

**COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA GAME COMMISSION  
BUREAU OF WILDLIFE HABITAT MANAGEMENT**

**FORESTRY DIVISION**

**2015 PGC STEM TREATMENT HERBICIDE**

**CONTRACT SPECIFICATIONS**

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# SPECIFICATIONS

## A. SCOPE OF WORK:

The Pennsylvania Game Commission (PGC), Bureau of Wildlife Habitat Management, Forestry Division, requires the services of a contractor for approximately a four (4) month period at specifically designated locations to provide application of herbicide in forested areas of State Game Lands to aid in the establishment of stands of desirable trees by eliminating competing understory vegetation consisting primarily of striped maple, red maple, sweet birch, beech brush, paulowina, and other undesirable trees and shrubs. The types and categories of application, specific locations and the timing for herbicide application required for Purchase Order(s) are detailed in Section G. **All Purchase Orders require the contractor to provide the herbicide, labor, insurance, and all miscellaneous expenses to complete the operation. The Commission will reimburse the contractor based upon the surveyed acreage treated.**

Any questions concerning the technical aspects of this bid should be directed to the Chief Forester at 717-787-2039, (physical address listed below). Questions concerning the bidding or contracting procedures should be directed to the PGC Procurement Division at 717-787-6594.

David J. Gustafson  
Chief, Forestry Division  
Pennsylvania Game Commission  
Bureau of Wildlife Habitat Management  
2001 Elmerton Avenue  
Harrisburg, PA 17110-9797  
717-787-2039  
Fax 717-787-6957

## B. LOCATIONS:

Maps outlining the proposed project areas are attached as *Appendix A*. For more specific information on the location, topography, acreage, equipment designations, and other detail on the treatment areas and to review topographic maps of these areas, contact the Regional Forester designated in Section G2.

## C. OPERATOR QUALIFICATIONS:

To bid on this project, a contractor must be a Licensed Pesticide Applicator or firm that is currently licensed with the Commonwealth.

Prospective bidder must have:

1. Knowledge and experience with identification of tree and shrubs species designated for treatment;
2. Ability to work under adverse physical and weather conditions;
3. Ability to provide references that can attest to the successful completion of similar work on other State or Federal lands, or on large industrial forest properties or land trusts.

## D. CONTRACT ADMINISTRATIVE REQUIREMENTS:

1. All work must be completed by November 1, 2015.
2. The Commission reserves the right to evaluate the proposed operation, including but not limited to equipment operators, equipment and operating plan, and reject any part of the operation that in the Commission's opinion will result in unsatisfactory performance. The Commission reserves the right to reject any or all bids.

## E. PURCHASE ORDER(S) TERM:

The contract term shall be for approximately four (5) months; starting date is July 1, 2015, and ends November 1, 2015. The Commission will determine the exact application start date and the time period that application may take place depending upon the type of treatment. See attachments in Appendix A for more specific treatment periods by treatment block. The Commission reserves the right to alter the delivery starting and ending date by up to fifteen (15) days.

The following will be "No-Work Days" during the contract period: All Saturdays during the month of October.

## F. GENERAL PURCHASE ORDER(S) TASKS:

1. It is the purpose and intent of this document to provide specifications for herbicide, equipment, application, and other operational requirements necessary for a properly prepared and executed Purchase Order(s) and for securing proper equipment, dispersal systems, service facilities, qualified ground personnel, and qualified equipment operators capable of making a proper application of herbicide and performing necessary related functions.
2. The Commission estimates a total of **2,854** acres of government-owned lands in the Commonwealth of Pennsylvania, consisting of several scattered blocks that are proposed for treatment. More specific information about each area is found in Section G, Item 1 and *Appendix A*. The treatment areas generally consist of uncut forest stands, or stands that have recently received shelterwood cuts. In general, the areas are low-use areas, where proper and careful herbicide application is essential to allow the establishment of desirable trees. A list of the addresses and phone numbers of each Pennsylvania Game Commission Regional Office involved in this project are given in Section G, Item 2.
3. **STARTING DATE** – Based upon previous experience, the estimated starting dates for each treatment block are listed in *Appendix A*. The contract is scheduled to be completed in about four (4) months, depending upon weather conditions. It is possible that the starting dates for the contract could be one (1) to fifteen (15) days later than those given in Section E. The Program Supervisor must make changes in the starting dates listed in *Appendix A* in writing. The Operator must give five days advance notice to the appropriate Regional Forester before commencing operations.
4. **RECALL TREATMENT**
  - a. Recall treatment resulting from misses and faulty application will be at the Operator's expense. The Operator will be required to treat, without any additional compensation; areas not treated due to skips, faulty application or equipment limitations that were not immediately readily apparent after initial application. The Program Supervisor will make this decision within three (3) weeks of the initial application and will transmit a final written decision to the Operator with the exact locations and time frames that these areas must be retreated. Thereafter, the Operator will be required to complete the retreatment by the date specified in the Program Supervisor's letter. These areas must be treated as per the original specifications.
5. **FAILURE TO PERFORM** - The Operator will be required to treat all acreage specified in the Purchase Order(s) within the service delivery dates.
  - a. **TREATMENT AREA** - Operator personnel are expected to know the location of treatment areas. Material applied off designated sites or to any sensitive area by the Operator will result in a separate penalty of one hundred dollars (\$100.00) per acre, or fraction thereof, per incident. All application costs associated with such incidents are the responsibility of the Operator and cannot be charged to the Commonwealth.

6. **DAMAGE TO COMMONWEALTH PROPERTY** - The Operator shall be responsible for any damage to Commonwealth property resulting from the improper use of equipment for this operation. The Operator will be given one (1) written warning that damage is becoming excessive and if the action continues damages will be assessed.
  - a. **TIMBER DAMAGES** –When, in the opinion of the Officer In Charge, damage to the residual stand becomes excessive the Operator shall pay the Commission a fair base current value determined by the Regional Forester per unit of volume. If this value for damage due to Operator’s carelessness or negligence is less than \$25.00 per tree then a minimum charge of \$25.00 per tree will be made whether the tree is commercial, non-commercial, merchantable or non-merchantable.
  - b. **COMMISSION FACILITIES** - Operator shall immediately repair, in a manner that meets with the approval of the Regional Forester, any damage to Game Land roads and other facilities, including access roads, resulting from their use for this operation, general wear and tear excepted. Regional Forester may notify the Operator in writing to temporarily discontinue use of any of the above whenever, in their opinion, such action is necessary to prevent serious damage.

**G. INDIVIDUAL PURCHASE ORDER(S) SPECIFICATIONS**

1. **Inquiry Number: 2015 PGC Stem Treatment Herbicide**  
**See Appendix A for maps and further information.**
  - a. PGC Regions Involved: North West, North Central, South Central, North East
  - b. Counties Involved: NW Region – Forest, Warren  
 NC Region – Cameron, Centre, Elk, Lycoming, McKean, Potter, Tioga  
 SC Region – Perry  
 NE - Bradford, Susquehanna
  - c. Type of Areas to Be Treated: State Game Lands. Total Acres: **2,854** Acres. See Appendix A for breakdown of treatment blocks.
  - d. Starting Date: July 1, 2015
  - e. Estimated Completion Time: Approximately four (4) months
  - f. Herbicides:
    1. Triclopyr: 25% solution of Garlon 4 (or equivalent) for Basal Bark treatment  
 50% solution of Garlon 3a (or equivalent) for Hack & Squirt treatment
  - g. Application: **All applications will be completed according to herbicide label guidelines for the method specified.** With the use of a basal bark herbicide an acceptable oil carrier is required. The following type of oil carrier is acceptable for this project: commercially available basal oil, diesel fuel, number 1 or 2 fuel oil, or kerosene. A blue tracer dye must be added to the herbicide mixture. The tracer dye will be used as an indicator of the amount of stems treated as well a means of evaluating the quality of the herbicide application.
  - h. Detailed treatment specifications including species, size class, and approximate stems per acre counts for each individual block are in the attached matrix. Any questions about the specific application guidelines should be directed to the appropriate Regional Forester or he Program Supervisor.

## 2. REGIONAL OFFICES

North West Region  
Howard Wurzbacher, Regional Forester  
PO Box 31  
Franklin, PA 16323  
814/432-3187

North Central Region  
Regional Forester  
PO Box 220  
Jersey Shore, PA 17740  
570/398-4744

South Central Region  
Regional Forester  
8627 William Penn Highway  
Huntingdon, PA 16652  
814/643-1831

Northeast Region  
Warren Harris, Regional Forester  
PO Box 5038  
Dallas, PA 18612  
570/675-1143

## H. OBLIGATIONS OF THE COMMISSION

1. **COMMISSION PERSONNEL** - The Commission will furnish personnel to supervise and direct the operation in the following capacities:
  - a. **PROGRAM SUPERVISOR** - The Chief of the Forestry Division in the Bureau of Wildlife Habitat Management is responsible for the overall operation of the vegetation control program and represents the Commission in settling minor contractual matters.
  - b. **FIELD CONTRACT COORDINATORS** - These persons are Regional Foresters or their designee who serve as the Commission's field liaison with the Operator and are responsible for reviewing and approving/disapproving the operations plan and conducting quality control checks on the application during the operations. This person is responsible for coordinating the activities of all people working on the program within a region and communicating with the Operator's project supervisor concerning any operational problems or changes in plans. He/she also provides daily reports of the operation to the program supervisor.
3. **PRE WORK MEETINGS** - The Regional Forester will hold periodic meetings in addition to the pre-work conference with Operator and sub-Operator personnel to discuss, among other things, logistics, deadlines, safety, check Operator's Purchase Order(s) compliance.
4. **MAPS** - The Commission will supply for use by the Operator, copies of 7 1/2-minute USGS topographic quadrangle maps, aerial photographs, or other suitable images on which the areas to be treated have been delineated. The Commission will also supply for operational purposes, copies of maps on which treatment areas have been drawn.

## I. OBLIGATIONS OF THE OPERATOR

1. **GENERAL** - The Operator is obligated to furnish equipment, materials, support equipment, and personnel necessary to produce a herbicide application in accordance with the specification herein, the Purchase Order(s) Specifications, and the Purchase Order(s). Other sections in these Purchase Order(s) Specifications give more specific information on the equipment and personnel required. The Operator maintains responsibility for an entire project even if another organization is providing part of the equipment and personnel.
2. **PESTICIDE APPLICATION BUSINESS LICENSE** - The Operator must show proof of a valid Pesticide Application Business License issued by the Pennsylvania Commission of Agriculture (PADA).
3. **MATERIALS** - The Operator is responsible for the purchase of the herbicide and any adjuvant used in this project. Specific details on herbicides and adjuvant are given in Section K.

## J. OPERATOR PERSONNEL

1. **PROJECT SUPERVISOR** - The Operator must designate one of its personnel to serve as the on-site project supervisor and to represent the company in all contractual matters that require prompt attention. This person must be familiar with all equipment being used and, as necessary, must be certified or registered as required by the Pennsylvania Pesticide Control Act rules and regulations of the Pennsylvania Commission of Agriculture.
2. **SAFETY** - Commission and Operator personnel are required to conduct themselves in a safe manner at all times. The Commission and Operator will prepare detailed safety plans that will be reviewed with all involved Commission and Operator personnel prior to the start of the treatment operations. The Operator must provide treatment equipment suitable for the safe application of herbicide on all types of terrain encountered on the project(s).

## K. HERBICIDES AND ADJUVANTS

1. **PURCHASING, STORAGE, AND TRANSPORTATION** - The Operator must purchase the herbicide used on this project, pay all applicable sales and use taxes, and arrange for delivery of the product to a suitable site where it will be secure and protected from damage. The Operator must assure that adequate supplies of herbicide are strategically located in the project area to assure an efficient operation. The Operator must also assure that its personnel and Commission personnel are aware of the locations of these supplies. Commonwealth property may be used to store material and equipment if prior arrangements are made with the Regional Forester.

The Operator is also responsible for handling and transporting the herbicide from the storage site to the treatment site.

2. **MSDS** - The Operator must keep a copy of the Material Safety Data Sheet (MSDS) available on site throughout the course of the project for any herbicide or other materials requiring an MSDS that are supplied by the Operator for the project.
3. **HERBICIDES** - All treatments for this project will be conducted with Triclopyr herbicide. Section G provides details on the acres to be treated with each material on each project and the dilution rates to be used.
4. **OPERATIONAL CONSTRAINTS** - The Operator must determine what, if any, operational constraints exist with any product. These constraints may include handling, mixing, storage, transportation, and treatment difficulties. To the best of the Commission's knowledge at this time, no adverse characteristics exist with any of the listed products. It is the Operator's responsibility to insure a trouble-free operation with the material purchased. If a delivered product presents operational constraints, it must be immediately replaced.
5. **CONTAINER DISPOSAL** - The Operator is responsible for the proper disposal of all herbicide and adjuvant containers as specified on the product label.

## L. HOLD HARMLESS:

Operator shall be responsible for and agrees to indemnify and hold harmless the Commonwealth from and against damages to property or injuries (including death) to any persons and other losses, damages, expenses, claims, demands, suits, and actions by any party against the Commonwealth in connection with the work performed by Operator.



## M. INSURANCE AND LICENSE REQUIREMENTS:

The Operator shall purchase and maintain at its expense the following types of insurance, issued by companies acceptable to the Commonwealth. Operator must provide proof of insurance as specified in Items 1, 2, 3 and 4 for equipment owned, leased, rented, subcontracted, or otherwise utilized by the Operator and for all personnel hired, subcontracted, or otherwise employed by the Operator.

Such policy(s) shall name the Commonwealth as an additional insured. Prior to the commencement of work under the Purchase Order(s), Operator must provide the Commonwealth with current Certificates of Insurance. These Certificates shall contain a provision that coverage's afforded under the policy shall not be canceled or changed until at least thirty (30) days prior written notice has been given to the Commonwealth.

1. **WORKMEN'S COMPENSATION INSURANCE** sufficient to cover all of the employees of Operator working to fulfill the terms of the project.
2. **COMPREHENSIVE GENERAL LIABILITY INSURANCE**, including bodily injury and property damage insurance, to protect the Commonwealth and the Operator from claims arising out of the performance of the Purchase Order(s). The amount of bodily injury insurance will not be less than \$300,000.00 for injury to or death of persons in a single occurrence. The amount of property damage insurance shall not be less than \$300,000.00 per occurrence of property damage.
3. **AUTOMOTIVE LIABILITY INSURANCE**, including bodily injury and property damage insurance to protect the Commonwealth and the Operator from claims arising out of the performance of the Purchase Order(s). The amount of bodily injury insurance shall not be less than \$300,000 for injury to or death of persons in a single occurrence. The amount of property damage insurance shall not be less than \$300,000 per occurrence of property damage.
4. **ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE** - covering environmental impairment caused by negligence in an amount of \$500,000 per occurrence. This specific type of insurance may be substituted by any riders to any of the aforementioned insurance, provided it services the same benefit and purpose. These provisions must cover the PA Commonwealth, as well, for any liability.
5. **SUBOPERATORS/LEASED EQUIPMENT** - If any work under the Purchase Order(s) is subcontracted or otherwise performed by anyone other than the Operator or performed with equipment subcontracted or leased by the Operator, the Operator must provide liability insurance as specified under its own policy(s) in order to provide coverage for any persons and/or equipment so subcontracted or leased or the Operator must provide evidence that the specified liability insurance for any persons and/or equipment so subcontracted or leased is provided for under a policy(s) maintained by the sub-Operator or lessor.

## N. BID AWARD

The bid shall be awarded on a **line item basis**. The Operator shall complete the **electronic invitation for bid** to be found at [www.pasupplierportal.state.pa.us](http://www.pasupplierportal.state.pa.us), for award of the bid.

Bids will be publicly opened on **April 7, 2015 at 2:00 PM** at the Pennsylvania Game Commission, 2001 Elmerton Ave., Harrisburg, PA 17110-9797. Failure to sign the IFB will be reason for rejection of the bid and bids received after the due date or due time will not be accepted.

The **per acre price** shall include the cost of herbicides, labor, insurance, and all miscellaneous expenses necessary for the completion of the tasks. Prices bid shall be in dollar and cents only.

The quantities herein are only estimates and may increase or decrease dependent upon the needs of the Commission. Operator shall be paid at the unit price bid for actual services performed.

The Commission reserves the right to award contracts as it determines to be in the best interest of the Commission.

**O. OPERATOR REFERENCES**

After bid opening and prior to awarding the Purchase Order(s), the Commission has the right to request three (3) references (name, addresses and telephone numbers) of similar work performed in the previous two (2) years as proof of qualifications to perform the work involved in the project(s).

**P. PAYMENT TERMS:**

Payment shall be on a reimbursement basis for actual services performed. **Payment will be made on the basis determined by the Commission’s surveyed acreage treated.**

**Q. PERFORMANCE BOND REQUIREMENTS**

As a further guarantee of faithful performance of the conditions set forth in this contract, the Successful Bidder(s) hereby agrees to furnish the Commission with Certified Check, Savings Account, Irrevocable Letter of Credit, or other security acceptable to the Pennsylvania Game Commission, in the sum of **\$5,000.00 per line item.**

ANY SECURITY POSTED HEREUNDER MUST HAVE AN EXPIRATION DATE A MINIMUM OF ONE YEAR BEYOND THE EXPIRATION DATE OF THE CONTRACT.

Performance Security is due no later than 30 days after written notice of the bid award. Time is of the essence with regard to the provision of Performance Security. At the option of the PGC, failure to provide an acceptable Surety within 30 days will result in cancellation of the contract and the PGC may declare the bidder ineligible on future projects.

Failure to comply with any of the terms of the conditions of the contract may result in cancellation of the agreement and claim may be made against the surety or the security for all or part of the damages sustained by such noncompliance.

**R. INVOICES**

Original invoices must be sent to:

Commonwealth of PA – PO Invoices  
P.O.Box 69180  
Harrisburg, PA 17106

A copy must be sent to:  
David J. Gustafson  
Chief, Forestry Division  
Pennsylvania Game Commission  
Bureau of Wildlife Habitat Management  
2001 Elmerton Avenue  
Harrisburg, PA 17110-9797

All invoices must have the Purchase Order Number, as well as the Operator's SAP Vendor Number on the invoice. The name and address listed on the purchase order must also be on each invoice. Failure to provide this information may result in a delay of payment.

**S. PURCHASE ORDER(S) TERMINATION**

The Commonwealth may terminate the Purchase Order(s) for its convenience if the Commonwealth determines termination to be in its best interest. Operator shall be paid for work completed.

# ***APPENDIX A***

**COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA GAME COMMISSION  
BUREAU OF WILDLIFE HABITAT MANAGEMENT**

**FORESTRY DIVISION**

**2015 PGC STEM TREATMENT HERBICIDE**

PGC 2015 Stem Herbicide

Line 1 - NW Region - Combination Basal and Hack / squirt – 65 acres

Line 2 - NC Region - Hack / Squirt only - 1,675 Acres

Line 3 - NC Region - Combination Basal and Hack / squirt - 947 acres

Line 4 - SC Region - Hack / Squirt only - 53 Acres

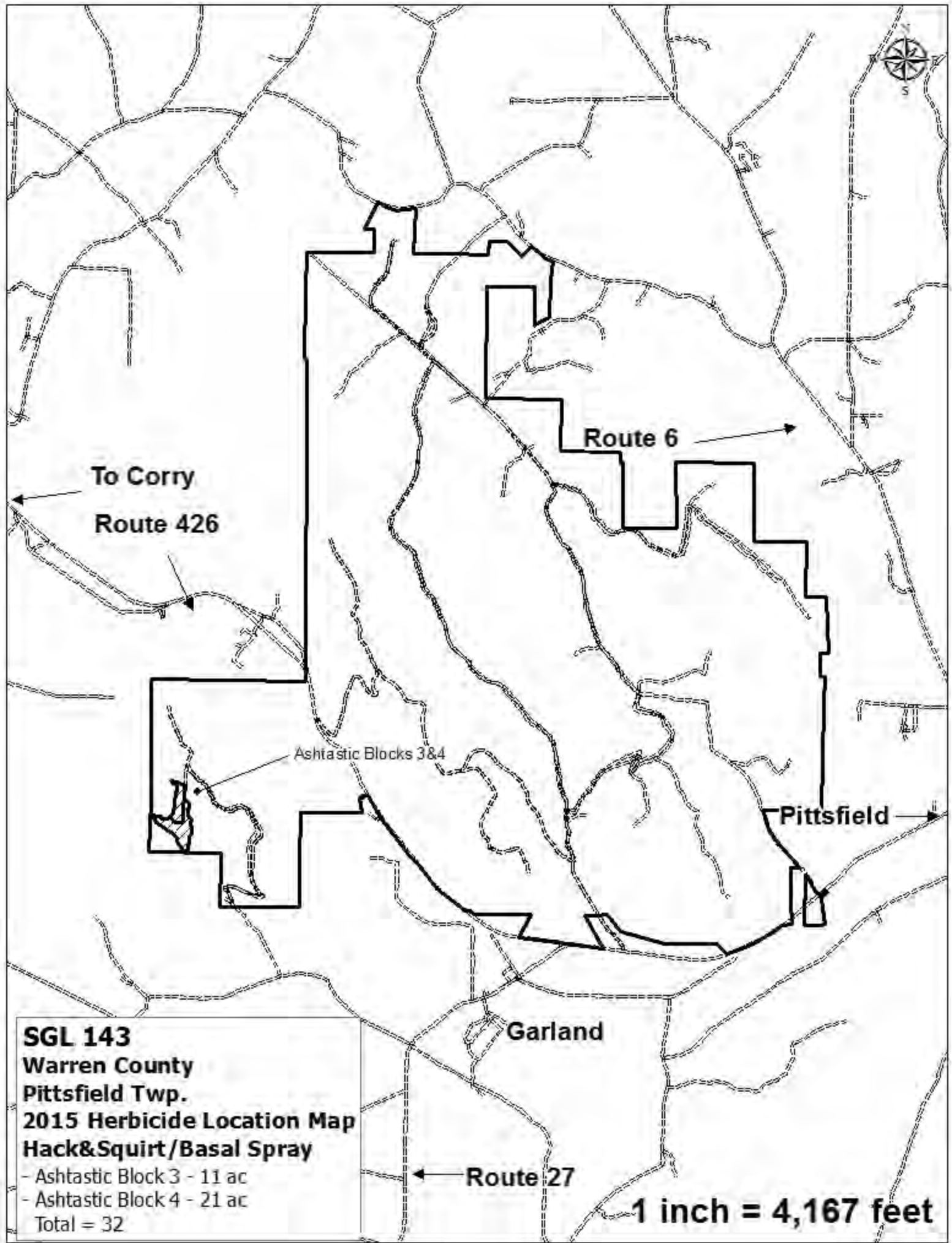
Line 5 - NE Region - Combination Basal and Hack / squirt - 114 acres

**PGC FY 15 Stem Herbicide Spray Areas**

			HACK and SQUIRT	BASAL BARK / HACK and SQUIRT	Triclopyr Garlon 4 (25% solution) basal bark	Triclopyr Garlon 3a (50% solution) hack & squirt		
Region	SGL	Project Name	Acres	Acres	# stems per acre	# stems per acre	Acceptable Treatment Period	Description of work
NW	143	Ashtastic B3,B4		32	378	27	7/1-9/15	All black birch, am. beech, and hornbeam Less than 2" dbh basal spray, 2 - 8"dbh Hack & Squirt
	24	Oak Strip Fences		33	3370	513	7/1-9/15	All Black Birch and Pin Cherry. Am. Beech up to 6"dbh. Stems less than 4"dbh will receive basal spray, stems 4" dbh and greater receive hack & squirt
				65				
NC	14	Dry Hollow Aspen block 10,4,7,5	104			50	July 1-November 1	Am. Beech, 4-8" dbh Hack and Squirt
	14	Frenchmans food plots block 10	44			15	August 15-October 15	Am. Beech & Striped Maple 4-8" dbh Hack and Squirt
	25	Bendigo Run	402			52	July 1-November 1	Am. Beech & Striped Maple, 4-10" dbh Hack and Squirt
	44	Rock Ledge	382			37	July 1-November 1	Am. Beech, 4-10" dbh Hack and Squirt
	59	Ash Gone Buy Block 1&7	87			235	August 15-September 15	Am. Beech, black birch, and striped maple 4-8" Hack and Squirt
	59	Ash Gone Buy Block 6	57			120	August 15-September 15	Am. Beech, black birch, and striped maple 4-8" Hack and Squirt
	59	Ash Gone Buy Block 9	47			65	August 15-September 15	Am. Beech, black birch, and striped maple 4-10" Hack and Squirt
	59	Ash Gone Buy Block 10	46			160	August 15-September 15	Am. Beech, black birch, and striped maple 4-10" Hack and Squirt
	293	Wolfinger West	506			139	July 1-September 15	Am. Beech, black birch, and striped maple 4-10" Hack and Squirt
			1675					

			HACK and SQUIRT	BASAL BARK / HACK and SQUIRT	Triclopyr Garlon 4 (25% solution) basal bark	Triclopyr Garlon 3a (50% solution) hack & squirt		
Region	SGL	Project Name	Acres	Acres	# stems per acre	# stems per acre	Acceptable Treatment Period	Description of work
NC	14	Dry Hollow Aspen block 2,6,9		74	165	50	August 15-October 15	black birch, striped maple less than 4" dbh Basal Bark; Am. Beech 4-8" Hack and Squirt
	14	Frenchmans food plots block 4		43	110	30	August 15-October 15	Buckthorn, black birch, and striped maple less than 4" dbh Basal Bark; Am. Beech, striped maple 4-8" dbh Hack and Squirt
	30	Dividing Cherry Block 7		25	30	60	August 15-September 15	striped maple, black birch, am. beech less than 4" dbh Basal Bark; striped maple, black birch, am. beech 4-8" dbh Hack and Squirt
	37	Woodstove Block 1		60	260	<1	August 15-October 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	37	Woodstove Block 2		24	141	13	August 15-October 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	37	Woodstove Block 4		43	9	9	August 15-October 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	37	Woodstove Block 5		16	13	6	August 15-October 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	59	Ash Gone Buy Block 2		96	100	30	August 15-September 15	striped maple, black birch less than 4"dbh Basal Bark; Am. Beech 4-8" dbh Hack and Squirt
	59	Ash Gone Buy Block 3		42	40	80	August 15-September 15	striped maple, black birch, am. beech, Ironwood, less than 4" dbh Basal Bark striped maple, black birch, am. beech 4 - 8" dbh Hack and Squirt
	59	Ash Gone Buy Block 4&5		71	30	60	August 15-September 15	striped maple, black birch, am. beech, Ironwood, less than 4" dbh Basal Bark striped maple, black birch, am. beech 4 - 8" dbh Hack and Squirt
	59	Ash Gone Buy Block 8		49	40	145	August 15-September 15	striped maple, black birch, less than 4"dbh Basal Bark striped maple, black birch, am. beech 4 - 10" dbh Hack and Squirt
	60	Apache Block 4		61	111	184	August 15-October 15	Red Maple, Sassafrass, less than 4," dbh Basal Bark. Red Maple, Sassafrass 4 - 8" dbh Hack and Squirt
	60	Apache Block 5		31	15	378	August 15-October 15	Red Maple, Sassafrass, less than 4," dbh Basal Bark. Red Maple, Sassafrass 4 - 8" dbh Hack and Squirt
	60	Apache Block 6		109	124	53	August 15-October 15	Red Maple, Sassafrass, less than 4," dbh Basal Bark. Red Maple, Sassafrass 4 - 8" dbh Hack and Squirt
	75	Flat Top Block 1		37	664	48	August 15-September 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	75	Flat Top Block 2		23	152	17	August 15-September 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	75	Flat Top Block 3		81	254	31	August 15-September 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	75	Flat Top Block 4		16	376	37	August 15-September 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	75	Flat Top Block 5		21	320	12	August 15-September 15	Am. beech, black birch, and striped maple less than 4"dbh basal bark; Am. beech, black birch, and striped maple 4 - 6" dbh Hack and Squirt.
	208	Lemonade Stand Block 1		25	280	45	August 15-September 15	striped maple, black birch, am. beech, Ironwood, less than 4" dbh Basal Bark striped maple, black birch, am. beech 4 - 8" dbh Hack and Squirt
				947				

			HACK and SQUIRT	BASAL BARK / HACK and SQUIRT	Triclopyr Garlon 4 (25% solution) basal bark	Triclopyr Garlon 3a (50% solution) hack & squirt		
Region	SGL	Project Name	Acres	Acres	# stems per acre	# stems per acre	Acceptable Treatment Period	Description of work
SC	170	Idle Road Hack and Squirt	53			40 (100% triclopyr)	September 1-September 30	All ailanthus and Paulownia - treatment will be with a 100% water based triclopyr
			53					
NE	219	Coburn II / Block 8		24	141	8	July 1 thru November 1	Am beech, striped maple, ironwood less than 4" dbh Basal Bark Am. beech 4-6" dbh Hack and Squirt
	236	Cedar Falls / Block 1		22	160	40	July 1 thru November 1	all trees less than 4" basal bark all trees with yellow paint Hack and Squirt
	236	Airport Road / Block 1		14	91	28	July 1 - September 15	all trees less than 4" basal bark all trees with yellow paint Hack and Squirt
	236	Airport Road / Block 2		33	61	17	July 1 - September 15	all trees less than 4" basal bark all trees with yellow paint Hack and Squirt
	289	Hilltop II / Block 4		21	315	32	July 1 thru November 1	Am. Beech, red maple, hemlock, and hornbeam less than 4" basal bark Am. Beech, red maple, hemlock, and hornbeam 4-6" dbh Hack & Squirt
				114				

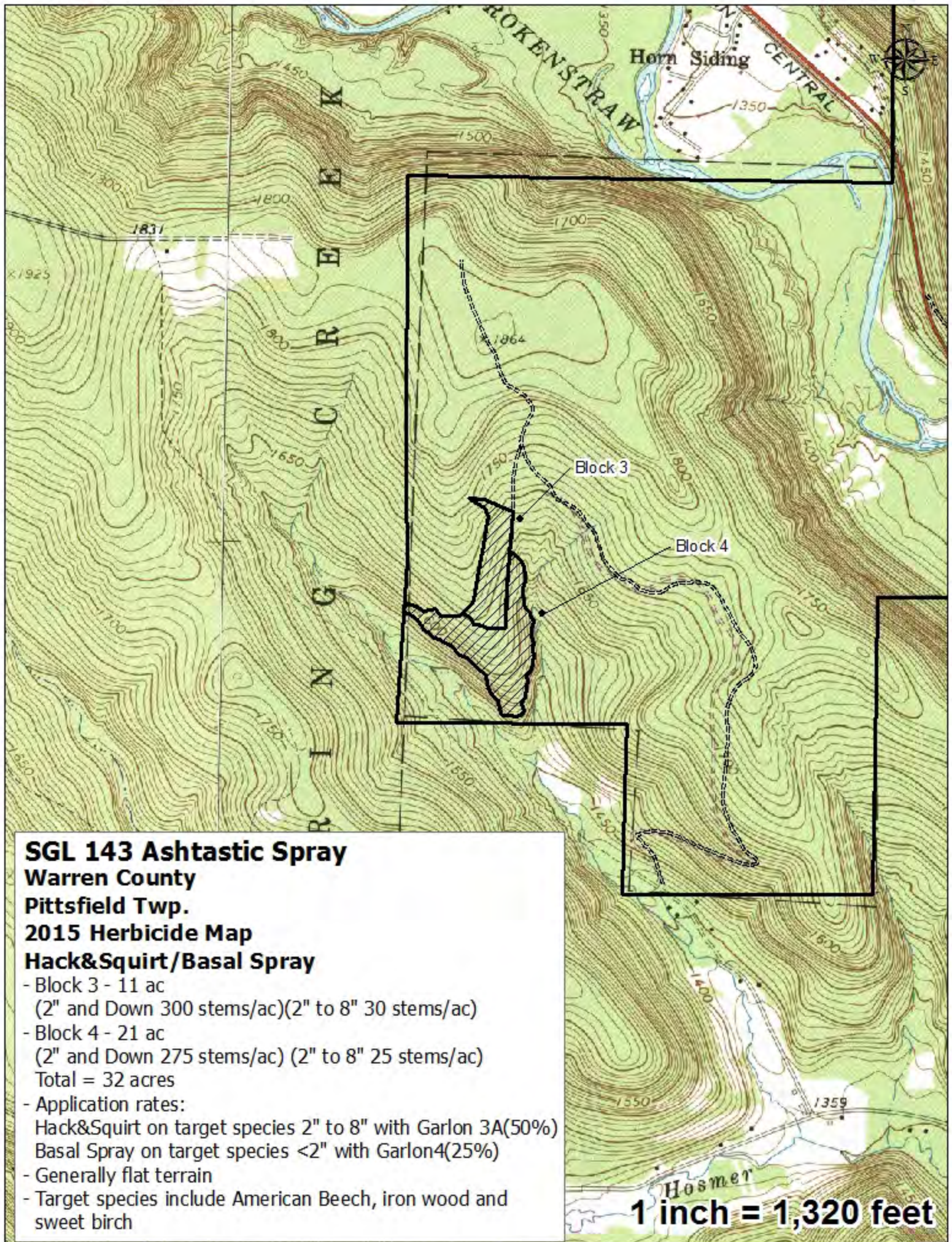


**SGL 143**  
**Warren County**  
**Pittsfield Twp.**  
**2015 Herbicide Location Map**  
**Hack&Squirt/Basal Spray**

- Ashtastic Block 3 - 11 ac
- Ashtastic Block 4 - 21 ac
- Total = 32

1 inch = 4,167 feet





**SGL 143 Ashtastic Spray**

**Warren County**

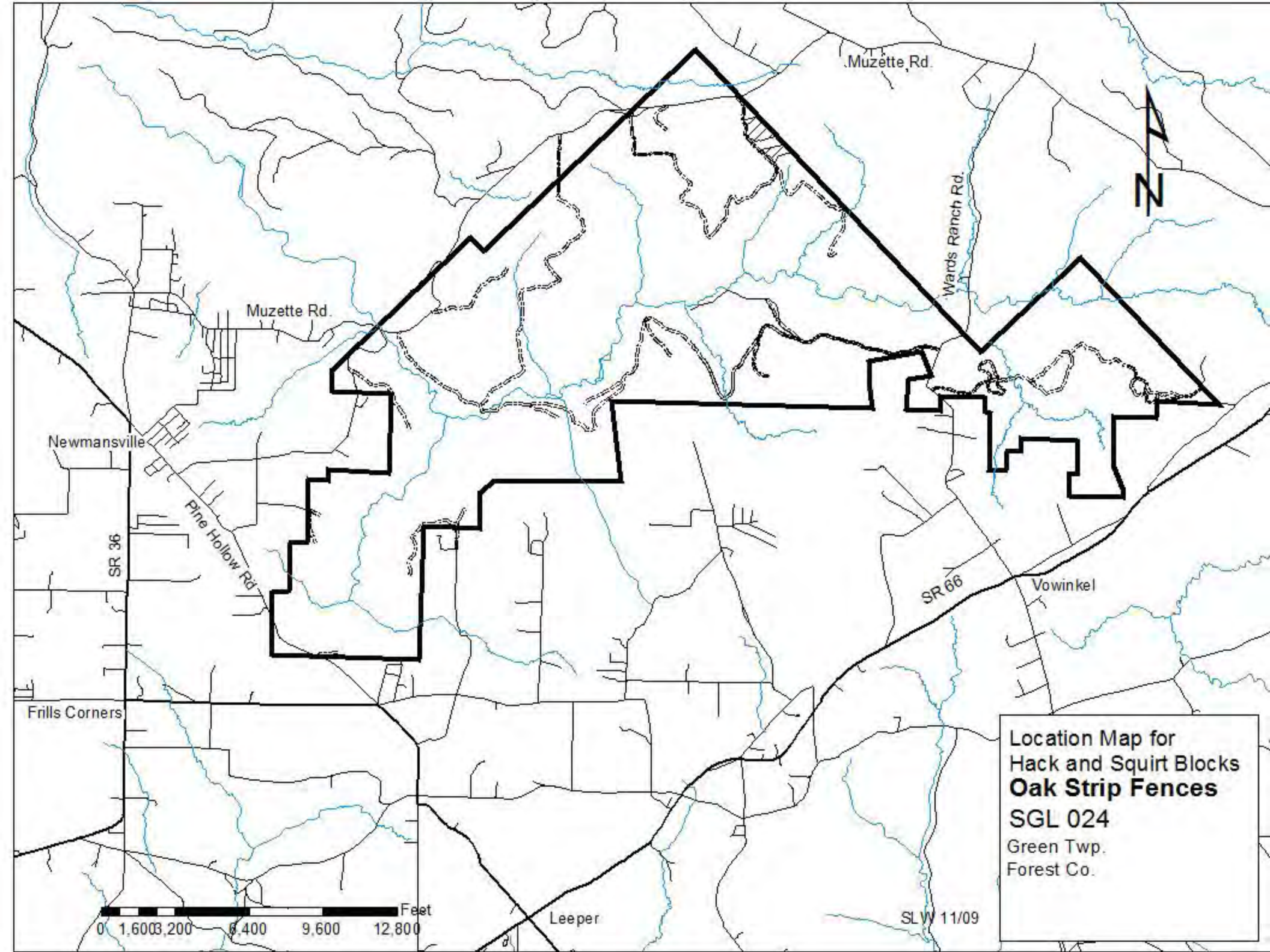
**Pittsfield Twp.**

**2015 Herbicide Map**

**Hack&Squirt/Basal Spray**

- Block 3 - 11 ac  
(2" and Down 300 stems/ac)(2" to 8" 30 stems/ac)
- Block 4 - 21 ac  
(2" and Down 275 stems/ac) (2" to 8" 25 stems/ac)
- Total = 32 acres
- Application rates:  
Hack&Squirt on target species 2" to 8" with Garlon 3A(50%)  
Basal Spray on target species <2" with Garlon4(25%)
- Generally flat terrain
- Target species include American Beech, iron wood and sweet birch

**1 inch = 1,320 feet**



Muzette Rd.



Wards Ranch Rd.

Muzette Rd.

Newmansville

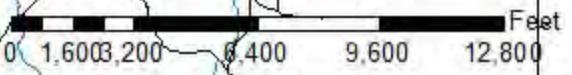
Pine Hollow Rd.

SR 36

SR 66

Vowinkel

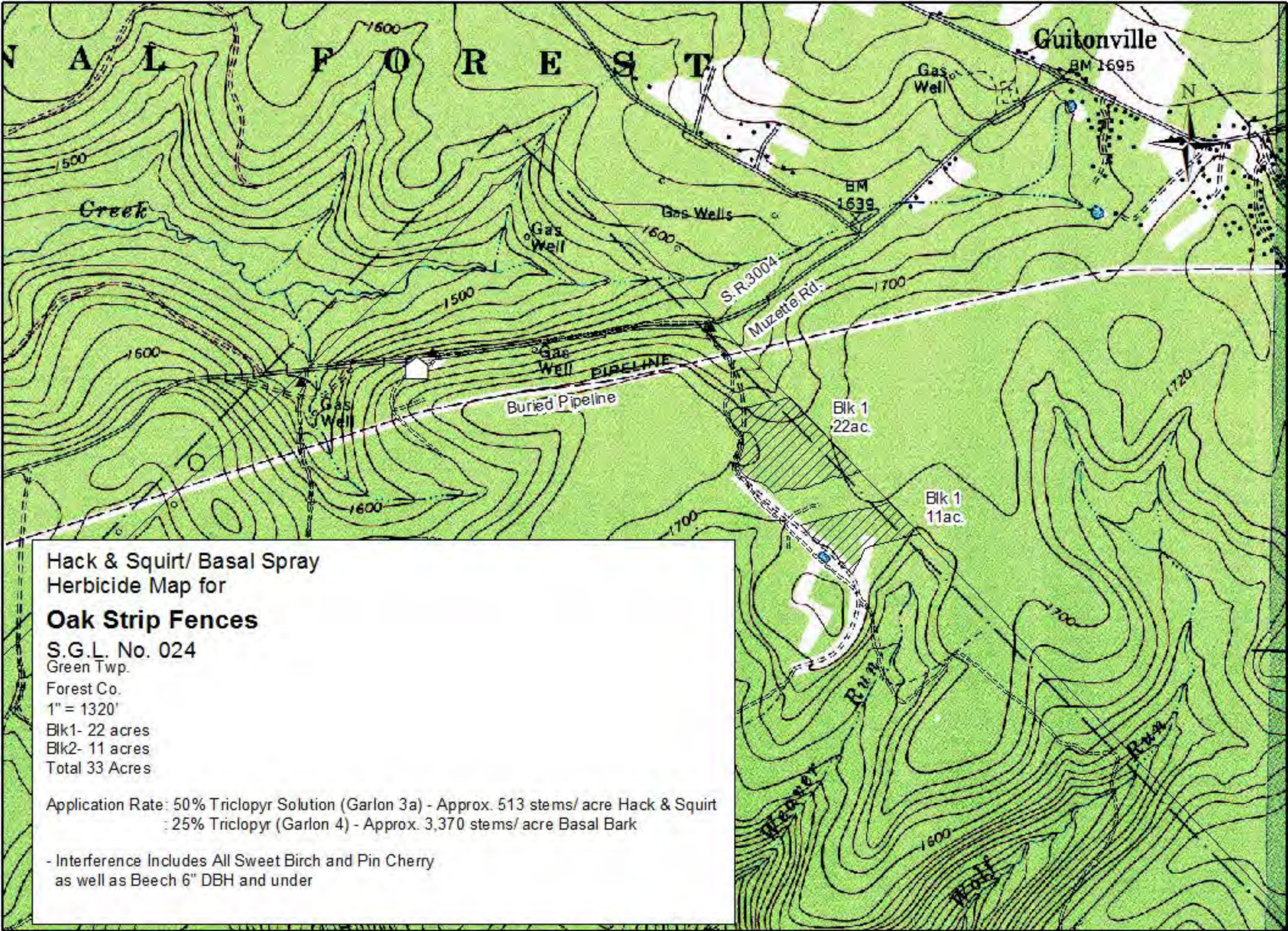
Frills Corners



Leeper

SLW 11/09

Location Map for  
Hack and Squirt Blocks  
**Oak Strip Fences**  
SGL 024  
Green Twp.  
Forest Co.



Hack & Squirt/ Basal Spray  
Herbicide Map for  
**Oak Strip Fences**

S.G.L. No. 024

Green Twp.

Forest Co.

1" = 1320'

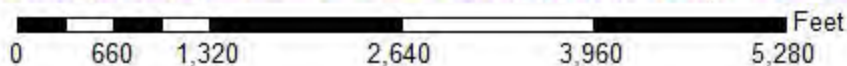
Blk1- 22 acres

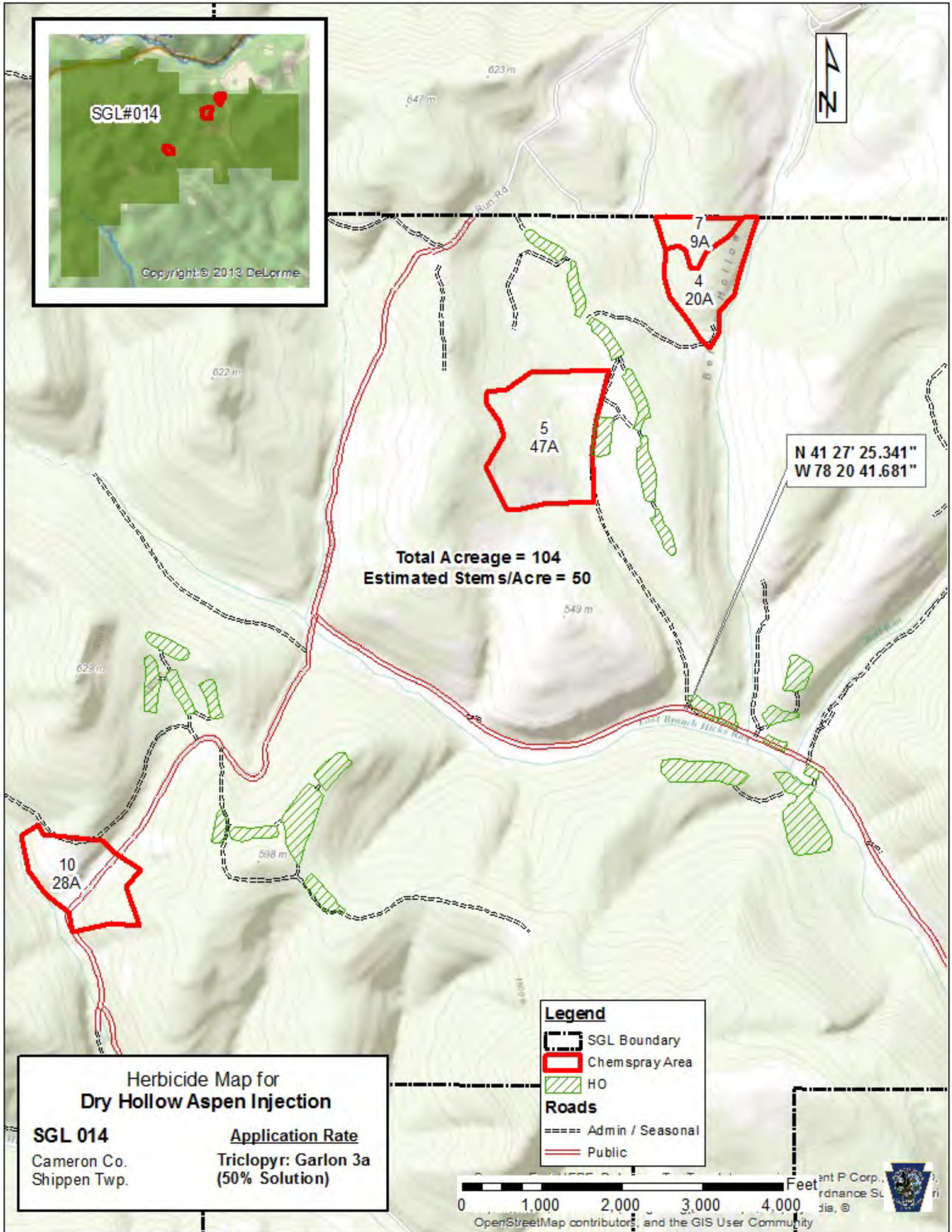
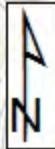
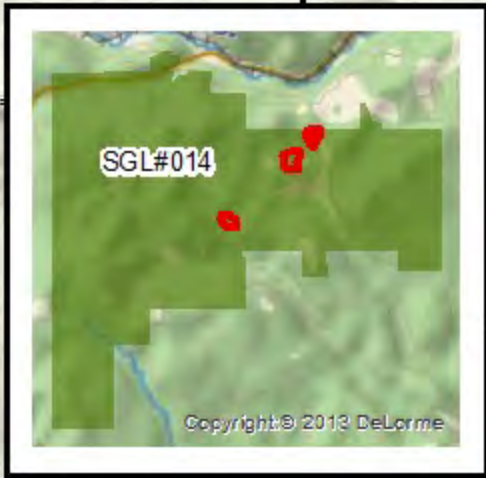
Blk2- 11 acres

Total 33 Acres

Application Rate: 50% Triclopyr Solution (Garlon 3a) - Approx. 513 stems/ acre Hack & Squirt  
: 25% Triclopyr (Garlon 4) - Approx. 3,370 stems/ acre Basal Bark

- Interference Includes All Sweet Birch and Pin Cherry  
as well as Beech 6" DBH and under





Total Acreage = 104  
 Estimated Stems/Acre = 50

N 41 27' 25.341"  
 W 78 20 41.681"

10  
 28A

5  
 47A

7  
 9A  
 4  
 20A

**Legend**

- SGL Boundary
- Chemspray Area
- HO

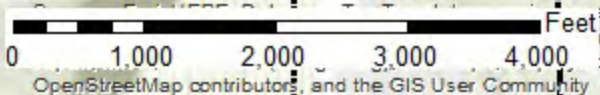
**Roads**

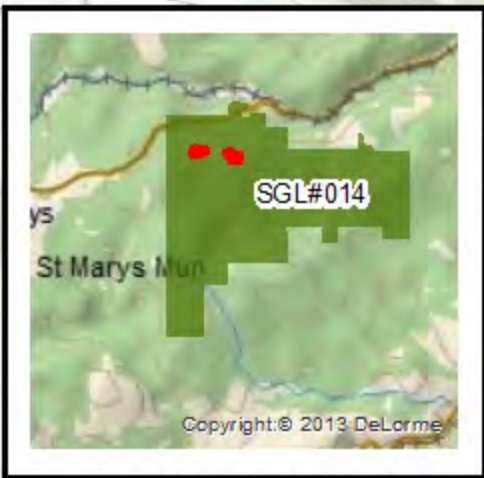
- Admin / Seasonal
- Public

**Herbicide Map for  
 Dry Hollow Aspen Injection**

**SGL 014**  
 Cameron Co.  
 Shippen Twp.

**Application Rate**  
 Triclopyr: Garlon 3a  
 (50% Solution)





N 41 28' 5.449"  
W 78 25' 9.062"

Estimated Stems/Acre  
Basal = 110  
Injection = 30

4  
43A

Total Acreage = 87

10  
44A

Estimated Stems/Acre  
Injection = 15

### Herbicide Map for Frenchman's Food Plots Basal & Injection

**SGL 014**

Cameron Co.  
Shippen Twp.

#### Application Rate

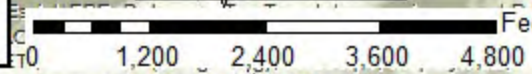
Block 4  
Basal: Triclopyr - Garlon 4 (25% Solution)  
Injection: Triclopyr - Garlon 3a (50% Solution)  
Block 10  
Injection: Triclopyr - Garlon 3a (50% Solution)

#### Legend

- SGL Boundary
- Chemspray Area
- HO

#### Roads

- Admin / Seasonal
- Public



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N 41 32' 2.229"  
W 78 36' 51.597"

60A

Estimated Stems/Acre = 52  
Total Acreage = 402

329A

13A

Jones

St Marys

### Herbicide Map for Bendigo Run Injection

**SGL 025**

Elk Co.  
Jones &  
St Marys Twps.

Application Rate

Triclopyr: Garlon 3a  
(50% Solution)

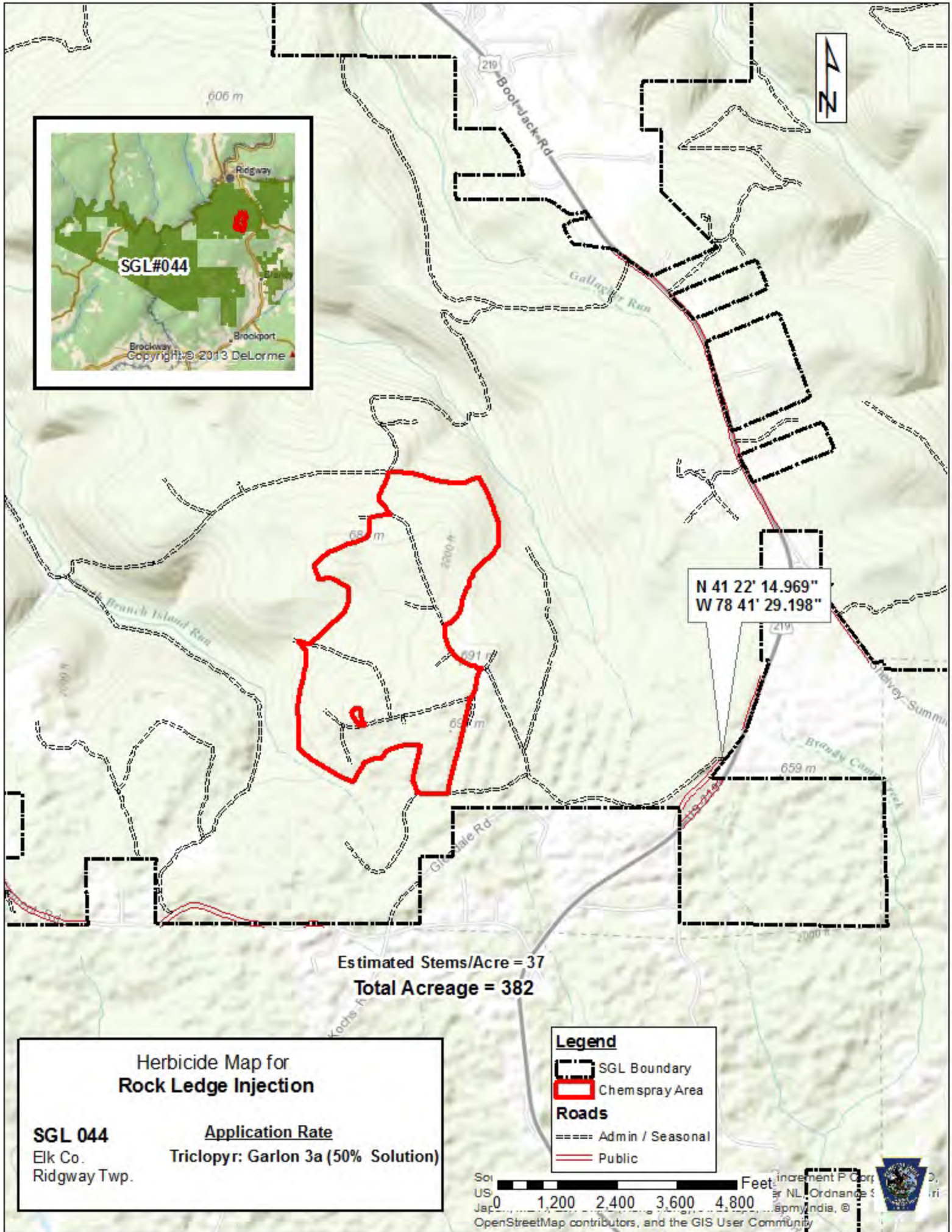
#### Legend

- SGL Boundary
- Chemspray Area
- Roads**
- Admin / Seasonal
- Public

0 1 200 2 400 3 600 4 800 Feet



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Estimated Stems/Acre = 37  
 Total Acreage = 382

**Herbicide Map for  
 Rock Ledge Injection**

**SGL 044**  
 Elk Co.  
 Ridgway Twp.

**Application Rate**  
 Triclopyr: Garlon 3a (50% Solution)

**Legend**

- SGL Boundary
- Chemspray Area

**Roads**

- Admin / Seasonal
- Public



N 41 52' 53.277"  
W 78 10' 7.249"

**Estimated Stems/Acre**  
 Block 1 = 235  
 Block 6 = 120  
 Block 7 = 235  
 Block 9 = 65  
 Block 10 = 160

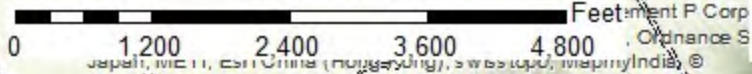
Total Acreage = 237

**Legend**

- SGL Boundary
- Chemspray Area

**Roads**

- Admin / Seasonal
- Public

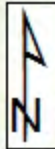
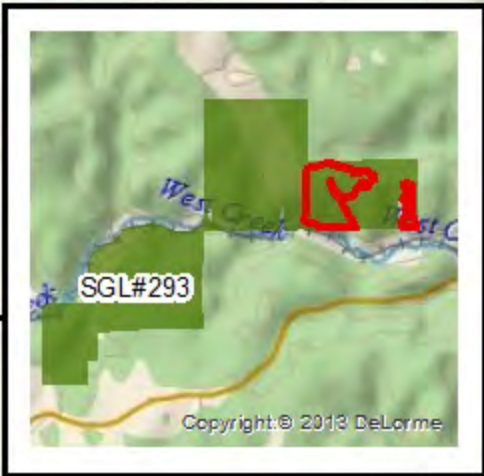


**Herbicide Map for  
Ash Gone Buy Injection**

**SGL 059**  
Potter Co.  
Pleasant Valley Twp.

**Application Rate**  
All Blocks -  
Triclopyr: Garlon 3a  
( 50% Solution)





**Total Acreage = 506**  
**Estimated Stems/Acre = 139**

**N 41 28.840'**  
**W 78 24.061'**

**Herbicide Map for  
 Wolfinger West Injection**

**SGL 293**  
 Cameron Co.  
 Shippen Twp.

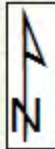
**Application Rate**  
 Triclopyr: Garlon 3a  
 (50% Solution)

**Legend**

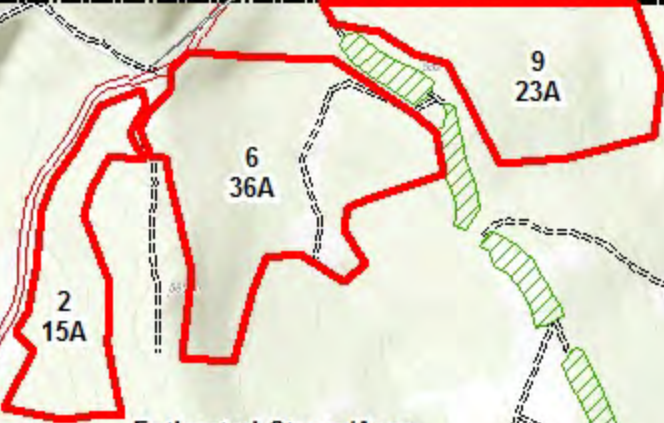
- Chemspray\_Area
- SGL Boundary
- Roads**
- Admin / Seasonal
- Public



Japan, ME II, Esri China (Hong Kong), swiss topo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



N 41 27' 25.47"  
W 78 20' 41.689"



Estimated Stems/Acre  
Basal = 165  
Injection = 50  
Total Acreage = 74

**Herbicide Map for  
SGL#014 Dry Hollow Aspen  
Basal & Injection**

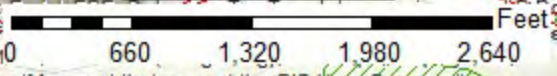
SGL 014	Application Rate
Cameron Co. Shippen Twp.	Basal: Triclopyr - Garlon 4 (25% Solution) Injection: Triclopyr - Garlon 3a (50% Solution)

**Legend**

- SGL Boundary
- Chemspray Area
- HO

**Roads**

- Admin / Seasonal
- Public





N 41 28' 5.449"  
W 78 25' 9.062"

Estimated Stems/Acre  
Basal = 110  
Injection = 30

4  
43A

Total Acreage = 87

10  
44A

Estimated Stems/Acre  
Injection = 15

**Herbicide Map for  
Frenchman's Food Plots  
Basal & Injection**

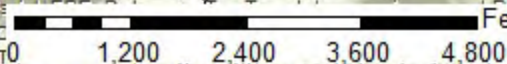
SGL 014	Application Rate
Cameron Co. Shippen Twp.	Block 4 Basal: Triclopyr - Garlon 4 (25% Solution) Injection: Triclopyr - Garlon 3a (50% Solution)
	Block 10 Injection: Triclopyr - Garlon 3a (50% Solution)

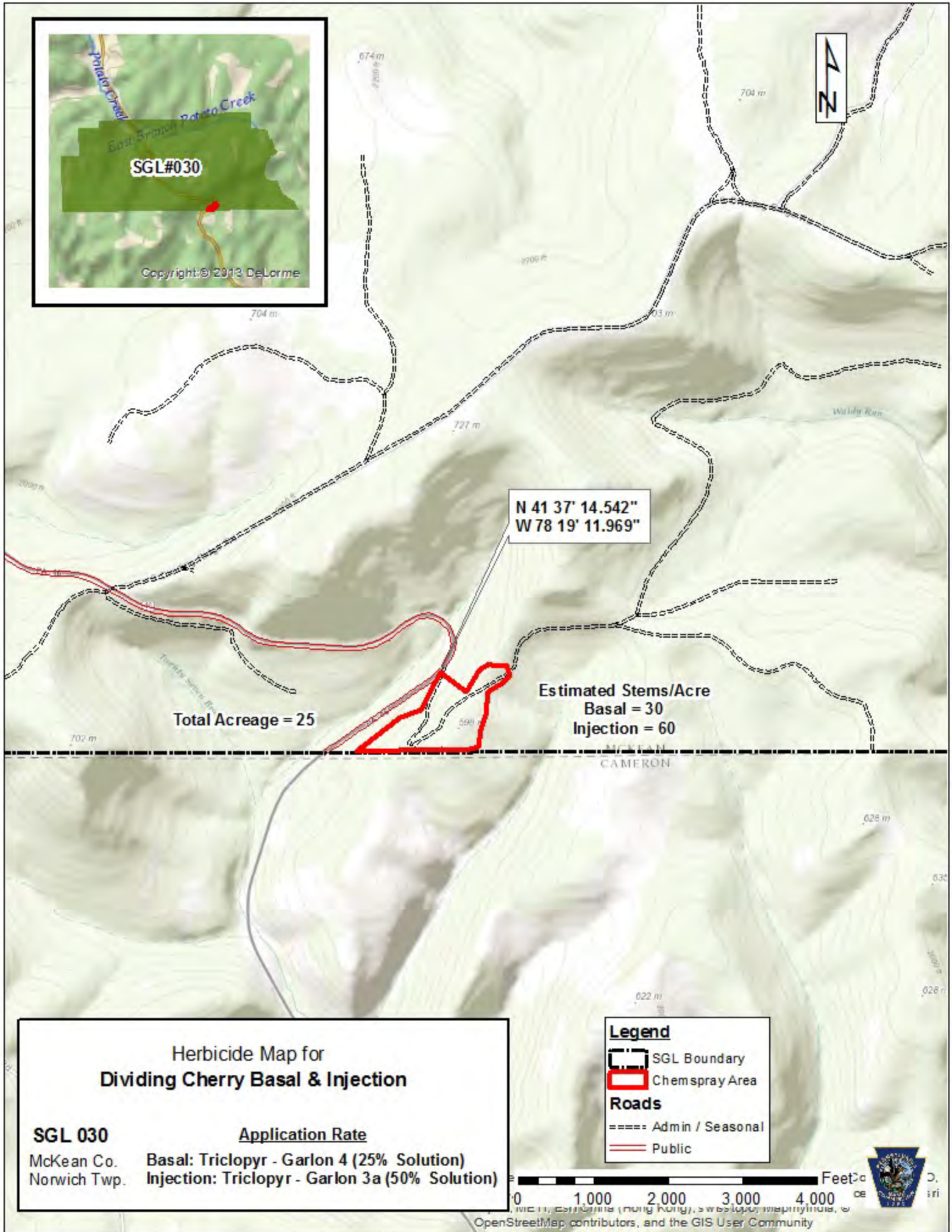
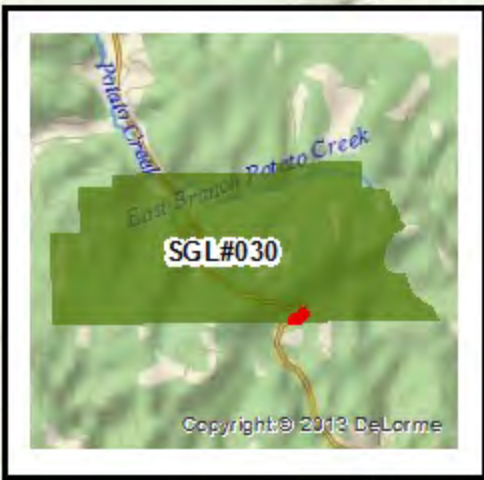
**Legend**

- SGL Boundary
- Chemspray Area
- HO

**Roads**

- Admin / Seasonal
- Public





Total Acreage = 25

N 41 37' 14.542"  
W 78 19' 11.969"

Estimated Stems/Acre  
Basal = 30  
Injection = 60

McKEAN  
CAMERON

**Herbicide Map for  
Dividing Cherry Basal & Injection**

<b>SGL 030</b>	<u>Application Rate</u>
McKean Co.	Basal: Triclopyr - Garlon 4 (25% Solution)
Norwich Twp.	Injection: Triclopyr - Garlon 3a (50% Solution)

**Legend**

- SGL Boundary
- Chemspray Area

**Roads**

- Admin / Seasonal
- Public

Feet

0 1,000 2,000 3,000 4,000

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**Estimated Stems /Acre**

- Block 1  
Basal = 260  
Injection = <1
- Block 2  
Basal = 141  
Injection = 13
- Block 4  
Basal = 9  
Injection = 9
- Block 5  
Basal = 13  
Injection = 6

4  
43A

5  
16A

2  
24A

1  
60A  
673 m

Total Acreage = 143

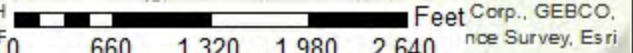
**Legend**

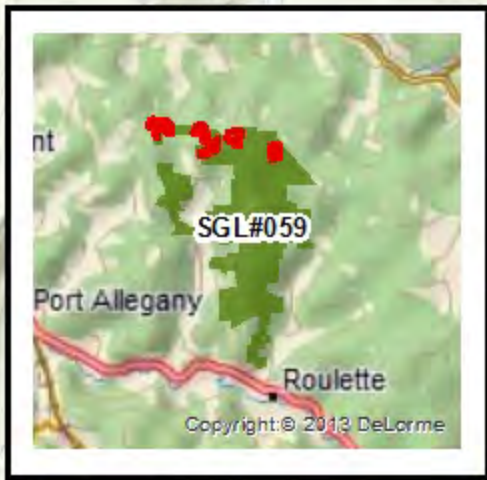
- SGL Boundary
- Chemspray Area
- Gate
- Parking Area
- Herbaceous Opening
- Roads**
- Admin / Seasonal
- Public

N 41° 49' 29.652"  
W 77° 11' 32.907"

**Herbicide Map for  
Woodstove Basal & Injection**

<u>Contract Name</u>	<u>Application Rate</u>
<b>SGL 037</b>	All Blocks
Tioga Co.	Basal: Triclopyr - Garlon 4 (25% Solution)
Middlebury Twp.	Injection: Triclopyr - Garlon 3a (50% Solution)

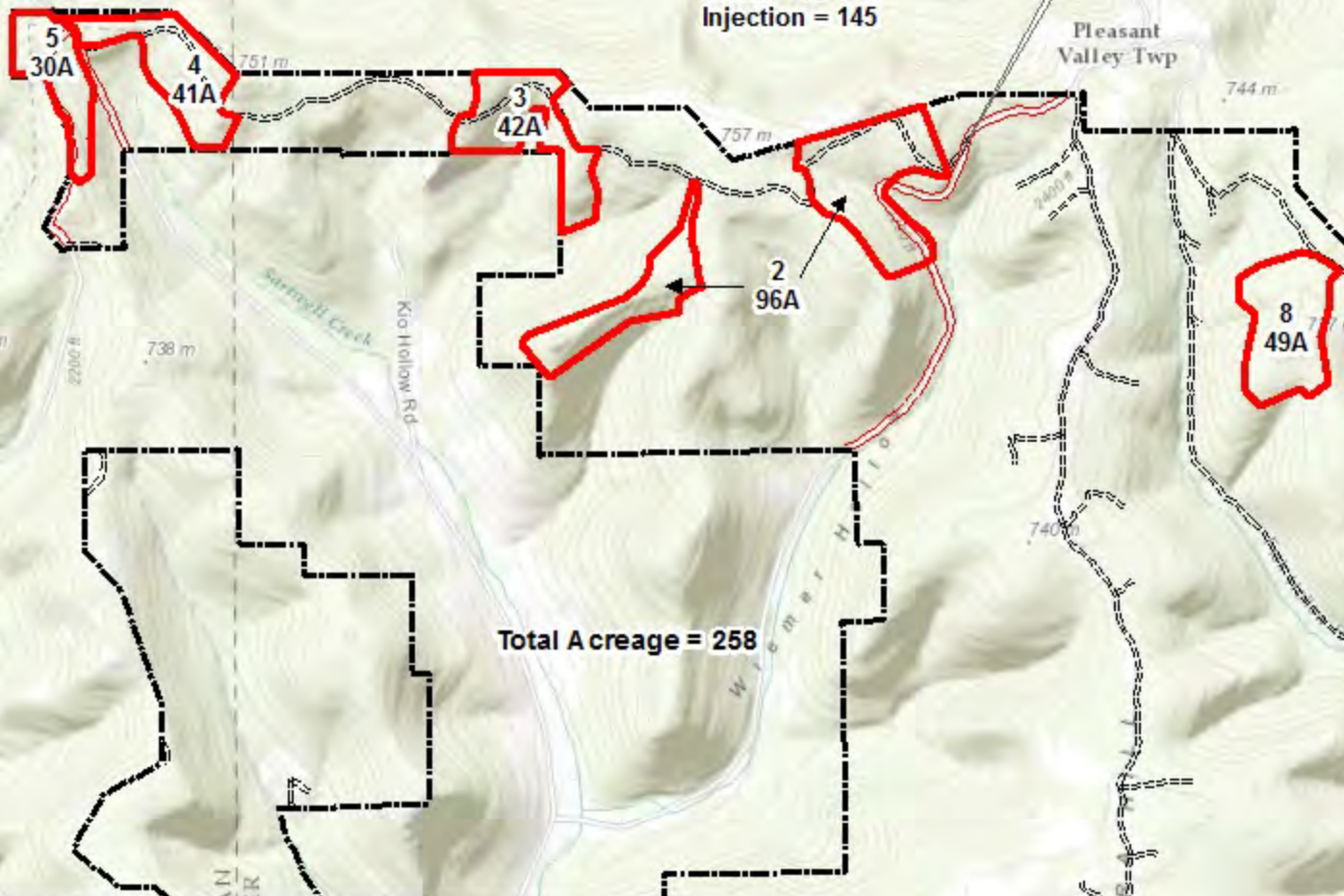




**Estimated Stems/Acre**

- Block 2  
Basal = 100  
Injection = 30
- Block 3  
Basal = 40  
Injection = 80
- Block 4  
Basal = 30  
Injection = 60
- Block 5  
Basal = 30  
Injection = 60
- Block 8  
Basal = 40  
Injection = 145

N 41 52' 52.871"  
W 78 10' 7.096"



Total A creage = 258

**Herbicide Map for  
Ash Gone Buy  
Basal & Injection**

**SGL 059**

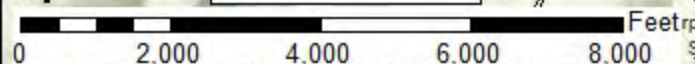
Application Rate

Potter & McKean Cos.  
Pleasant Valley, Annin,  
Ceres & Liberty Twps.

Basal: Triclopyr - Garlon 4  
(25% Solution)  
Injection: Triclopyr - Garlon 3a  
(50% Solution)

**Legend**

- SGL Boundary
- Chemspray Area
- Roads**
- Admin / Seasonal
- Public





**Estimated Stems/Acre**  
 Block 4  
 Basal = 111  
 Injection = 184  
 Block 5  
 Basal = 15  
 Injection = 378  
 Block 6  
 Basal = 124  
 Injection = 53



**Legend**

- SGL Boundary
- Chemspray Area
- Herbaceous Opening

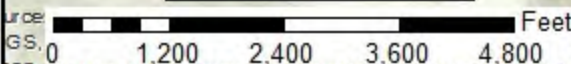
**Roads**

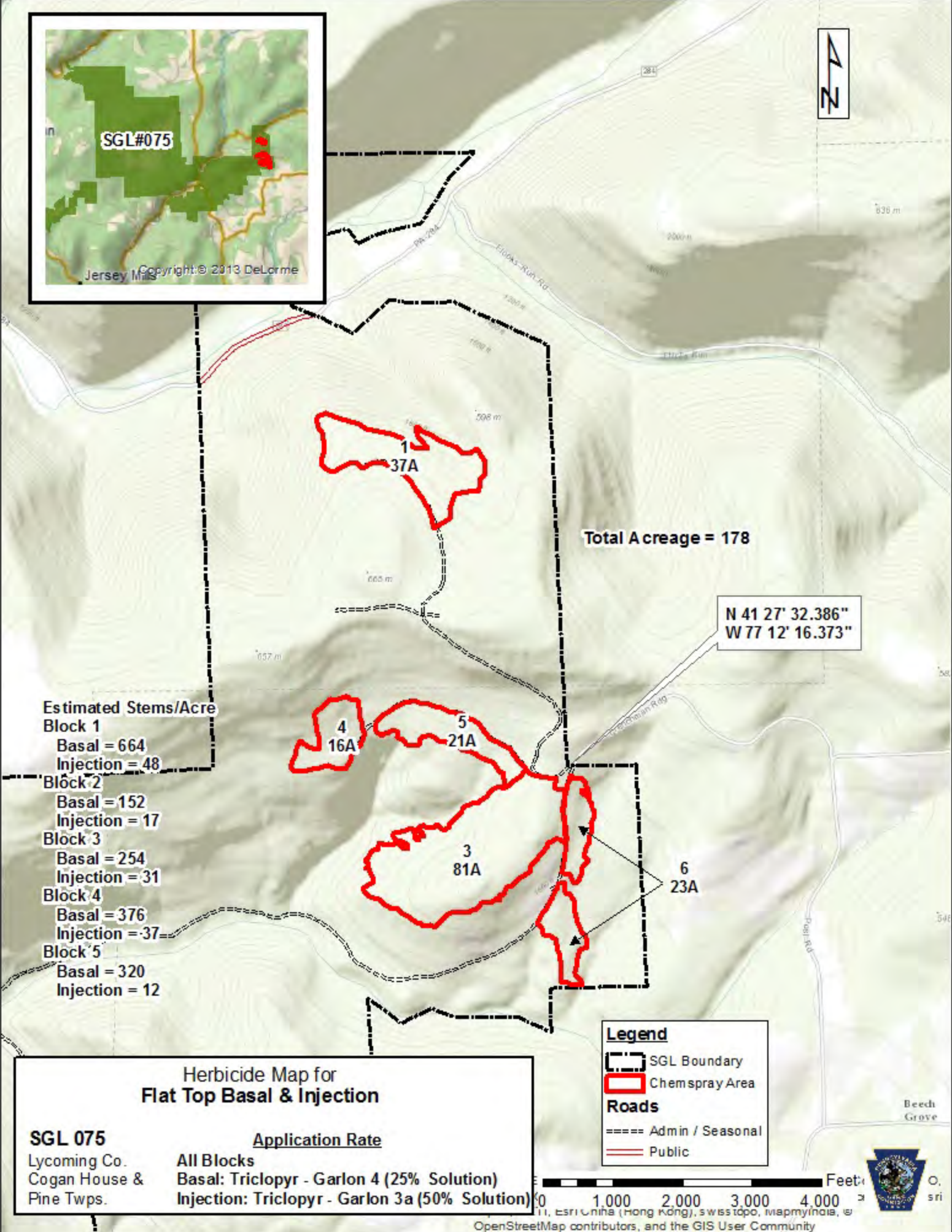
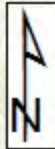
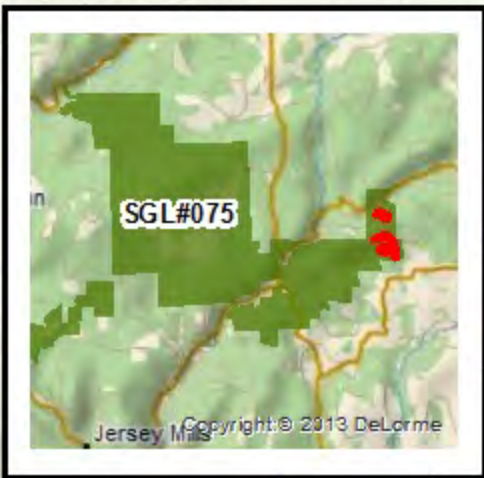
- Admin / Seasonal
- Public

**Herbicide Map for  
 Apache Basal & Injection**

**SGL 060**      Application Rate

Centre Co.      All Blocks  
 Rush Twp.      Basal: Triclopyr - Garlon 4 (25% Solution)  
                   Injection: Triclopyr - Garlon 3a (50% Solution)





Total Acreage = 178

N 41 27' 32.386"  
W 77 12' 16.373"

Estimated Stems/Acre	
Block 1	
Basal = 664	
Injection = 48	
Block 2	
Basal = 152	
Injection = 17	
Block 3	
Basal = 254	
Injection = 31	
Block 4	
Basal = 376	
Injection = 37	
Block 5	
Basal = 320	
Injection = 12	

1  
37A

4  
16A

5  
21A

3  
81A

6  
23A

**Legend**

- SGL Boundary
- Chemspray Area

**Roads**

- Admin / Seasonal
- Public

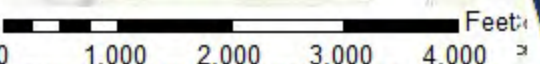
**Herbicide Map for  
Flat Top Basal & Injection**

**SGL 075**

Lycoming Co.  
Cogan House &  
Pine Twps.

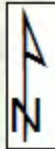
Application Rate

All Blocks  
Basal: Triclopyr - Garlon 4 (25% Solution)  
Injection: Triclopyr - Garlon 3a (50% Solution)



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N 41 48' 3.893"  
W 77 34' 18.594"

**Estimated Stems/Acre**  
 Basal = 280  
 Injection = 45  
 Total Acreage = 25

**Herbicide Map for  
 Lemonade Stand Basal/Injection**

**SGL 208**  
 Tioga Co.  
 Gaines Twp.

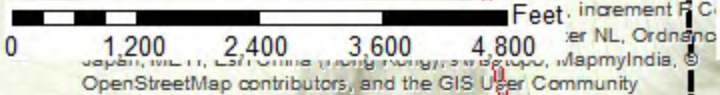
**Application Rate**  
 Triclopyr: Garlon 4  
 (25% Solution - Basal)  
 Garlon 3a  
 (50% Solution - Injection)

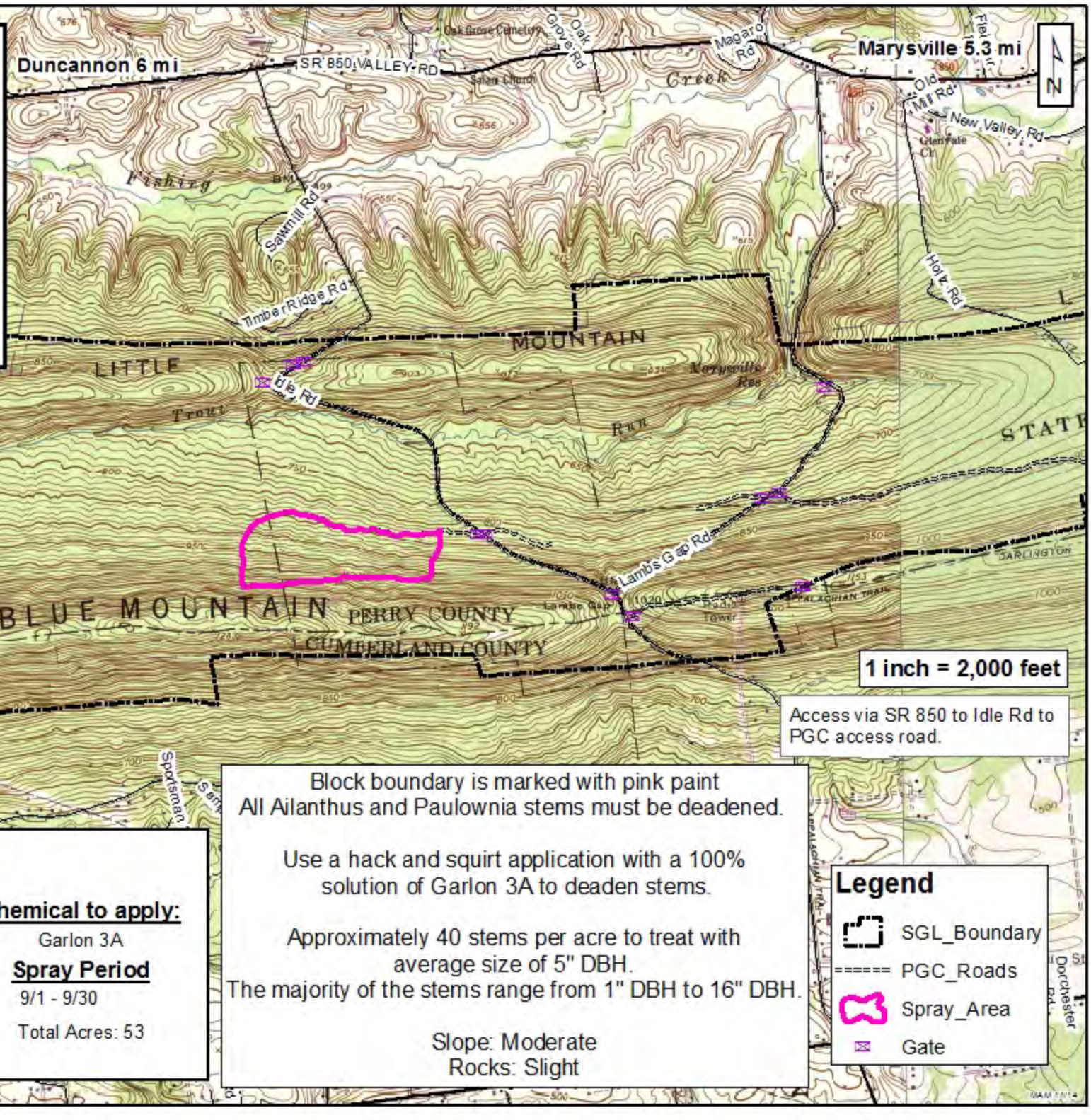
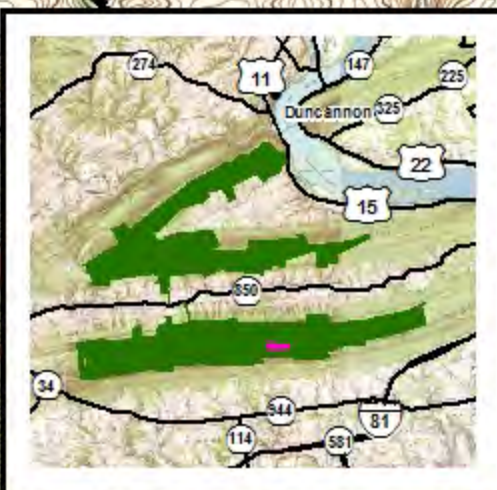
**Legend**

- SGL Boundary
- Chemspray Area

**Roads**

- Admin / Seasonal
- Public





1 inch = 2,000 feet

Access via SR 850 to Idle Rd to PGC access road.

**Herbicide Map for  
Idle Road**

**SGL 170**  
Perry County  
Rye Township

**Chemical to apply:**  
Garlon 3A

**Spray Period**  
9/1 - 9/30

**Compartment(s):** 2

**Cover Stand(s):** 47, 48, 61, 62, 63

Total Acres: 53

Block boundary is marked with pink paint  
All Ailanthus and Paulownia stems must be deadened.

Use a hack and squirt application with a 100% solution of Garlon 3A to deaden stems.

Approximately 40 stems per acre to treat with average size of 5" DBH.

The majority of the stems range from 1" DBH to 16" DBH.

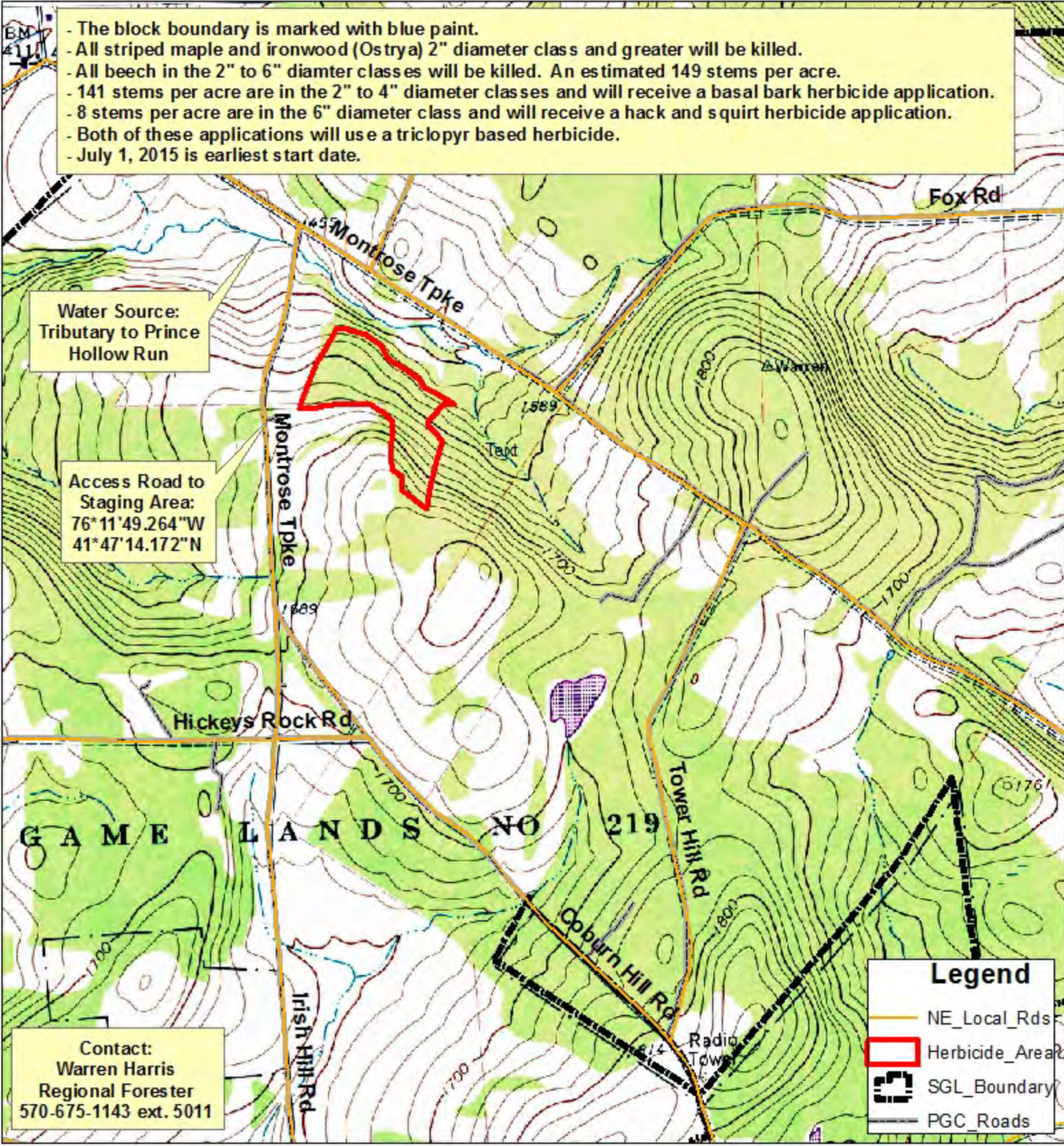
Slope: Moderate  
Rocks: Slight

**Legend**

- SGL\_Boundary
- PGC\_Roads
- Spray\_Area
- Gate

# SGL 219 Coburn II Sale Block 8 Herbicide Map

- The block boundary is marked with blue paint.
- All striped maple and ironwood (*Ostrya*) 2" diameter class and greater will be killed.
- All beech in the 2" to 6" diameter classes will be killed. An estimated 149 stems per acre.
- 141 stems per acre are in the 2" to 4" diameter classes and will receive a basal bark herbicide application.
- 8 stems per acre are in the 6" diameter class and will receive a hack and squirt herbicide application.
- Both of these applications will use a triclopyr based herbicide.
- July 1, 2015 is earliest start date.

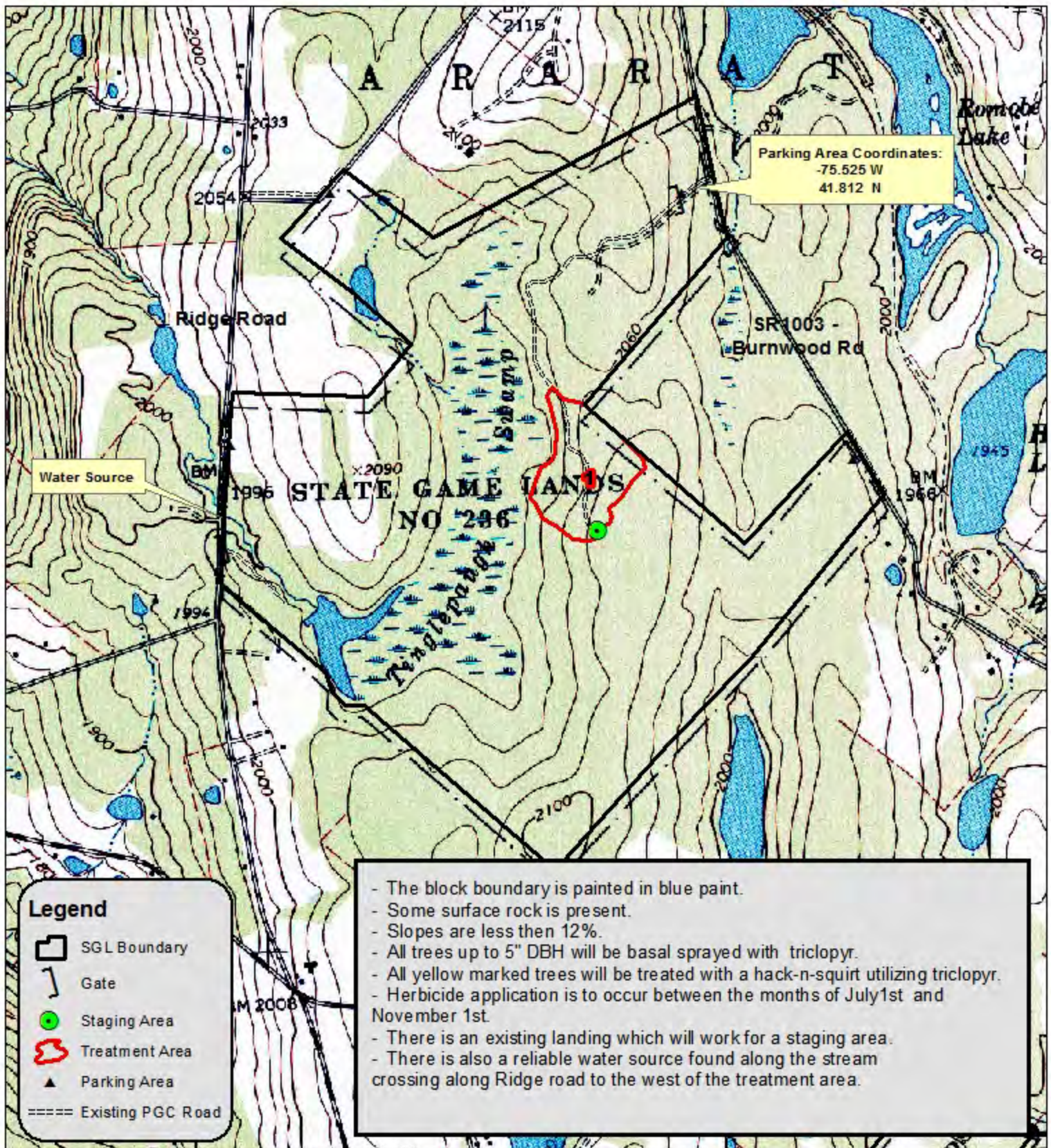


Water Source:  
Tributary to Prince  
Hollow Run

Access Road to  
Staging Area:  
76° 11' 49.264" W  
41° 47' 14.172" N

Contact:  
Warren Harris  
Regional Forester  
570-675-1143 ext. 5011

# Cedar Falls Herbicide Map



Parking Area Coordinates:  
-75.525 W  
41.812 N

Water Source

## Legend

- SGL Boundary
- Gate
- Staging Area
- Treatment Area
- Parking Area
- Existing PGC Road

- The block boundary is painted in blue paint.
- Some surface rock is present.
- Slopes are less than 12%.
- All trees up to 5" DBH will be basal sprayed with triclopyr.
- All yellow marked trees will be treated with a hack-n-squirt utilizing triclopyr.
- Herbicide application is to occur between the months of July 1st and November 1st.
- There is an existing landing which will work for a staging area.
- There is also a reliable water source found along the stream crossing along Ridge road to the west of the treatment area.

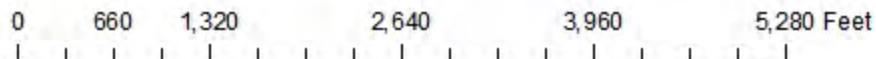
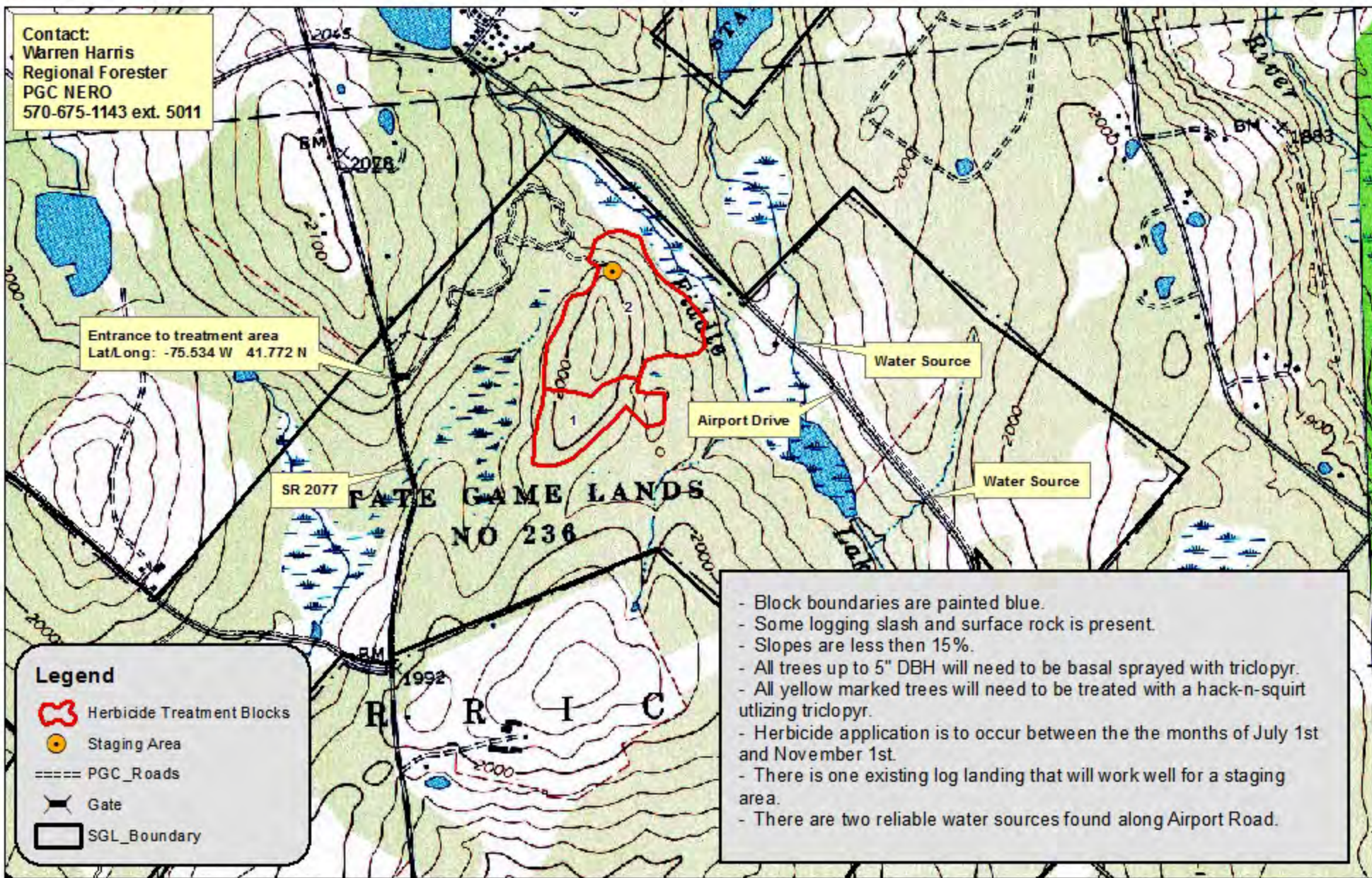


0 660 1,320 2,640 3,960 5,280 Feet



# Airport Road Herbicide Map

Block 1: 14 Acres  
Block 2: 33 Acres  
Total: 47 Acres



# SGL 289 Hilltop II Sale Block 4 Herbicide Map

- The herbicide block boundary is marked with blue paint.
- All ironwood (*Ostrya*) and musclemwood (*Carpinus*) trees 2" diameter class and greater will be killed.
- All beech, red maple, and hemlock in the 2" to 6" diameter classes will be killed. An estimated 347 stems per acre.
- 315 stems per acre are in the 2" to 4" diameter class and will receive a basal bark herbicide application.
- 32 stems per acre are in the 6" diameter class and will receive a hack and squirt herbicide application.
- Both applications will use a triclopyr based herbicide.
- July 1, 2015 is the earliest start date.

