habitat will harm all of these species, so the usual practices of unconventional shale gas drilling poses a serious threat to their continued existence.

Construction of access roads, drill pads, pipelines and compressor stations fragments the forest. Breaking up the landscape affects wildlife migration routes and impacts the health of many species, particularly those which require large blocks of contiguous forest for survival. Clearing for all the gas infrastructure reduces critical food and shelter sources for wildlife and creates openings for predators and invasive species.

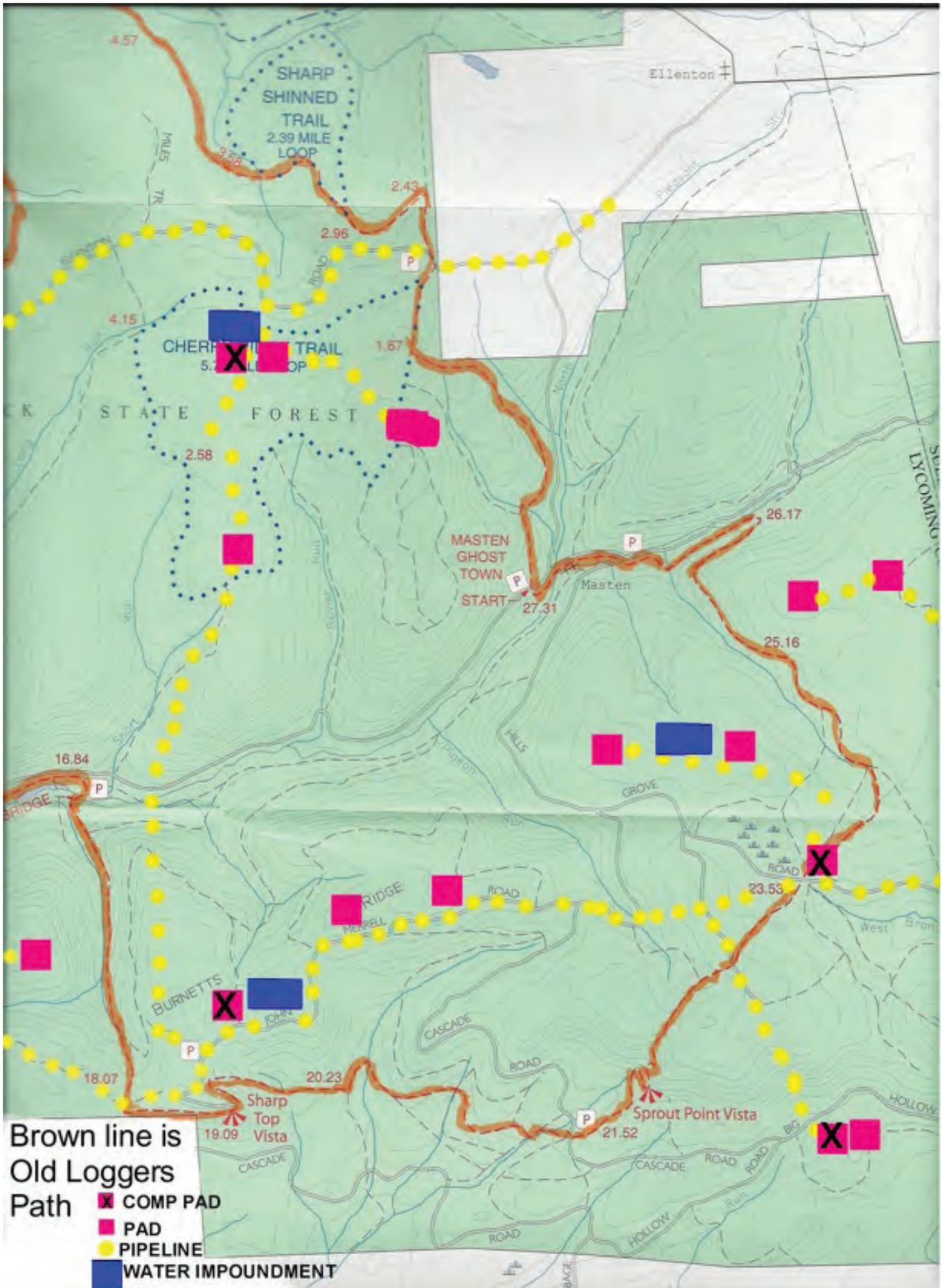
DCNR concluded (2010) that leasing any more State Forest lands would significantly affect the wild character and ecological integrity of the State Forest system. The DCNR study further found that gas development on private lands is already surrounding the State Forest in some areas, causing an uncompensated, lasting change on the wild character of the forests.

### 1d Forestry's mission

See again map #1a East OLP V07 (opposite)

The DCNR Bureau of Forestry's mission is to ensure the long-term health, viability and productivity of the Commonwealth's forests and to conserve native wild plants. In accordance with the Pennsylvania Conservation and Natural Resources Act, P.L. 89, No. 18 (1995), the DCNR has a legislative mandate to manage the commonwealth's forest lands for multiple uses under sound ecosystem principles.

Section 101 of this Act clearly affirms that "Pennsylvania's public natural resources are to be conserved and maintained for the use and benefit of all its citizens as guaranteed by section 27 of Article I of the Constitution of Pennsylvania." Further, the law recognizes that Pennsylvania's state parks and forests and community recreation and heritage conservation areas are critical to the continued success of the commonwealth's tourism and recreation industry, the second largest industry in the Commonwealth.



Map #1a: OLP V07

Marcellus Shale drilling in this state forest would devastate the wet forest ecology and eliminate many of the species from living here. You cannot just avoid a few areas and keep the ecology of this type of forest intact.

The species depending on this special place are here because it is quiet, wet, and unfragmented.



Map #1b: Headwater Wetlands

Sustainable forestry is a science and our Bureau of Forestry is proud of their certification by the Forestry Stewardship Council (FSC) Forest products with FSC certification command premium prices, but conversion of certified forests to other uses is strictly regulated. Good forest management and harvests are planned for decades but unplanned gas development ruins years of management by the Bureau of Forestry.

Industrialization of the forest jeopardizes DCNR's ability to fulfill its duty to conserve and maintain these public natural resources

## 1e Water resources

See again map #1b Headwater Wetlands (opposite)

Current state and local policies governing gas drilling and hydraulic fracturing in the Marcellus Shale do not adequately protect valuable and irreplaceable natural resources, including clean water and critical habitat for fish and wildlife.

- Mill Creek marsh is immediately west of the proposed 500 x 500 foot compressor site @ mile 23.53 of the Old Loggers Path. Development will result in warmer water draining to the marsh, as well as increased erosion and sedimentation.
- Riparian buffers, vegetated zones immediately adjacent to flowing waterways, prevent erosion of streambanks and filter runoff before it enters the aquatic ecosystem.
- Buffers also decrease flood damages by reducing the volume and peak of floodwaters and ensure healthy fish and beautiful scenery which supports the multi-million dollars businesses dependent upon fishing and boating.
- We must have independently certified pre-drilling water quality monitoring data prior to development, as part of the permit process. This monitoring data will document contaminants that may already be present in the water. Water quality monitoring should occur weekly in nearby surface waters where a drilling site is active. Monitoring should continue until such time as the site is completely restored and rehabilitated.
- Drilling must occur far enough away from the state's 85,000 miles of streams and rivers to keep them from becoming collateral damage in this major energy exploration.
- Broad, naturally-vegetated buffers provide a critical level of protection. Chemical spills and leaks of frackwater flowback from drilling sites are a grave concern.

===== end of stop one =====

## **Tour Stop #2 Rock Run @ Camp Lease 2456 (Barb & Herb Selman)**

### 2a RockRun 'aesthetic area'

See map #2 Rock Run 'aesthetic area' (opposite)

Sportsmen have a long history in Pennsylvania of hunting and fishing. We rank at the top in the nation for the number of days afield hunting. We bushwhack up to tiny streams to find native Brook Trout. We value the habitat that provides sustenance for our fish and game.. North central Pennsylvania contains the bulk of the commonwealth's Class A and wilderness trout watersheds.

Just east of this section of Rock Run - at the top of the steep hill to our east - is an area scheduled for gas development. The many wetlands at the head of Doe Run and Buck Run will be altered. Erosion caused by runoff from cleared areas and the subsequent sedimentation can dramatically alter trout spawning success by burying eggs and smothering the aquatic insects on which the trout feed.

Opening up additional state forest lands in this region will significantly affect the ecological health of this region and the quality of the sporting experience that defines many of these areas.

### 2b PFBC data

Tributaries to Rock Run & Pleasant streams (all have been assessed and are either adopted as wild trout natural reproduction or they are on the list to be adopted).

ADD DATA

### 2c E&S and coldwater issues

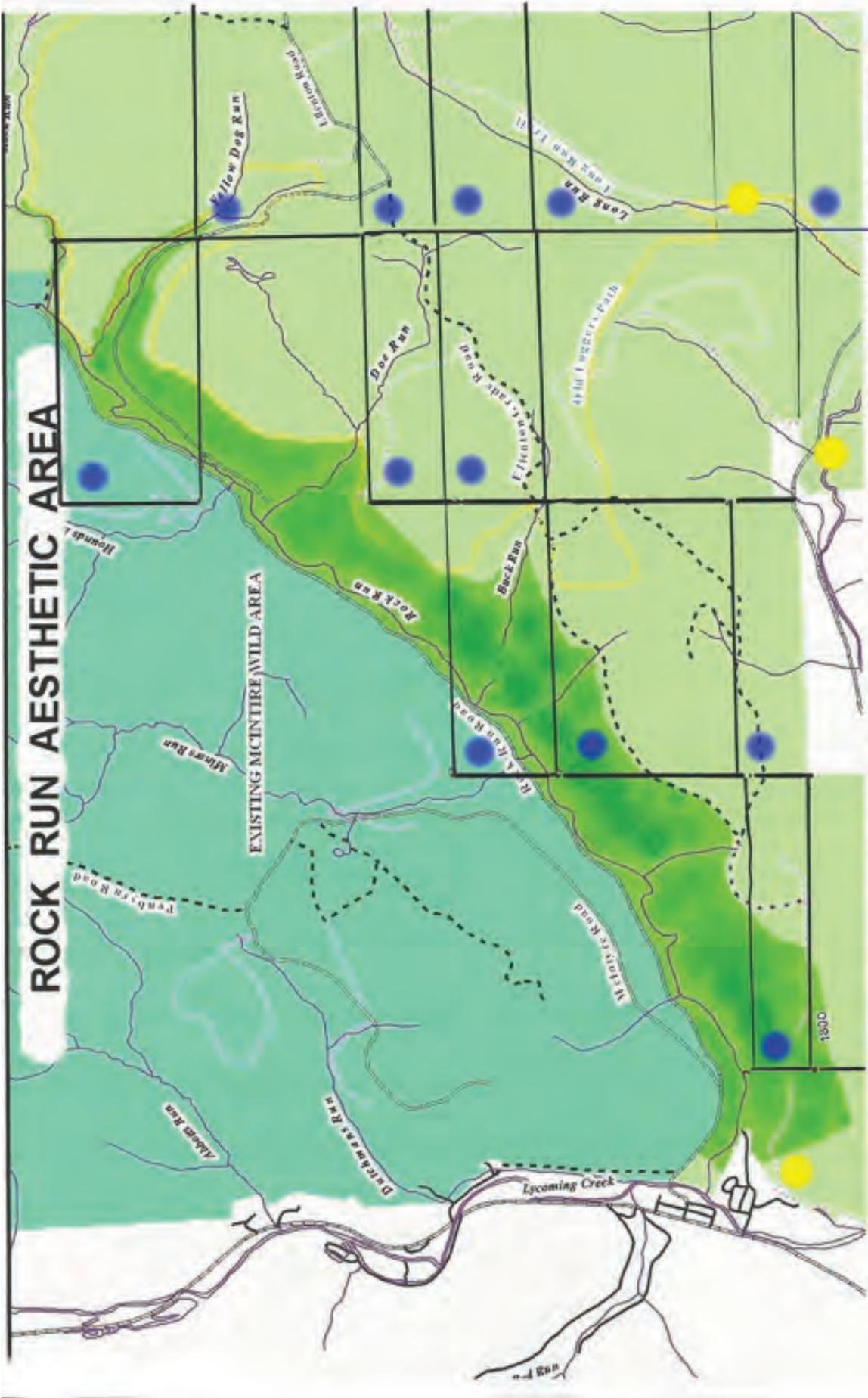
While Anadarko's gas activities will not be visible from here, the development will critically impact Rock Run, the main artery of this special place.

The development of the Clarence Moore lands will contribute to the loss of forest on the plateau immediately west of this location. Build-out of shale-gas infrastructure near RR's tributaries (Buck Run, Doe Run) will disturb the ecosystems at those headwater wetlands.

Erosion and sedimentation will alter the water quality. Increased sunlight will raise the water temperatures. Less vegetation results in increased runoff and less infiltration of water. The groundwater hydrology will be altered, resulting in warmer water entering the water table more rapidly, scouring the streambed. Then, in late summer, you can expect less water in the streams due to a lower ground water table.

Our native Brook Trout are the canaries in the coal mine of this generation's resource extraction boom. Current state and local policies governing gas drilling and hydraulic fracturing in the Marcellus Shale do not adequately protect valuable and irreplaceable natural resources like our historic brook trout waters. Has DCNR conducted any studies to determine the cumulative effects of development of the Clarence Moore lands on water quality? Has the agency performed any base line studies so that they will be able to determine changes due to gas development anywhere?

===== end of stop two =====



● Blue = Clarence Moore Tract; B&B applies

● Yellow = Full surface control by DCNR

DCNR owns both surface and mineral rights in unmarked areas

### 3a Rock Run

Map #2: Rock Run 'aesthetic area'

## Tour Stop Three:

Bodine Mt. Road

1/2 mile north of security shack #310

See map #3a, Bodine Mt, 100, 551 and CM Lands

What you saw earlier today is the "before"; what you see here is the "after" of unconventional gas development.

Note our location on the map. Seneca Resources is drilling to the northwest of this spot. Their wellpad E takes up the entire crest of the overlook just northwest of here.

Anadarko (APC) wants to drill to the southeast of this road, on two Clarence Moore Tracts. According to DCNR memos, APC does not want to cooperate with Seneca to share a drilling pad.

The footprint of the Marcellus gas play in Pennsylvania mirrors much of our prime hunting and fishing areas. This complicates things. Our native Brook Trout serve as "the canaries in the coal mine".

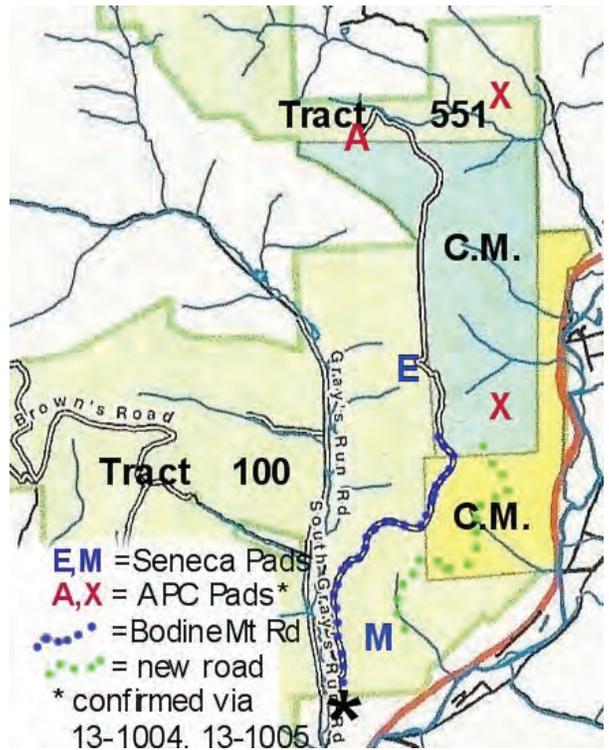
While we welcome the economic benefits that will come from the Marcellus gas industry in our state, we cannot sacrifice our outdoor heritage, our air or our water.

A friend from Elk County wrote to me recently. "Some of the most secluded corners of our woods are now patrolled by security guards," he lamented. "They approach citizens in the vicinity of well pads, requesting names and the nature of their business. Not particularly the hunting experience my sons and I are after."

**Note:** We passed three security stations on the way to this location and there is one more security station at the entrance to Seneca Pad E, just 1.4 mile to our north.

In areas where drilling is already occurring on public lands, access to areas where sportsmen and women have traditionally hunted, trapped or fished has been restricted where there are drilling operations. Hunters, anglers and trappers have found new roads on State Forest lands and have encountered large volumes of truck traffic in areas where active drilling is occurring. By prohibiting additional leasing of State Forest lands, the state can be sure that it fulfills (1) the state's constitutional mandate to conserve and maintain its public natural resources for Pennsylvanians and (2) DCNR's statutory directive to manage state forest lands for multiple uses that maintain the wild and ecological character of the state forest system.

The Commonwealth Court's Clarence Moore Decision allows DCNR full control of the surface on 74% of the Clarence Moore lands. At this location, only the northern of the two Clarence Moore tracts is controlled by Belden & Blake rules.



Map #3a: Bodine Mt, 100, 551 and CM Lands



The After

Under Belden & Blake, DCNR and the PA Game Commission have little power to protect the resource when they don't own the mineral rights. New legislation is needed to enable our state agencies to protect the land that belongs to the people of this state.

Let's make sure that we do it right this time. Follow the lead of our Fish& Boat Commission with the mantra "Resource First". Approximately one-third, or 2.1 million acres, of Pennsylvania's State Forests have been leased for drilling, we must keep some intact and untouched and develop the rest as wisely as possible.

**===== Bottom Line =====**

- Public lands hold a special value for Pennsylvanians, and the conservation and maintenance of these public resources is a guaranteed right under the Pennsylvania Constitution.
- Article I, Section 27 of Pennsylvania's Constitution states "The people have a right to clean air, pure water and the preservation of the natural, scenic, historic and esthetic values of the environment....":
- The DCNR has not performed the scientific surveys that are needed to determine the cumulative effects of the industrialization of the forest. Without a baseline study, the agency is managing by guesswork.
- No federal laws currently require companies to disclose the chemicals used in the hydraulic fracturing process, making it difficult to know what toxins are being injected into the ground or released when spills do occur. Inadequate regulations and poor enforcement are a recipe for disaster. Bonding is a joke, leaving the state vulnerable to the drillers walking away from their responsibilities for restoration. We saw it happen with earlier oil & gas drillers and taxpayers are still paying for the cleanup from the coal industry.
- Protective measures must be taken at the state level to prevent the effects of gas development from impacting fish and wildlife habitat. As hunters and anglers we simply cannot allow the state's rush for economic gain to permanently damage Pennsylvania's sporting traditions. Gov. Corbett and Pennsylvania legislators must be held accountable for setting rules that adequately protect Pennsylvania's wild areas.
- We must research the problems caused by prior resource extraction so as to prepare for similar problems that will come up due to unconventional natural gas extraction.
- We must limit the construction of well pads or other related drilling infrastructure to limit exposure and impact to wildlife habitat and water resources. We must require inter-agency coordination of PFBC, PGC and DCNR in all steps of the permit review and site planning.
- What happens on state forests and other important natural areas today will have lasting effects on tomorrow's outdoor recreational opportunities. A baseline study of air, water and species is mandatory before any gas development projects. DCNR must assess the direct and indirect cumulative effects of this industrialization.
- If they can't measure it, they can't manage it.

**# # #**

