

# Project Number 1

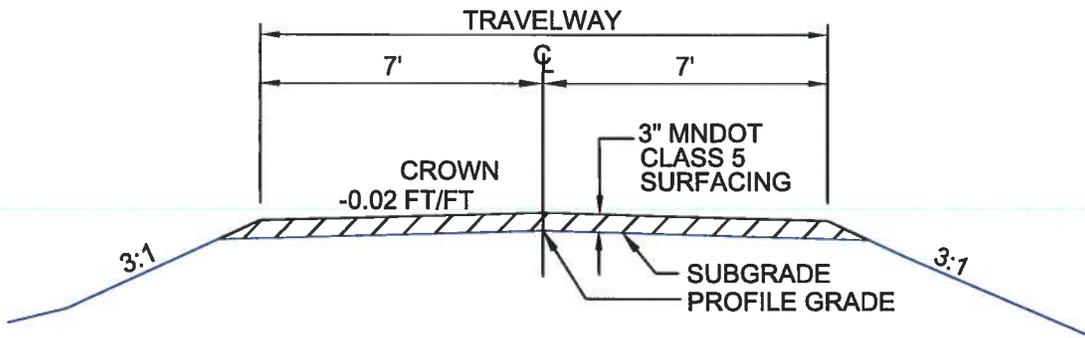
## SCHEDULE OF ITEMS

### SOO PORTAGE STEWARDSHIP FR 3990

Item	Description	Method of Measure	Unit	Qty	Unit Price	Item Price
201	ROAD RESHAPING	LSQ	LS	1		
202	HAUL AND PLACE GRAVEL	AQ	CY	1290		
203	BLADING NEW GRAVEL	LSQ	LS	1		
204	ROADSIDE BRUSHING	LSQ	LS	1		
<b>TOTAL ALL ITEMS</b>						



FR 3990 STEWARDSHIP PROJECT



TYPICAL TRAVELWAY SECTION

# SOO PORTAGE STEWARDSHIP FR 3990

## DIVISION 100 - GENERAL SPECIFICATIONS

**These specifications are supplemental specifications to “Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects.” Those specifications apply to all contracts unless amended below.**

### 101 - Statement of Work

The Contractor shall provide any and all equipment, labor, materials, tools, supervision, equipment including safety and other incidentals necessary to perform all work activities located in the designated areas of the Chippewa National Forest, in accordance with the specifications, exhibits and clauses contained or referenced herein.

### 102 - Work Description

Work under this contract will involve the following activities:

- A. Reshape roadway by establishing a road surface without potholes or an irregular surface. This includes, but is not limited to: filling potholes, depressions and other low spots. Ensure water is able to drain from the road surface. Road shall have a slight out slope or crown to allow surface drainage.
- B. Spot gravel roadway as staked in the field by the government. This material shall be from a commercial source. Providing, hauling, and placement of material at the project site shall be the responsibility of the Contractor. Any other material will be supplied by the contractor, at the contractor's expense.
- C. Blading of newly placed gravel. This includes, but is not limited to: ensure smooth surface free of depressions and other high or low spots. Ensure water is able to drain from the road surface. Road shall have a slight out slope or crown to allow surface drainage.
- D. Roadside brushing consists of removal and disposal of limbs, residual brush, live roadside brush and trees which are within or obtrude upon the designated clearing limits on both sides of the roadway. Work also includes the removal of all logs and windfall within the specified clearing limits.

### 103 - Project Location

Project is located approximately 5 miles east of Cass Lake, MN on U.S. Highway 2 and 0.1 miles south on Cuba Hill Road. Project heads west from the Cuba Hill Road for 1.35 miles.

A map of this location shall be included with the specifications.

#### **104 - Superintendence by the Contractor**

- A. At all times during the performance of the contract, and until the work is complete and accepted, the Contractor shall directly supervise the work, or assign and have at the work site a competent superintendent who is satisfactory to the Contracting Officer (CO) and has authority to act for the Contractor. The superintendent shall be designated in writing to the CO prior to the contract start date.
- B. Responsibilities of the site superintendent include, but are not limited to, construction, day-to-day coordination of activities, control over employees/subcontractors and coordination with Contracting Officers Representative (COR) and Inspectors. The superintendent shall be available in person or by telephone to respond to any and all problems during normal working hours.

#### **105 - Equipment Requirements and Transportation**

- A. The Contractor's proposed equipment shall be made available for inspection prior to award of the contract. If at any time during the course of this contract the equipment is deemed unsatisfactory, the CO may order removal and may require a satisfactory replacement, at Contractor's expense. Replacement equipment, if ordered, is to be onsite and working within 48 hours.
- B. Any movement or transportation of equipment to or from work areas, required to repair or replace equipment, or for the Contractor's convenience, shall be at the Contractor's expense.
- C. A bulldozer, motor patrol or other equipment shall be used to remove ruts, re-establish ditches, eliminate potholes and other depressions and create an overall smooth surface, sloped for drainage. This may be done using any type of approved equipment.
- D. The Contractors equipment shall be equipped with the following items throughout the performance of this contract:
  - Fire extinguisher (minimum type B-C)
  - A reflectorized slow moving emblem mounted on rear
  - A minimum of 4 flashing amber lights, (2 forward & 2 rear), or a single light on top of the cab, visible from all directions.
  - A Rollover Protective Structure (ROPS)
  - Exhaust stacks with spark arrestors
  - Self-propelled, engine driven, pneumatic tire, one person controlled.

#### **106 - Public Safety and Traffic Control**

- A. The Contractor shall exercise caution and care while pursuing the work to prevent unnecessary conflict with, or potential hazards to, road users or others within the work area.
- B. The Contractor is to pursue all work on site in accordance with all Federal, State, and Local laws governing the transportation and the type of work being performed.
- C. The Contractor shall post warning signs at the beginning of the project and the end of the project and at all intersections. Signs are to be of the size, quantity, and colors as required in the current edition of the "Manual on Uniform Traffic Control Devices" (MUTCD). These signs shall be

moved as needed to properly delineate and identify the section of the road being maintained. These signs shall be in place only when road equipment or persons are performing operations. All slow moving equipment is to have a reflectorized "Slow Moving Vehicle" emblem properly attached.

- D. The contractor may delay traffic for up to 30 minutes. Contractor shall notify the COR or Inspector immediately for any closure exceeding 30 minutes. If any delay exceeds this time, signs must be posted on each end of the project indicating "ROAD CLOSED".
- E. Contractor is responsible for contacting Gopher State-One Call prior to performing any excavation.
- F. Design and locate equipment repair stops, stationary refueling sites, or other facilities to minimize the potential and impacts of hazardous material spills on Government land.
- G. The Contractor is solely responsible for all spills or leaks that occur during the performance of this contract. Clean up spills or leaks to the satisfaction of the COR and in a manner that complies with Federal, state, and local laws and regulations.

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### **107 - Measurement and Payment**

Payment/credit will be made upon completion and acceptance of all work.

### **108 - Materials**

- A. Gravel material shall meet MN DOT specifications for Class V material. Test results that verify Class V material shall be supplied by contractor. Final determination of acceptability will be made by the COR. Cost for Contractor supplied material should be included in the rock/surfacing bid items.

### **109 - Mobilization**

- A. Description

This work shall consist of moving to the project site all materials, equipment and other incidental items necessary for completion of the assigned work.

- B. Method of Measurement

Mobilization shall be considered incidental to all other work and will receive no separate measurement or payment.

**DIVISION 200 – PERFORMANCE STANDARDS**

**201 – Road Reshaping**

- A. This work consists of shaping the road surface and establishing drainage.
- B. A bulldozer, motor patrol or other equipment shall be used to remove ruts, eliminate potholes and other depressions and create an overall smooth surface, sloped for drainage. This may be done using any type of approved equipment. This work shall be done prior to placing any surfacing.
- C. Shaping shall result in a road bed that is smooth, without holes or dips and an outslope or a slight crown in the center.
- D. This item shall be measured as per mile, to the nearest 0.10 mile.

**202 – Haul and Place Gravel**

- A. This work shall consist of hauling and placement of commercial source aggregate surfacing from the junction with FR2133 Cuba Hill to M.P. 1.4 where decommissioning begins as staked in the field to a three inch compacted depth.
- B. **NO SURFACING MATERIAL IS TO BE PLACED ON THE ROAD, UNTIL ALL OTHER ITEMS ARE APPROVED IN WRITING BY THE COR.**
- C. Compaction shall be achieved by continual passes with rubber-tired equipment until visible deformation ceases, or approved by the COR

D. Testing

Material shall meet the specifications for Minnesota Department of Transportation Specifications for Class V material.

One gravel test shall be performed and the results provided to the government for: Every new source of material and each 700 tons of material or fraction thereof provided to the project site.

- E. Method of Measurement shall be computed from actual truck counts delivered to project. Volume per truck will be agreed upon by contractor and COR before work begins.
- F. Payment shall be by the Cubic Yard (CY), as measured and approved by the COR.

ROAD #	Loose CY
FR 3990	1290 CY

## 203 – Blading Gravel

### A. Surface Blading

Surface blading shall include an adequate number of passes, as agreed to by the COR, to achieve the surface blading standard described herein from road shoulder to road shoulder. Normally, single lane roads will require 2-3 passes, and double lane roads will require 3-4 passes. The contractor will also be required to blade the entire width including turnouts and intersection fillets.

**The following standard industry practices will be reviewed during inspections to determine the desired results will be met:**

- A. Blading to restore surface without loss of aggregate/gravel surfacing or disturbance or loss of road base material. Performance on gravel-surfaced roads shall be accomplished so the base is not disturbed and no surface material is lost in ditches or over the road shoulders. Blading of un-surfaced roads shall be performed so no base material is lost. Sections having segregated materials after spreading shall be reprocessed and spread.
- B. Ruts, chuckholes, and washes shall be repaired by scarifying or cutting to the bottom of such defects to provide for uniform compaction of roadbed material. High blading, or any method which merely fills depressions with loose material, does not eliminate the defect or provide for uniform compaction and is therefore not acceptable.
- C. No special consideration will be given for rutting or other surface disturbances that can be considered the result of normal use or road activity. If a road, or any substantial section of a road, appears to be excessively rutted, washed out or otherwise damaged beyond expected normal use, the contractor shall notify the COR before proceeding to grade this section.
- D. Blading and shaping operations shall not undercut road back slopes.
- E. At the conclusion of the blading and shaping operations the roadbed shall be smoothed and dressed to produce a uniform blade and cross section and a surface free of hollows, depressions, and projections above the adjacent roadbed surface. No berm or ridge or any material shall be left along either shoulder of the roadbed unless directed by the COR.
- F. The finished grade shall be reasonably smooth with a crown.

Grading shall include providing for drainage of surface water directly into the side ditches at the shoulder without interruption by false ditches formed by accumulation of excess surfacing material. Blending into the road shall conserve all surfacing material. Removal of oversize rock and sod off the road will be permitted only at locations approved in advance by the COR. If the COR determines excessive gravel is being pushed into the ditches, the contractor will be liable for that gravel replacement.

Grading will proceed in a logical continuous pattern. Grading will not proceed when road conditions do not warrant it, such as extremely wet or dry weather or when the road, in the judgment of the COR, does not need grading. Graders shall not be run at speeds that will cause bounce in grader and/or leave ripples or washboard in roadbed. Grading will not change or alter existing roadway width, shoulder alignment or ditches without advance approval from the COR.

Contractor shall take reasonable steps to insure all suitable material, which has been worked onto the roadbed edge by traffic or maintenance activities, be reclaimed onto the roadbed.

Total roadbed width, including turnouts, turnarounds, and parking lots shall be bladed and shaped to produce a surface which is uniform, consistent to grade, and crowned or cross-sloped as indicated by the character of the existing surface. Established grasses and other vegetation shall not be removed from areas outside the traveled way except as incidental to providing drainage.

Undercutting of the road surface at the roadbed edge and leaving a berm is unacceptable.

At intersections, the roadbeds of the side roads shall be bladed to assure a smooth transition.

All fallen trees, limbs, brush, and other obstructions in the roadbed shall be removed. This work may require a chainsaw. If this removal appears to be excessive, notify the COR immediately.

No material shall be deposited in ditches, or in such places as to interfere with the road drainage. Material shall be "feathered out" or piled such that no berms are created.

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#### **204 - Roadside Bushing**

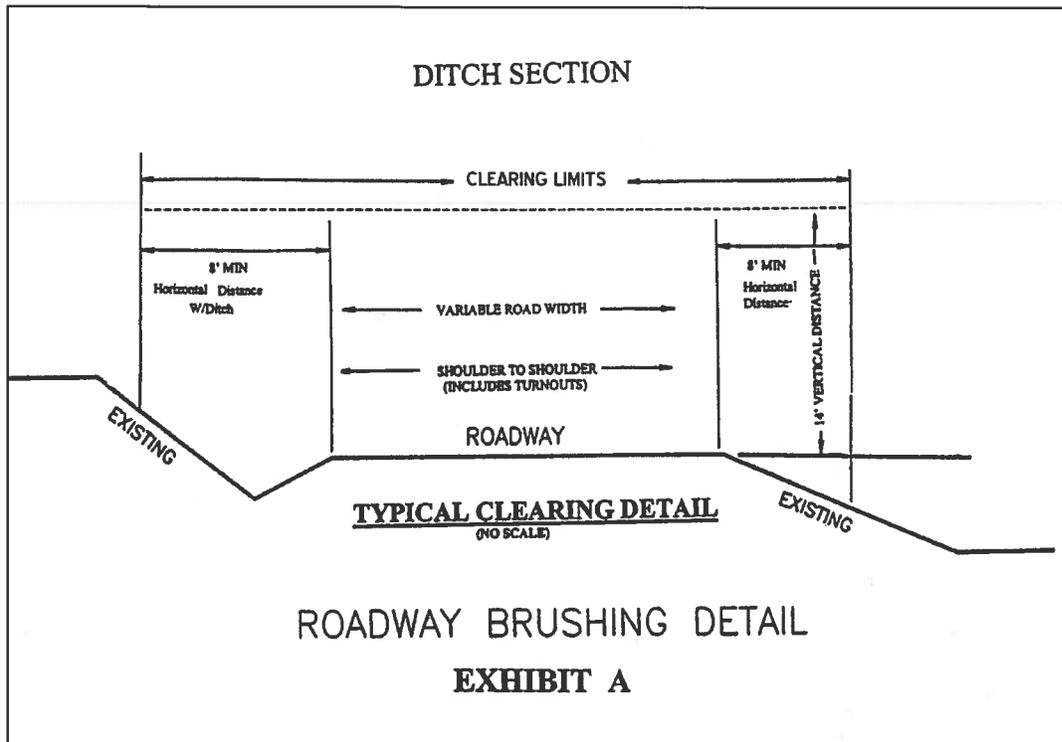
- A. This work consists of removal and disposal limbs, residual brush, live roadside brush and trees less than four (4) inches in diameter which are within or obtrude upon the designated clearing limits on both sides of the roadway. Brushing work may be completed during the winter months when ground is frozen.
- B. Work also includes the removal of all logs and windfall within the specified clearing limits. The clearing limits are shown in the included typical section. This includes a horizontal distance of eight (8) feet from the shoulder of roads with ditches, eight (8) feet horizontal distance from hinge for roads without a ditch, and a horizontal distance of eight (8) feet from the shoulder of the road of the fill side. Clearing limits shall include turnouts and curves.
- C. All brush shall be removed from the roadway at the end of each day. All slash having a diameter greater than one (1) inch and a length greater than two (2) feet or a length greater than three (3) feet regardless of diameter shall be disposed of by scattering outside the clearing limits so that no material extends above the roadway elevation.
- D. Trees in excess of eight (8) inches diameter, when measured eight (8) inches above the ground, shall be limbed so that no limb extends within a clear height of 14 feet directly above the roadway. Limbs shall be trimmed with a pole saw as near flush with the trunk as practicable. Limbs shall be disposed of outside the clearing limits. Limbing of trees with machines will not be allowed.
- E. Any damage to Forest Roads caused by the contractor and/or their employees shall be restored to an equal or better condition than those existing prior to project activities. The contractor shall protect all known survey monuments and road signs during operation. Hand brushing around these objects may be required to meet specifications.
- F. Acceptable results are:

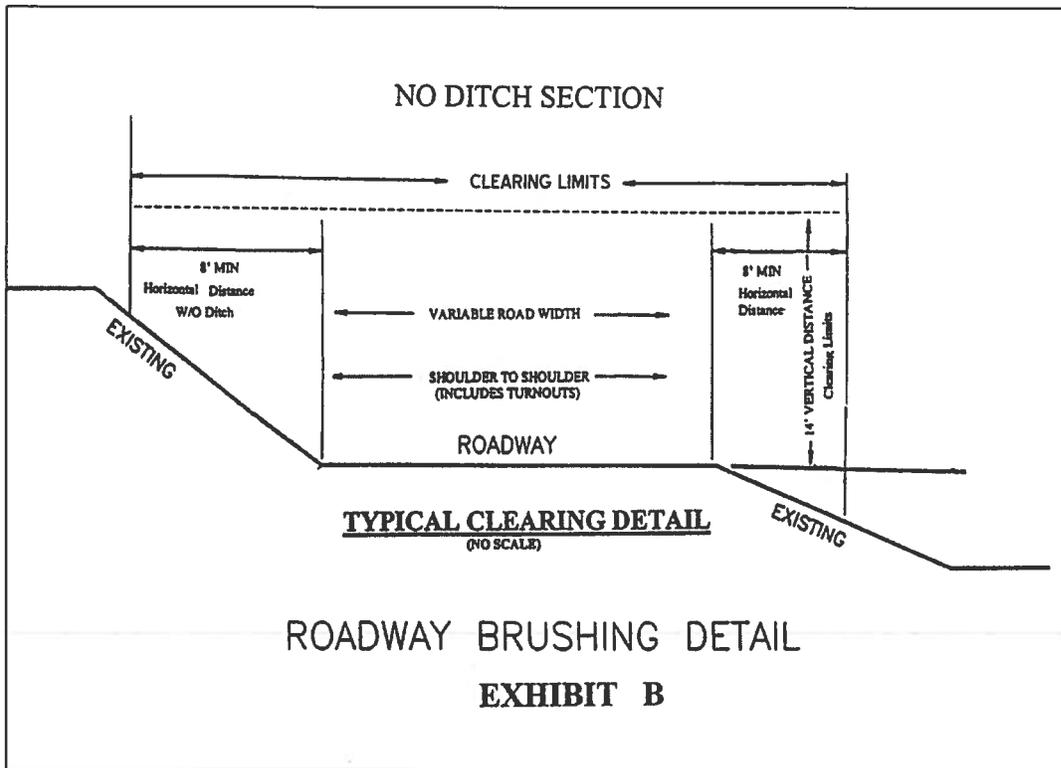
For ground growth: total removal of all stems greater than 1 inch and less than 4 inches in diameter as measured at the required cutting height.

For overhead growth: removal of all vegetation up to the required height and distance from the road.

G. Method of measurement for roadside brushing shall be lump sum quantity. Note: Parking areas, turnouts, and approach road connections are considered as part of the main roads and shall not be measured separately. Measurement includes all work on both sides of the road.

H. Payment shall be lump sum, and approved by the COR.





## **Reforestation Timber Stand Improvement Project**

### **C.1 – SCOPE OF WORK**

The service work covered in this contract are for the furnishing of all labor, equipment, supervision, transportation, operating supplies and incidentals, except as provided by the government see below; and performs all work necessary to accomplish a wide variety of service work including but not limited to: individual crop tree release, animal damage control, in compliance with the terms, specifications, conditions and provisions of this contract.

### **C.2 – DESCRIPTION AND LOCATION**

All areas are located in Beltrami & Cass Counties within the boundaries of the Chippewa National Forest in north central Minnesota. Stands treated must be done 2017. Please see the attached maps for specific stand locations and acres.

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#### **Individual Release of crop trees (Project 2)**

Control all vegetation in a three-foot diameter around each crop tree within the stand. In an area 3 feet around each crop tree all competing vegetation shall be cut to within four inches of the ground. All vegetation overtopping the crop tree shall be removed so that the seedling will be free to grow. When two crop trees are competing in the same 3 foot area species preference shall be given to the species determined by the COR on the site specific map. Crop tree preference is typically pine, tamarack, spruce, fir, oak, birch, and maples. No Crop trees should be damaged while conducting release unless they are directly competing and then the less preferred crop tree shall be cut. Crop tree species is determined by the COR with site specific instructions this may include aspen in some stands.

Most sites are less than 5 years old however some sites have heavy competition of deciduous trees and brush; alder hazel aspen willow and raspberry. It is strongly recommended that visiting and reviewing sites before submitting bid.

Suggested equipment to be furnished by the contractor for hand cutting tools is a motor driven brush saw. The contractor will assume all cost of maintenance and operation of equipment including items such as fuel, oil, grease, repairs and miscellaneous operating supplies. Contractor shall assume all risk of loss or damage to his equipment for the duration of contract. Stump height shall be no more than four inches as measured from the highest adjacent point of ground. Areas or trees to be left uncut within mapped areas will be marked or flagged indicating exterior boundary. All existing survey markers, bearing trees, etc., shall be protected. No roads shown on the TSI area map will be blocked by slash or debris resulting from contractors operations. No cut stems may end up on top of crop trees being released

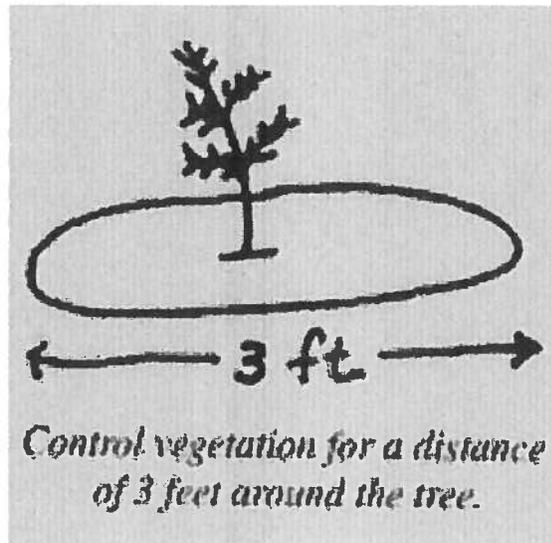


Image 6. Release of crop trees

Work on release items for can begin on June 1<sup>st</sup> 2017 and must be completed by October 1<sup>st</sup> 2017.

### **Animal Damage Control Bud Capping (Project 3)**

Pine buds are a favorite food of deer and hair as a result they need some protection to deter browsing. This can be done through the use of bud caps. A bud cap is simply a piece of paper wrapped and stapled around the terminal leader and bud of the tree. This protects the terminal bud, yet allows the tree to grow up through the paper during the next growing season.

Bud capping should be done in the fall, after a hard frost but before snow covers the ground. Lightweight paper cut into 4" x 6" pieces works well. Fold the paper in half around the leader to form a sleeve that covers the terminal bud. Staple the paper together using at least three staples, and catching some needles to help hold the paper in place. No staples shall puncture or damage the stem or bud of the tree.

Bud caps staples and staplers to be used will be furnished by the Forest Service and delivered to a site designated at the pre-work conference. The contractor is responsible for storing and hauling government bud caps. Pre-cut paper bud caps must be kept dry and protected from damage. Boxes of pre-cut paper bud caps provided by the Government that are damaged or destroyed due to negligence on the part of the contractor will be assessed at \$300.00 per carton (approx. 24,000 paper bud caps per carton). The contractor shall return unused bud caps, and staples, and staplers to the forests representative within one week after job is completed. Failure

to do so will result in a \$300.00 charge per carton of papers \$30.00 per stapler and \$100.00 per carton of staples. All crop trees that are under 4.5 feet tall and within the unit boundary will be bud capped. Crop tree species is determined by the COR with site specific instructions but typically it is all white pine, Jack pine and red pine. In some stands tamarack and balsam fir will be bud capped. Typical crop tree spacing is 6X8 or 800 trees per acre. Areas with in a stand that far exceed 800 trees per acre the contractor can bud cap the dominant crop trees on a 6x6 spacing and disregard all other crop trees in that area.

Work on bud capping items can begin on September 1st 2017 and must be completed by November 4 th 2017.

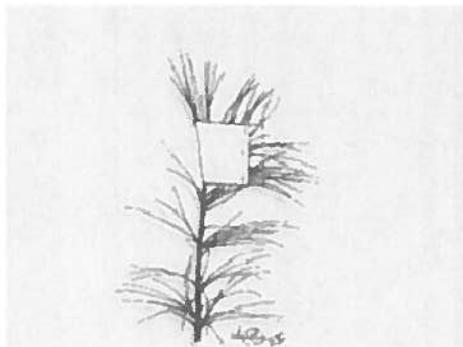
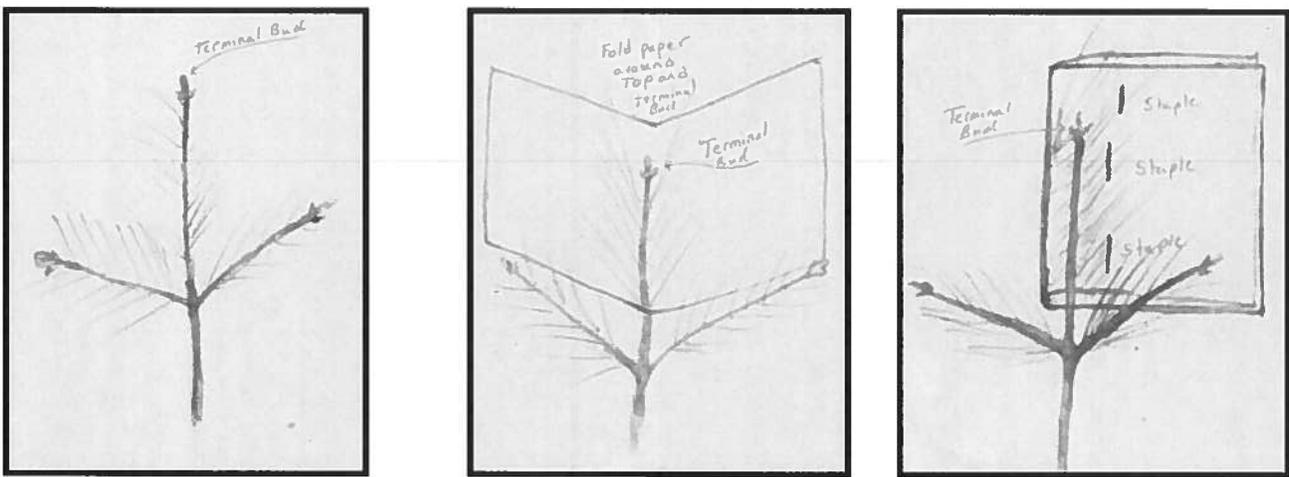


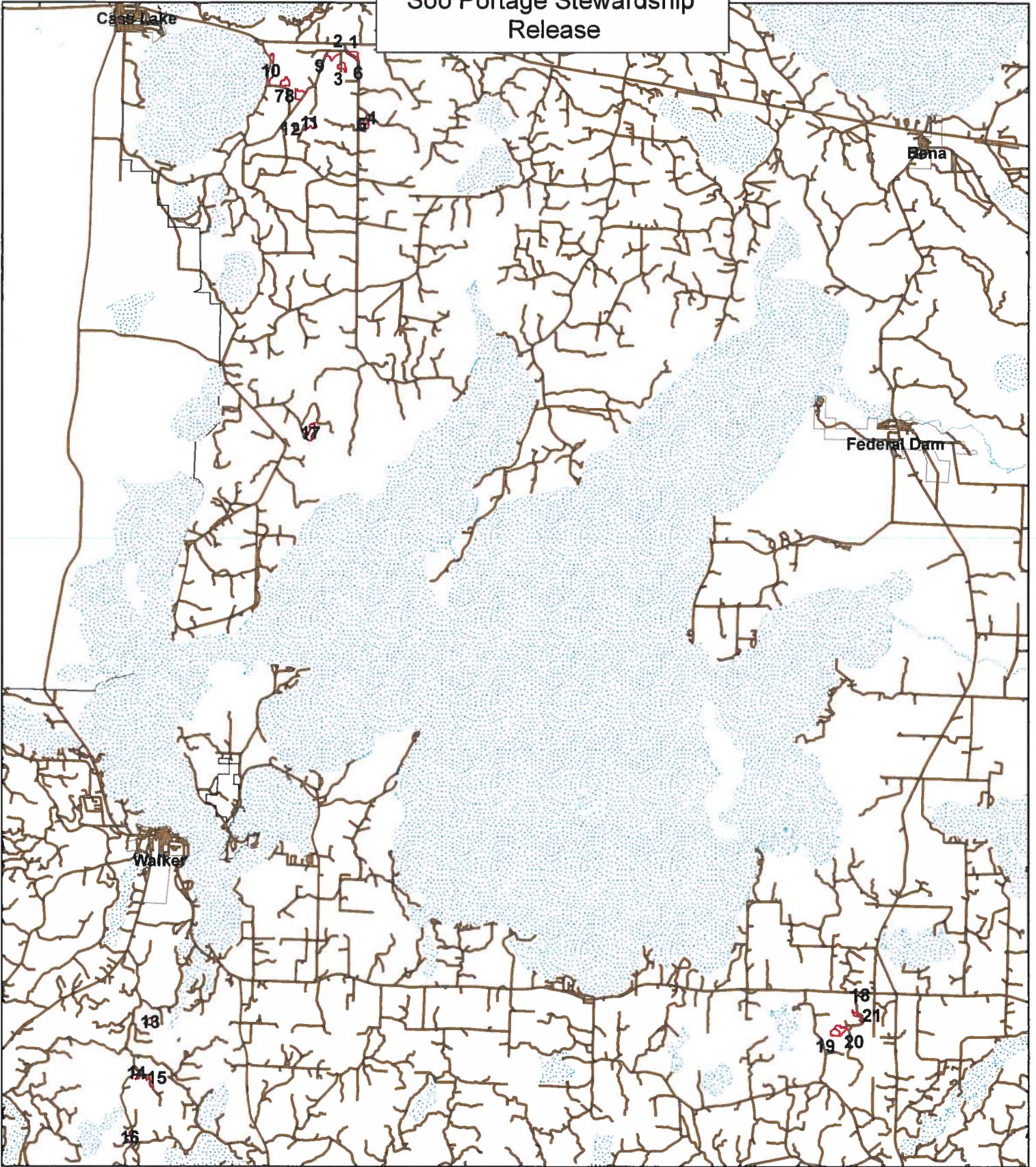
Image 2: Correct bud cap placement

# Project Number 2

## Soo Portage - Release

ITEM	SALE_NAME	UNIT_ID	Year	ACRES
1	MCDONALD	5	2017	19
2	MCDONALD	20	2017	12
3	MCDONALD	21	2017	12
4	TOWER SALVAGE	3	2017	10
5	TOWER SALVAGE	2	2017	20
6	Lookout spruce	1	2017	6
7	SANTIAGO SALVAGE	6	2017	18
8	SANTIAGO SALVAGE	7	2017	26
9	SANTIAGO SALVAGE	9	2017	6
10	East Pike Bay Salvage	1	2017	6
11	SOUTH BOUNDARY SALVAGE	3	2017	31
12	SOUTH BOUNDARY SALVAGE	2	2017	7
13	WHEELER	3	2017	12
14	WHEELER	8	2017	15
15	WHEELER	7	2017	11
16	WHEELER	10	2017	16
17	Oakpoint	2	2017	28
18	TADPOLE	2	2017	8
19	TADPOLE	5	2017	18
20	TADPOLE	6	2017	21
21	TADPOLE	NA	2017	6

# Soo Portage Stewardship Release



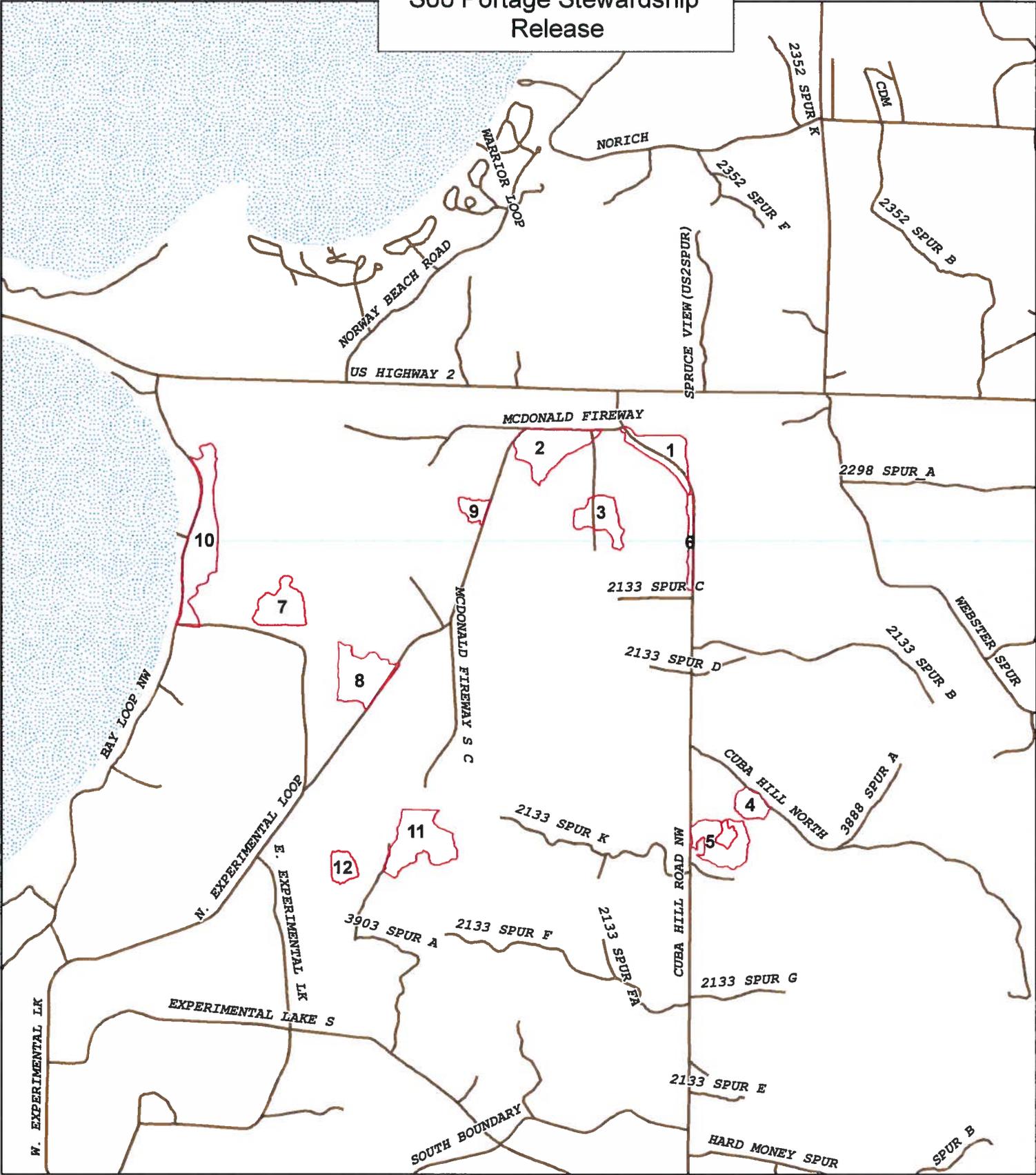
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- Towns
- Roads
- 2017\_SPortageStew\_release\_1
- waterbody
- CNF NFS Boundary

0 1.75 3.5 7 Miles

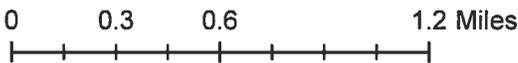


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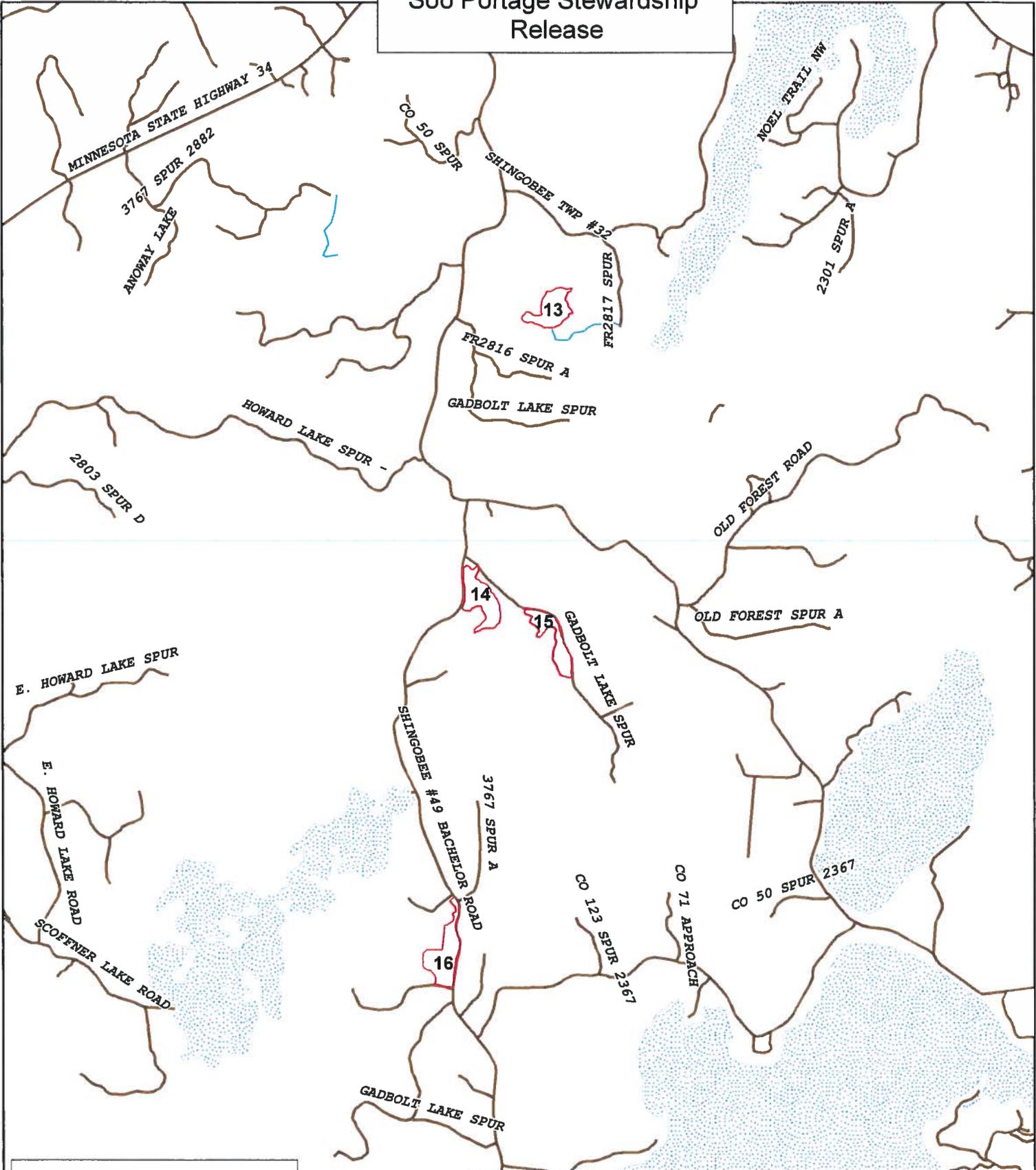


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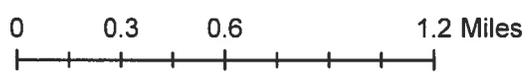


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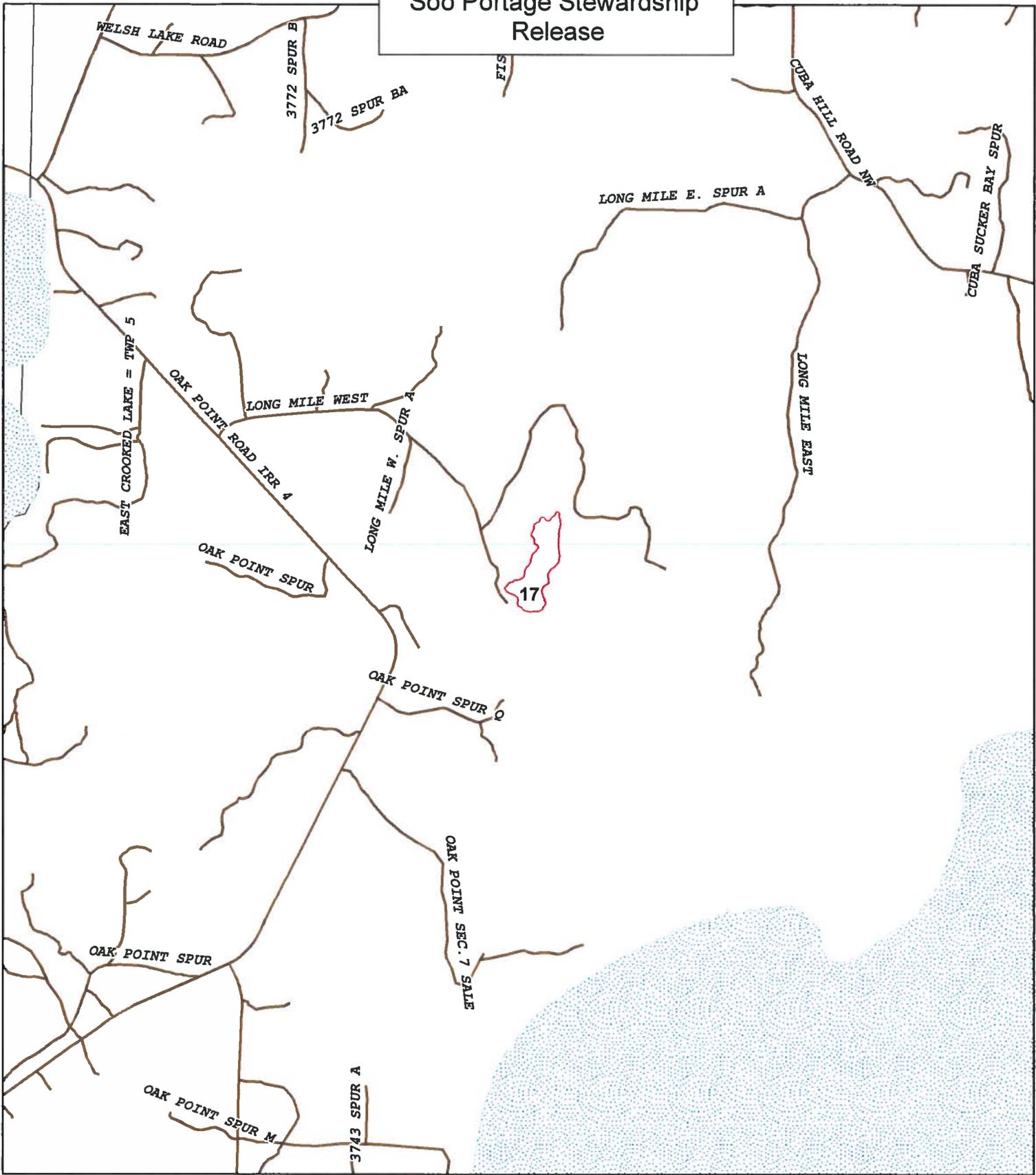


**Legend**

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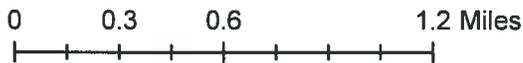


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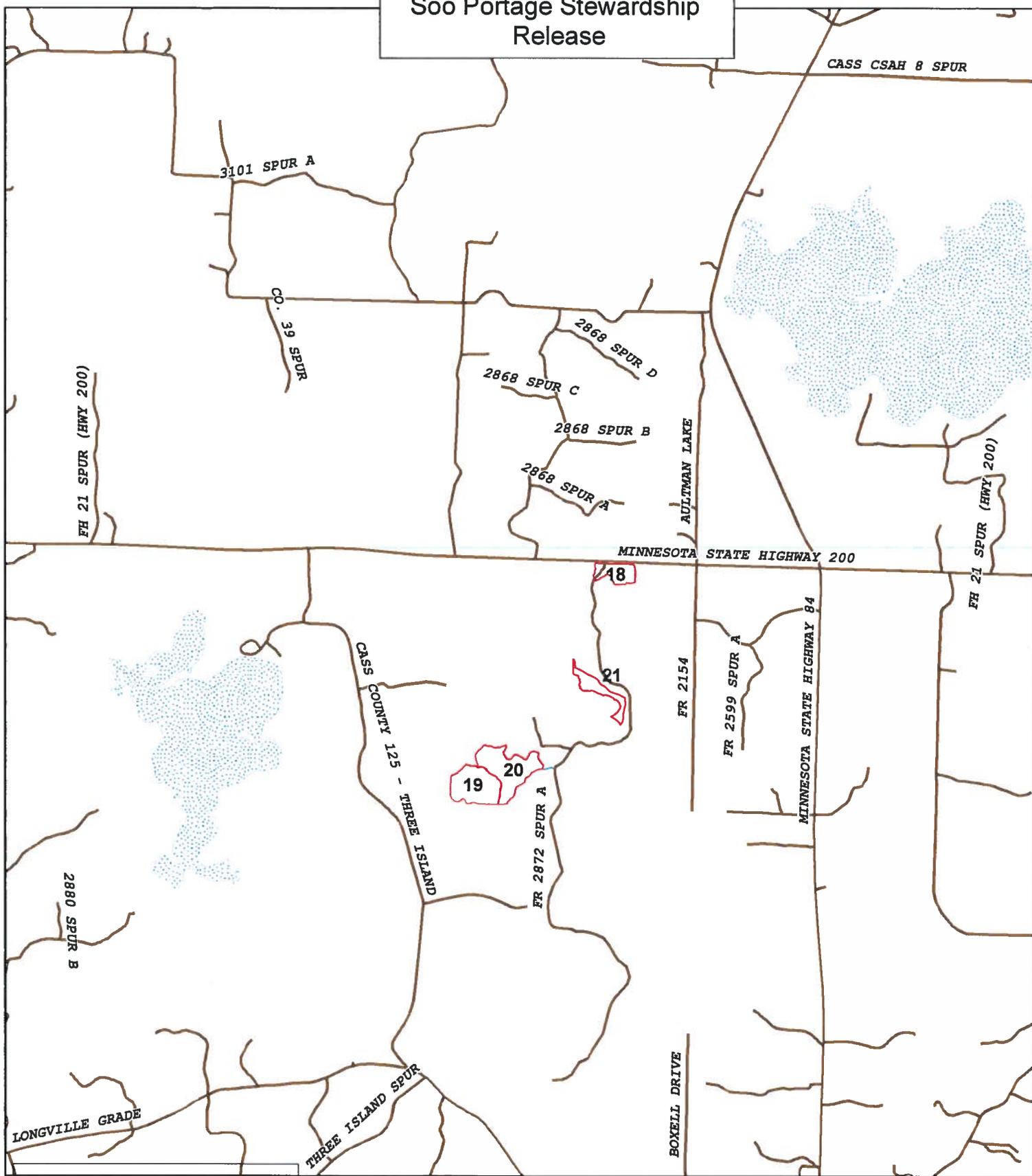


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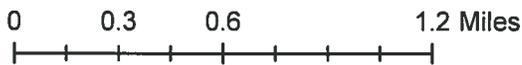


# Soo Portage Stewardship Release



## Legend

-  access
-  2017\_SPortageStew\_release\_1
-  waterbody
-  Towns
-  Roads
-  CNF NFS Boundary



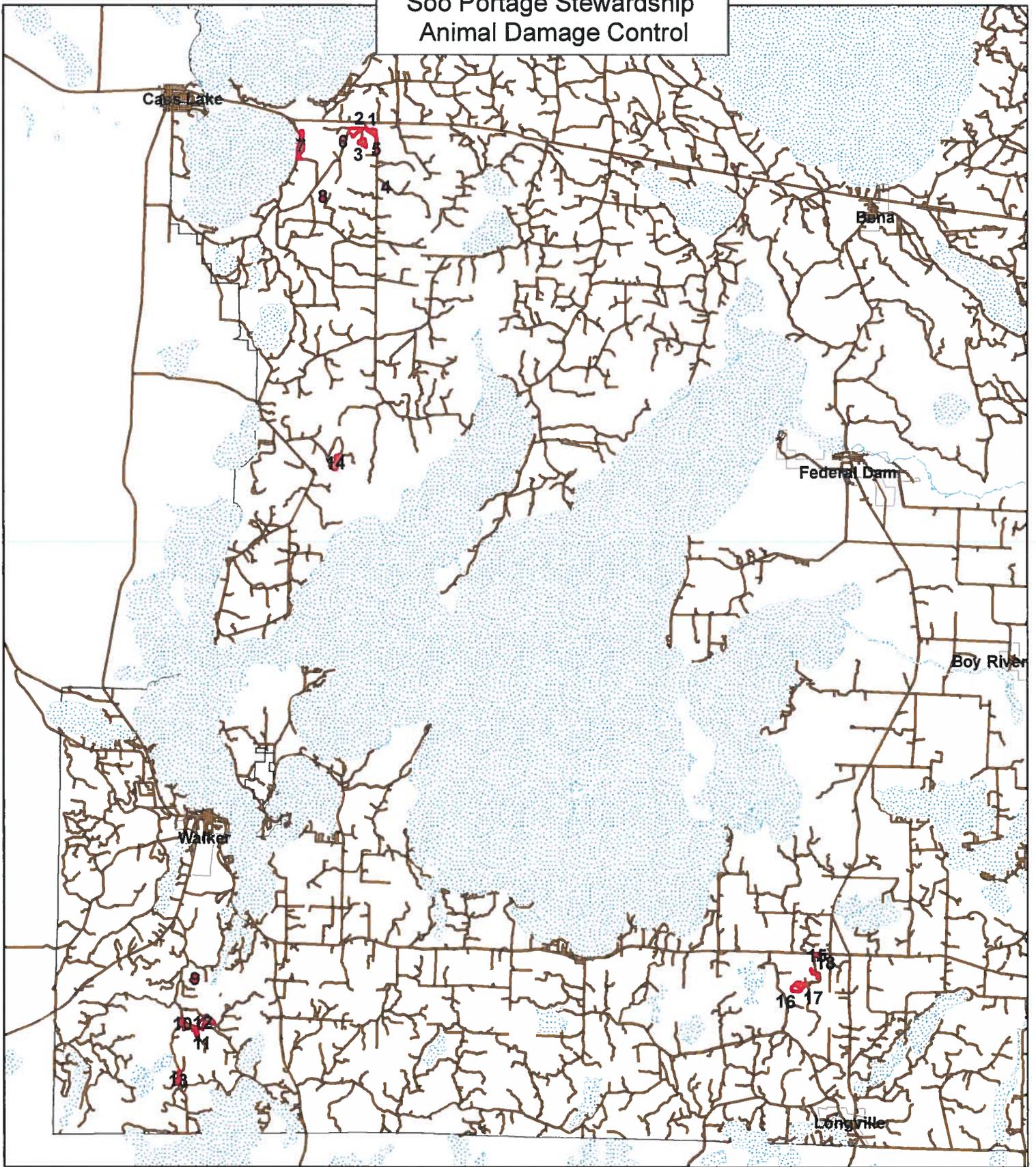
# Project Number 3

## Soo Portage ADC

ITEM	SALE_NAME	UNIT_ID	Year	ACRES
1	MCDONALD	5	2017	19
2	MCDONALD	20	2017	12
3	MCDONALD	21	2017	12
4	TOWER SALVAGE	3	2017	10
5	Lookout spruce	1	2017	6
6	SANTIAGO SALVAGE	9	2017	6
7	EAST PIKE BAY SALVAGE	1	2017	6
8	SOUTH BOUNDARY SALVAGE	2	2017	7
9	WHEELER	3	2017	12
10	WHEELER	8	2017	15
11	WHEELER	7	2017	11
12	WHEELER	6	2017	38
13	WHEELER	10	2017	16
14	Oakpoint	2	2017	28
15	TADPOLE	2	2017	8
16	TADPOLE	5	2017	18
17	TADPOLE	6	2017	21
18	TADPOLE	NA	2017	6

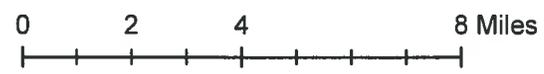
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# Soo Portage Stewardship Animal Damage Control

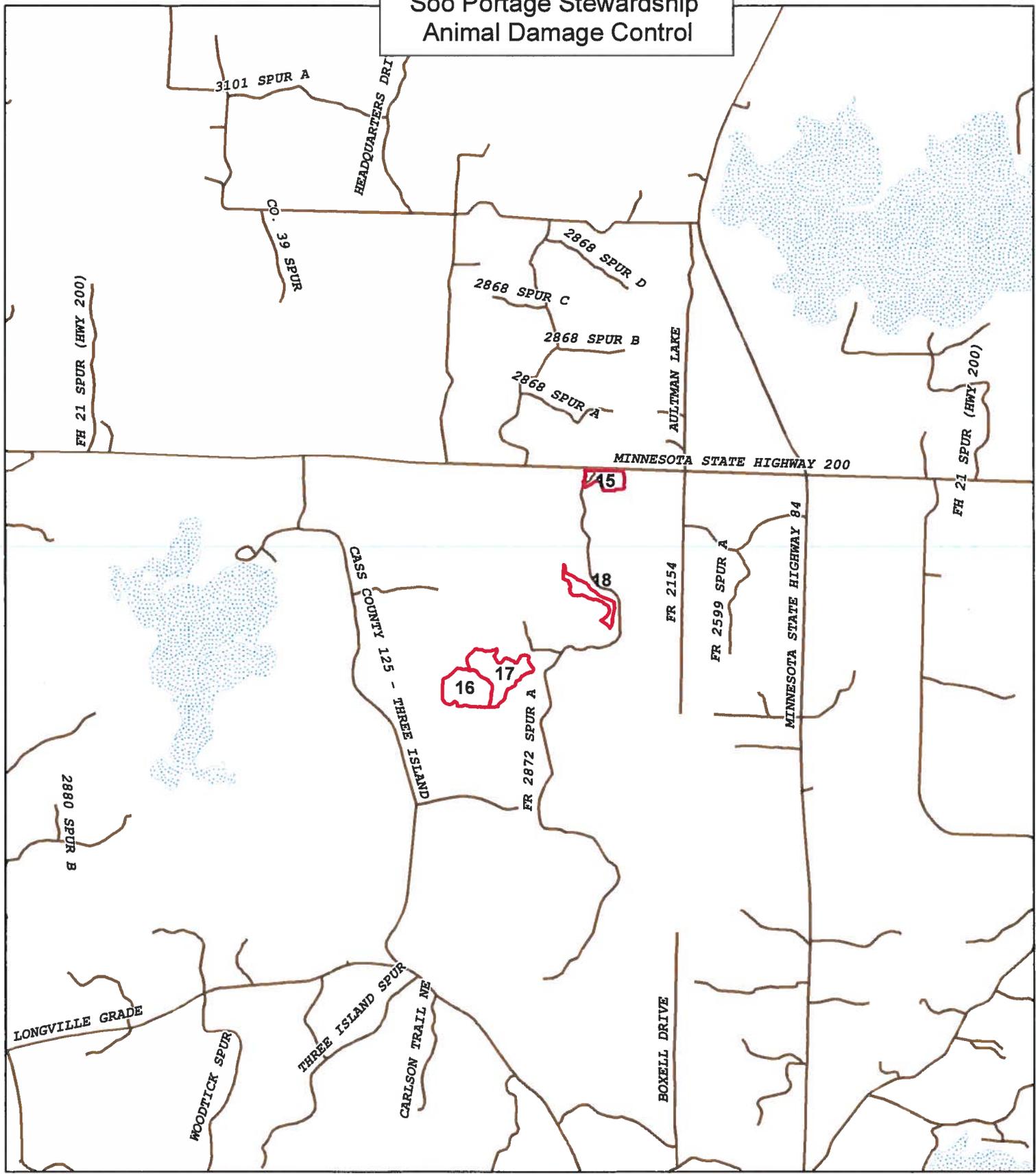


**Legend**

- 2017\_SooPortageStew\_ADC1
- waterbody
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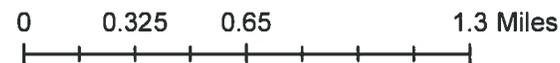


# Soo Portage Stewardship Animal Damage Control

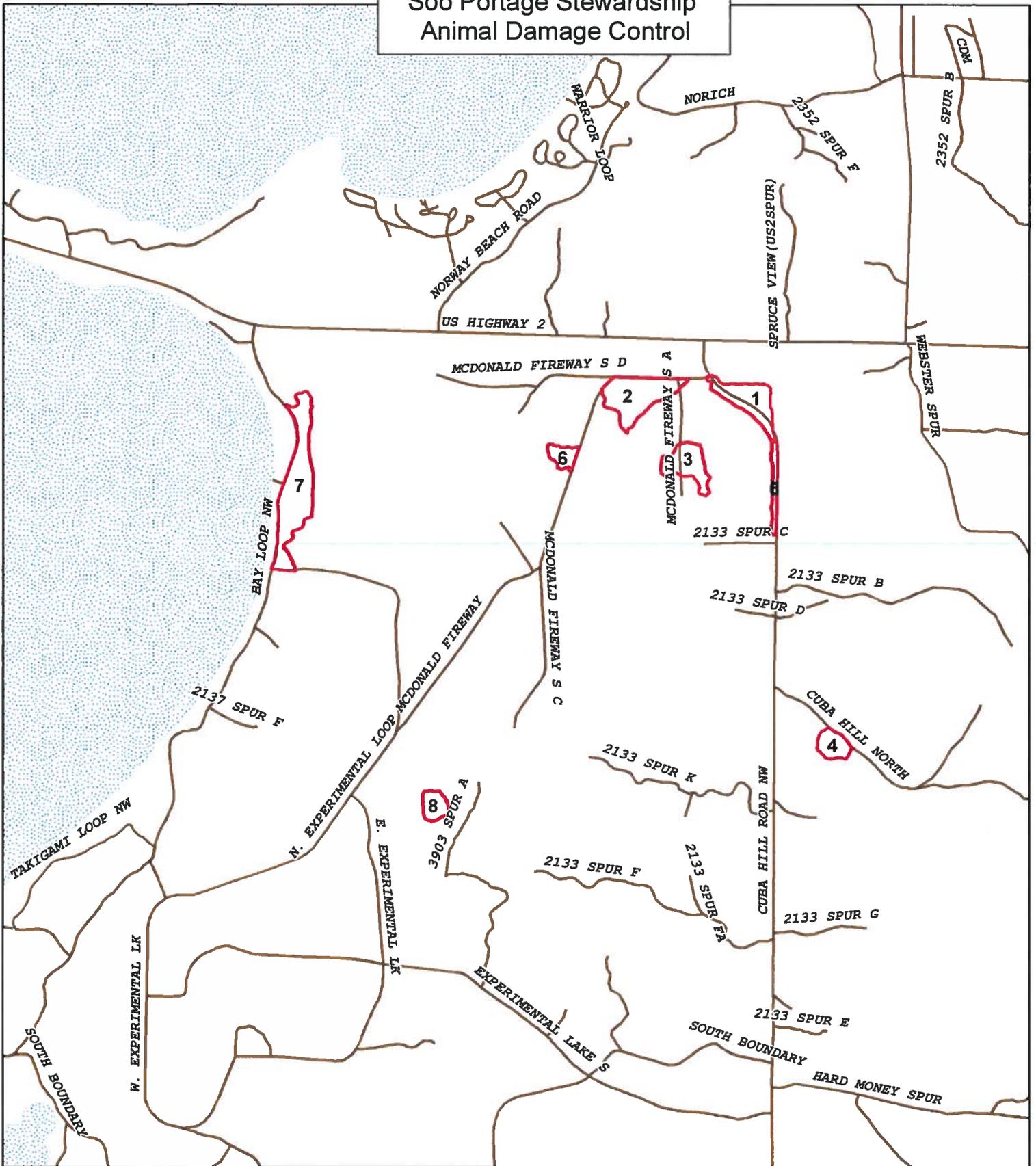


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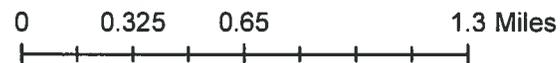


# Soo Portage Stewardship Animal Damage Control

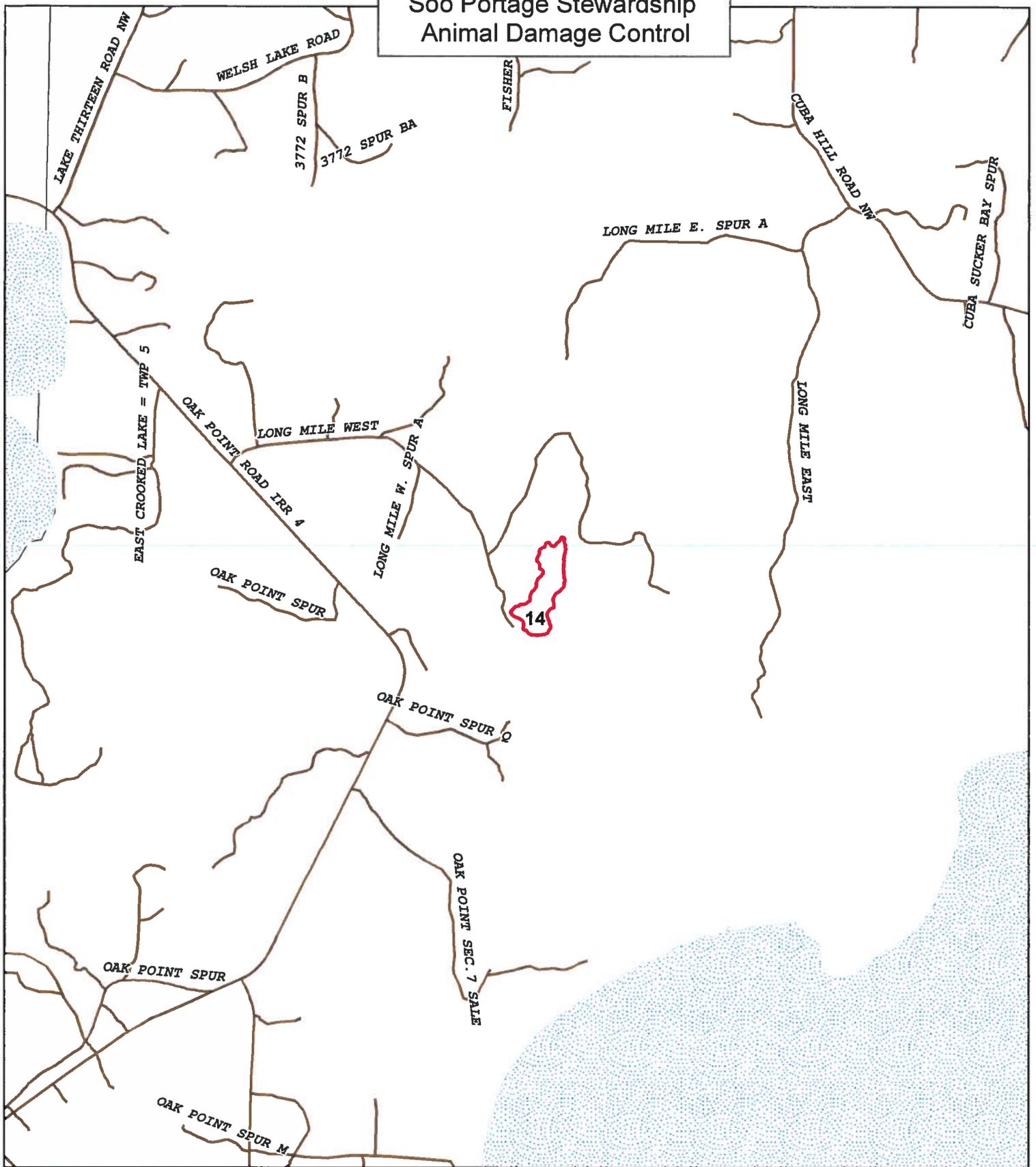


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# Soo Portage Stewardship Animal Damage Control



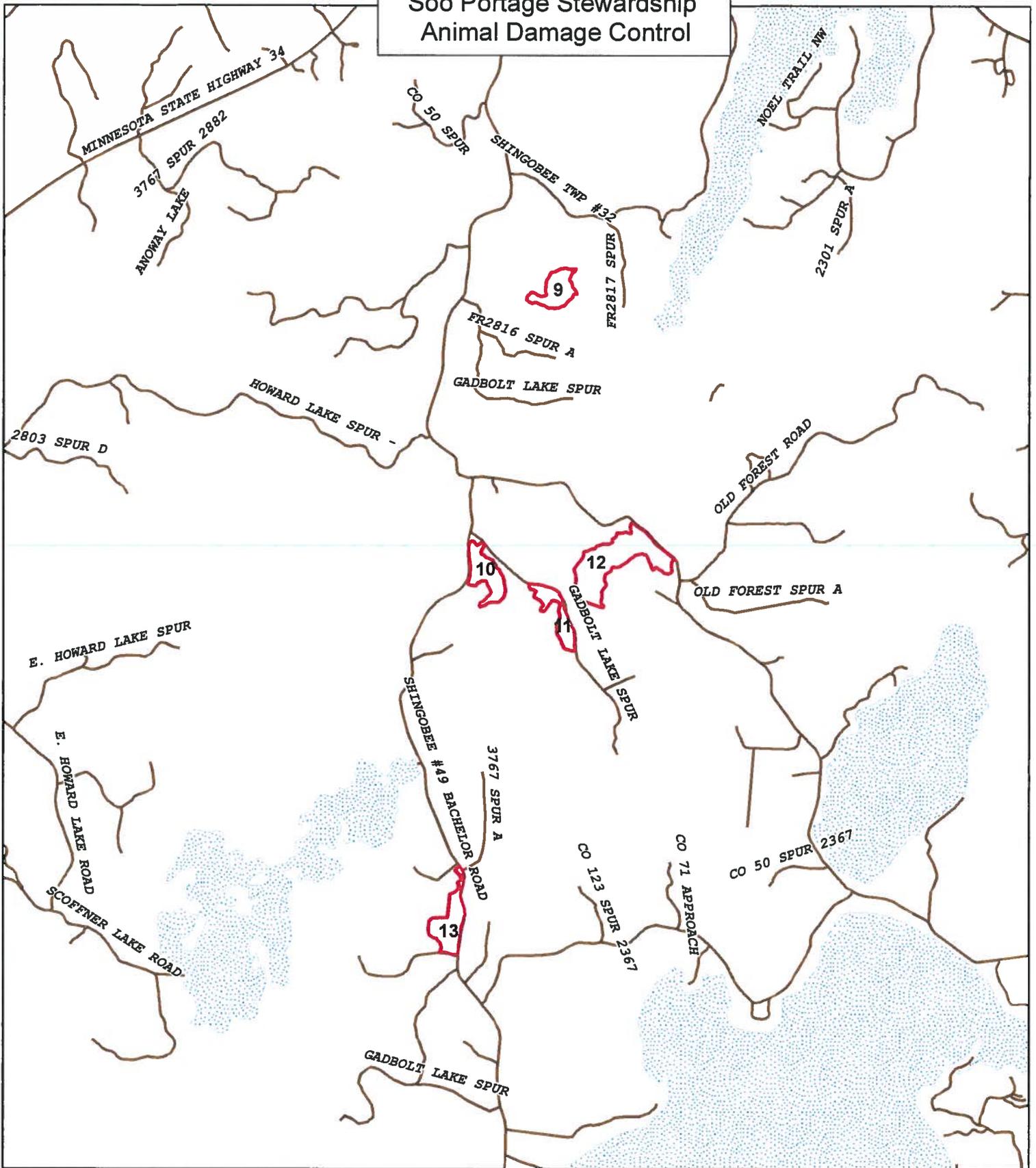
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0 0.325 0.65 1.3 Miles



# Soo Portage Stewardship Animal Damage Control



**Legend**

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