Humboldt Redwood
COMPANY, LLC

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February 2nd, 2012

Ms. Catherine Kuhlman
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd, Suite A
Santa Rosa, CA 95403

Subject: Enrollment of THP 1-11-090 HUM into the Freshwater WWDR, "Tier II"

Dear: Ms. Kuhlman

HRC is requesting Tier II enrollment under Watershed-Wide Waste Discharge Requirement (WWDR) for units 1 and 5 of THP 1-11-090 HUM. WB staff attended the PHI. Within their PHI report, staff stated that "*Incorporating these recommendations into the THP will make these units eligible for enrollment*". All recommendations were agreed to and incorporated into the plan. Therefore a standard tier II enrollment review package is not provided. Portions of the planned have been enrolled as Tier 1, so standard enrollment information, include the fee, have been previously provided to the Water Board.

While the THP is covered under the watershed wide WDR, the discharger is and will remain in compliance with the Terms and Provisions of this Order. No changes to the ECP for either plan have been noted since the previous enrollment of other portions of this THP.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information is, to the best of my knowledge and belief true, accurate and complete.

If you have any questions please call me.

Jon Woessner,
Area Forester, RPF 2571
Humboldt Redwood Company, LLC

Tier 2 Units 1 35

Morton Ridge

N *Topographic Map*

T4N R1E Sec. 14, 15, 22, 23 HB&M

USGS Quad(s): MCWHINNEY CREEK

Map Scale: 1 inch = 1000 feet

Contour Interval: 40 feet

Harvest Boundary
Permanent Road
Seasonal Road
Proposed Seasonal Road
Class I Watercourse
Class II Watercourse
Class III Watercourse
NSO Site
500' NSO Buffer
1000' NSO Buffer

No Group Selection will occur in Hazard Areas 1 or 2.

Hazard Area 1
Hazard Area 2

SHALSTAB Landslide Map
Hazard Areas 1 and 2
Reprinted for black and white copy

PART OF PLAN
RECEIVED
NOV 28 2011
COAST AREA
RESOURCE MANAGEMENT

50.1 (11-17-11)

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Table 1. Proposed 2012 Harvest in Freshwater Creek.

THP Name	THP Number	Unit Number	Silviculture CC	ROW	shr	SEL	CC Equivalent	Hazard Low	High*
Another Whiskey	11-007	2				8.7	4.4	8.7	0.0
Another Whiskey	11-007	7a				34.1	17.1	34.1	0.0
Another Whiskey	11-007	8				21.1	10.6	21.1	0.0
Morton Ridge	11-090	5				18.9	9.5	8.7	39.2
Morton Ridge	11-090	1		0.6		11.3	6.1	9.24	7.9
Another Whiskey	11-007	5				18.2	9.1	18.1	0.4
Whiskey	08-041	4				32	16.0	32	0.0
Whiskey	08-041	5				11.3	5.7	9.5	6.9
Morton ridge	11-090	2				8.6	4.3	8.6	0.0
Morton ridge	11-090	3				41.4	20.7	38	13.1
Morton ridge	11-090	4				27.6	13.8	24.9	10.4
							117.1		

*The acres represented here have been converted to High Hazard Acres by multiplying by 3.8404.

TBD - Planning is either in the approval or preperation stage. Acreages are not finalized yet. They will be finalized prior to enrollment

Highlight indicates a THP and Specific Unit to be enrolled prior to establishing an enforceable Zero Discharge Monitoring Plan (Tier I). Weighted Acreage Totals are listed below to demonstrate compliance with the Staff Landslide Model limit of 144 Harvest Acres in Freshwater Creek. Other THP Units will be enrolled after approval of the aforementioned Monitoring Plan

No Highlight Indicates a THP and Specific Unit to be enrolled after establishment of an enforcable Zero Discharge Monitoring Plan (Tier II).

Total Clear Cut Equivilant Acres enrolled or submitted for enrollment	117.1

Table 2. Summary of THPs to enrolled prior to establishment of Zero Discharge Monitoring Plan for Freshwater Creek

THP Number	Unit Number	Harvest Acres	Hazard Low	High*
11-090	2	8.6	8.6	0.0
11-090	3	41.4	38	13.1
11-007	2	8.7	8.7	0.0
11-090	4	27.6	24.9	10.4
11-007	7a	34.1	34.1	0.0
Totals		120.4	137.8	

Table 3. Summary of THPs by Yarding System and Site Preparation for Freshwater Creek

THP Name	THP Number	Unit Number	Yarding System Ground Based	Yarder	Helicopter	Site Preparation Mechanical	Broadcast
Another Whiskey	11-007	2	7.6	1.1		0	0
Another Whiskey	11-007	7a	0	34.1			
Another Whiskey	11-007	8	5.5	15.6			
Morton Ridge	11-090	5	0	18.9		0	0
Morton Ridge	11-090	1					
Another Whiskey	11-007	5	0	18.2			
Whiskey	08-041	4	19	13			
Whiskey	08-041	5	0	11.3			
Morton ridge	11-090	2	0	8.6			
Morton ridge	11-090	3	0.4	41			
Morton ridge	11-090	4	0	27.6			

Another Whiske	11-007	6a	0.4	44	22.4	42.8	4.60848	Another W 11-007	6a		16.3	28.1
Another Whiske	11-007	1	36.3	18.15	20	62.59852	Another W 11-007	1	11.8	14.9
Another Whiske	11-007	3	77.9	38.95	41.7	139.02248	Another W 11-007	3	7.2	70.7
Another Whiske	11-007	6b	17.7	8.85	6	44.93268	Another W 11-007	6b	0	17.7
another Whiske	11-007	7b	61.6	30.8	50.1	44.1646	another W 11-007	7b	1.3	54.9

Matt Rodriquez
Secretary for Environmental Protection

California Regional Water Quality Control Board
North Coast Region
Geoffrey M. Hales, Chairman

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Edmund G. Brown Jr.
Governor

JAN 03 2012

UNIT, RPF, PLANSUB, ftp/NEW

Pre-harvest Inspection (PHI) Report and

Watershed-wide Waste Discharge Requirements (WWDR), R1-2006-0041,

Enrollment Evaluation for

Timber Harvest Plan (THP) 1-11-090 HUM "Morton Ridge"

RECEIVED
DEC 28 2011
COAST AREA OFFICE
RESOURCE MANAGEMENT

Date: November 16, 2011

To: Mark Alpert, Senior Southern Timber Unit

Subject: Pre-harvest Inspection and WWDR enrollment evaluation, THP 1-11-090 HUM, "Morton Ridge"

From: Dr. Matthew Buffleben, Water Resource Control Engineer, P.E. #C65694

Watershed
Freshwater Creek

CWA 303(d) Listed
Sediment

Planning Watershed Calwater (2.2):
SF Freshwater - 1110.000103

Landowner
Humboldt Redwood Company

Silviculture
Selection: 16.9 ac
Group selection: 90.9 ac
Road Right of Way: 0.6 ac
No Harvest: 9 ac
Total harvest area: 117.4 ac

Erosion Hazard Rating (EHR)
Moderate

Site Preparation
None

Harvesting Practices
Tractor, skidder, and cable

Winter Operations
Equipment, felling and hauling allowed under restrictions listed in plan

Roads and Landings
Approximately 700' of new road

Watercourses
Class I, II and III
No harvest in inner zones

Erosion Control Plan
Yes

WLPZ In Lieu Practices
WLPZ directional felling

PHI Attendance on September 6, 2011:
Dr. Matthew Buffleben, North Coast Regional Water Quality Control Board
William Forsberg, California Department of Forestry and Fire Protection (CAL FIRE)
Jim Falls, California Geological Survey
Dave Rogers, RPF, Humboldt Redwood Company

Introduction

On November 3, 2011, I participated as part of the Review Team in the Pre-harvest Inspection (PHI) for Timber Harvest Plan (THP) 1-11-090 HUM, "Morton Ridge." The purpose of Regional Water Board staff participation in the PHI was to evaluate the potential impacts to water quality from proposed timber harvest, associated road construction and reconstruction, and related activities, and evaluate the Project for compliance with all applicable water quality regulations included in the Water Quality Control Plan for the North Coast Region (Basin Plan).

Timber Harvest Projects on private lands within the North Coast Region must be permitted under either Waste Discharge Requirements or a Waiver of waste discharge requirements. The North Coast Regional Water Quality Control Board (Regional Water Board) has adopted Watershed-wide Waste Discharge Requirements (WWDRs) under Order No. R1-2006-0041 to provide coverage for THPs operated by Humboldt Redwood Company in the Freshwater Creek watershed.

PHI observations

The inspection team examined sample mark in Unit #1. The sample mark was well distributed throughout the unit with no group openings.

The Work Order for Road Repair/Construction contained two locations of cracking and settling (Road X 1600-1630 and Road X98 380-420). These sites have the potential to become debris slides which could reach watercourses. There has been previous road/landing failures along the road system in this portion of Freshwater Creek. Therefore, these two locations shall be added to the Erosion Control Plan (**Recommendation #1**). Also, Road X98 should be evaluated after logging operations to determine if additional road fill needs to be removed.

Another concern for this THP was the potential for group openings in steep convergent areas above the heads of Class III watercourses. Although the sample mark in Unit #1 was well distributed, Units #3, #4 and #5 have not been marked. These units contain several steep convergent areas above Class III watercourses. These locations are

easily identified in the SHALSTAB landslide hazard map as hazard levels 1 and 2 near the heads of Class III watercourses (the SHALSTAB landslide map for this THP was provided to the Regional Water Board as part of the WWDR enrollment evaluation). Since these locations are source areas for debris flows, I recommend no group selection in these steep convergent areas near the head of Class III watercourses as identified as hazard areas 1 and 2 by the SHALSTAB landslide map **(Recommendation #2)**.

The lower portion of Unit #3 contains the old railroad grade. Portions of the railroad grade form a large through-cut. Two small Class III watercourses pass underneath the outside berm of the through-cut. The berm in one of these locations is quite substantial (over 10' in height). However, there is no sign of failure or potential failure at this location. Furthermore, the through-cut was well vegetated with no signs of erosion.

Recommendations

1. Road work sites X 1600-1630 and X98 380-420 shall be added to the Erosion Control Plan.

2. No group selection in steep convergent areas near the head of Class III watercourses as identified as hazard areas 1 and 2 by the SHALSTAB landslide map.

Incorporating these recommendations into the THP will make these units eligible for enrollment in the WWDRs.

Please note that only portions of the proposed project were reviewed during the PHI due to time restrictions, limitations of the area covered and scope of the PHI. Therefore, these comments cannot be deemed adequate to protect against all foreseeable impacts to water quality.

N

From: Robbins, James
Sent: Wednesday, December 28, 2011 2:15 PM
To: Markham, Leslie; Markiewicz, Beth
Subject: WQ PHI Report 1-11-090 HUM
Attachments: MX-2600N_20111228_152125.pdf

FYI

James M. Robbins
Forester II, Fortuna Resource Management
Department of Forestry and Fire Protection
CAL FIRE
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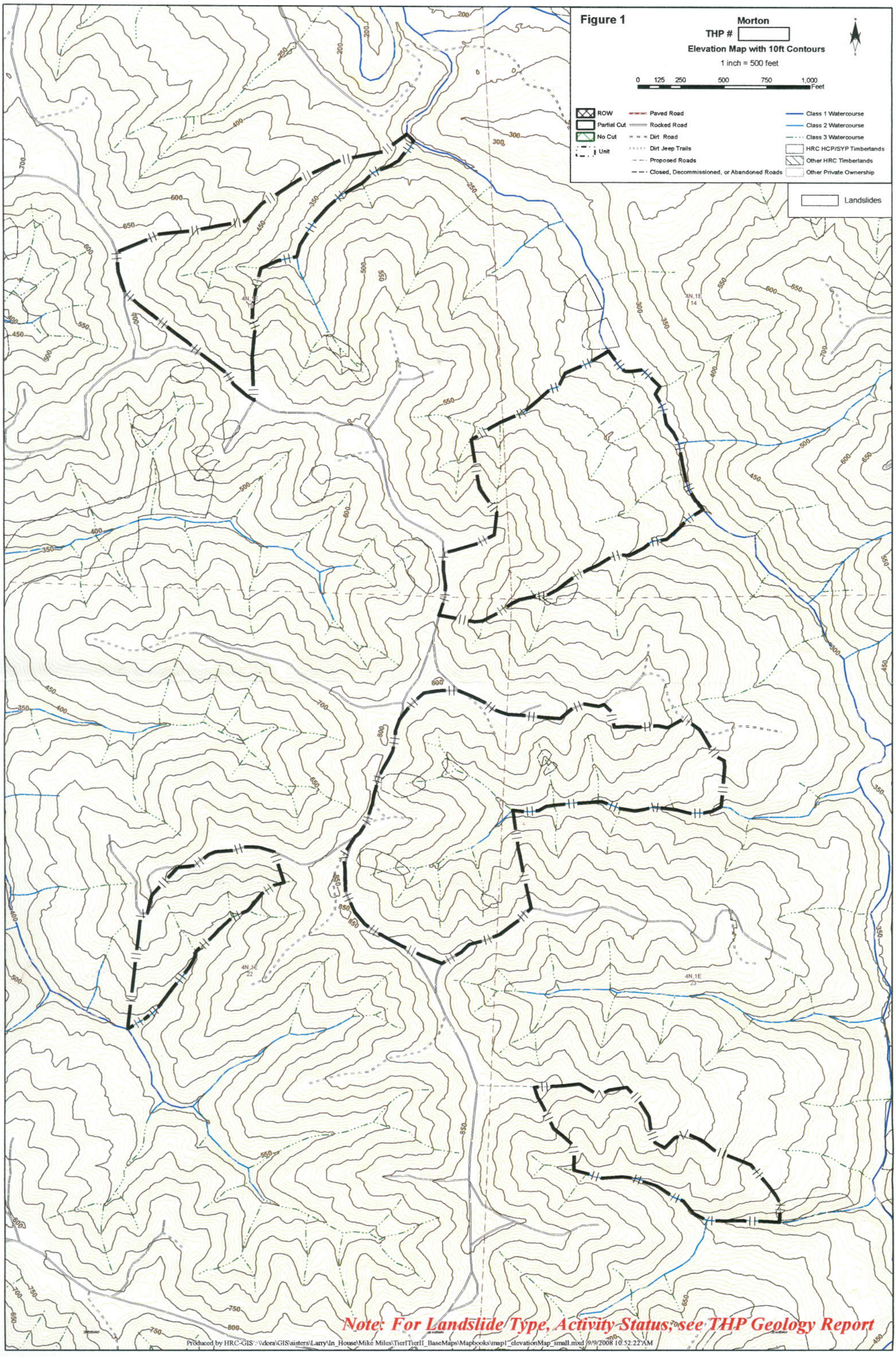
Figure 1
Morton
THP #
Elevation Map with 10ft Contours
1 inch = 500 feet
0 125 250 500 750 1,000 Feet
ROW
Partial Cut
No Cut
Unit
Paved Road
Rocked Road
Dirt Road
Dirt Jeep Trails
Proposed Roads
Closed, Decommissioned, or Abandoned Roads
Class 1 Watercourse
Class 2 Watercourse
Class 3 Watercourse
HRC HCP/SYP Timberlands
Other HRC Timberlands
Other Private Ownership
Landslides
4N,1E 14
4N,1E 22
4N,1E 23
Note: For Landslide Type, Activity Status, see THP Geology Report
Produced by HRC-GIS: \\dora\GIS\sisters\Larry\In_House\Mike Miles\TierITierII_BaseMaps\Mapbooks\map1_elevationMap_small.mxd 9/9/2008 10:52:22 AM

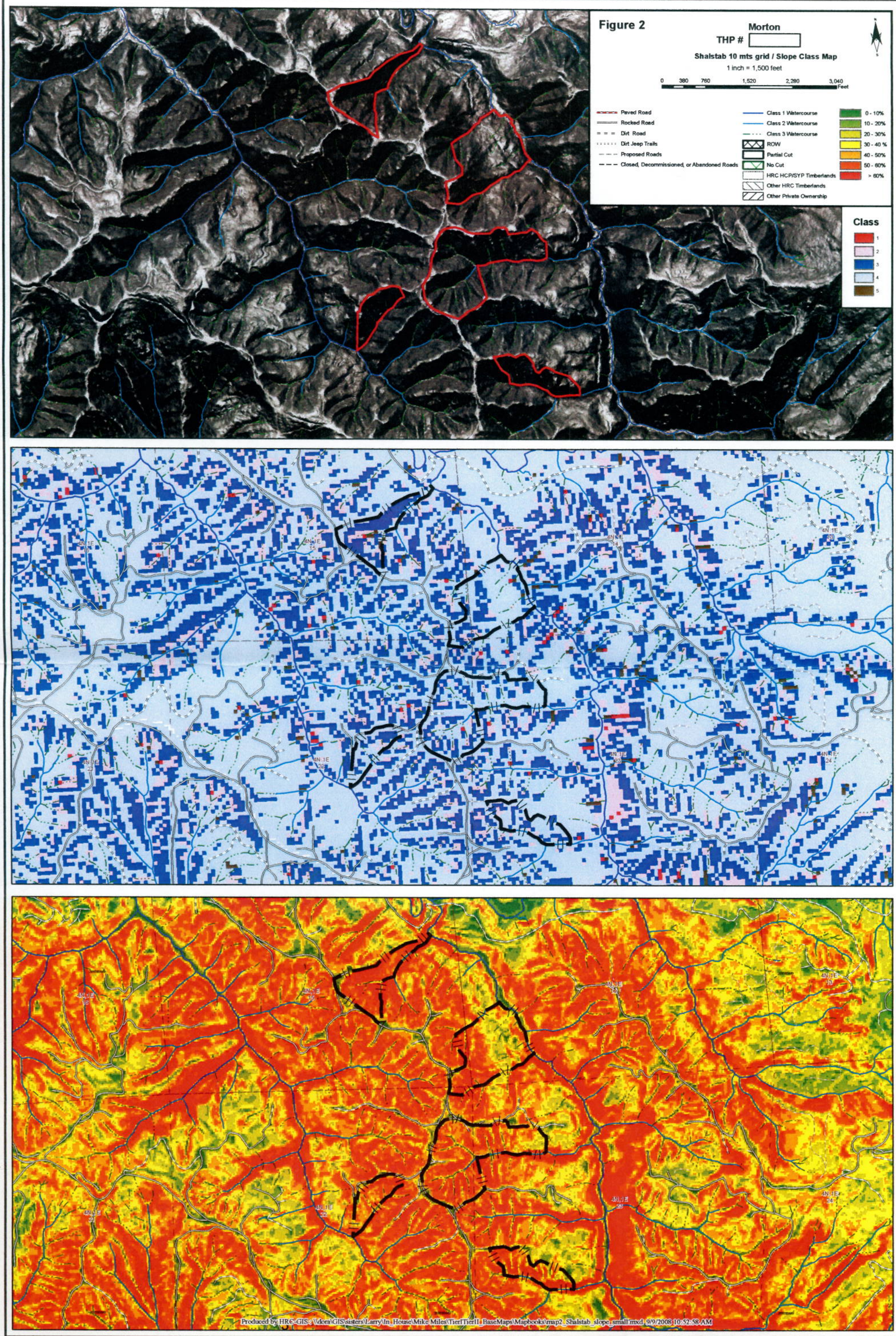
Figure 2
Morton
THP #
Shalstab 10 mts grid / Slope Class Map
1 inch = 1,500 feet
0 380 760 1,520 2,280 3,040 Feet
Paved Road
Rocked Road
Dirt Road
Dirt Jeep Trails
Proposed Roads
Closed, Decommissioned, or Abandoned Roads
Class 1 Watercourse
Class 2 Watercourse
Class 3 Watercourse
ROW
Partial Cut
No Cut
HRC HCP/SYP Timberlands
Other HRC Timberlands
Other Private Ownership
0 - 10%
10 - 20%
20 - 30%
30 - 40 %
40 - 50%
50 - 60%
> 60%
Class
1
2
3
4
5
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Q Recent Alluvium: Holocene (less than 10,000 years old). Interbedded gravel, sand, silt and clay within active stream channel and adjoining flood plain. Dike-protected pastures may be underlain by bay mud at northwestern end of flood plain.

Qfa Falor Formation (Knudsen, 1993): Late Pleistocene to late Pliocene (approximately 0.4 to 1.6 m.y.). Reddish-yellow pebbly conglomerate, sandstone and silt. Contains abundant animal and plant remains locally. May lie in gradational contact with Wildcat Group Upper Unit of Knudsen (1993). Fluvial and shallow marine depositional environment.

Qrt Alluvial Terrace Deposits: Probably late Pleistocene (more than 10,000 years old). Poorly consolidated flat-lying deposits of gravel, sand, silt and clay elevated above present streams.

TWu Wildcat Group- Upper Unit (Knudsen, 1993): Late Pleistocene to Late Pliocene (approximately 0.4 to 1.6 m.y.). Reddish-yellow fine- to medium-grained sandstone containing scattered pebble layers (<10%). Previously mapped as Hookton Formation in the southwest portion of the drainage and Falor Formation in the northeast. Depositional environment is generally shallow marine.

Twl Wildcat Group-Lower Unit (Knudsen, 1993): Middle Miocene to Late Pliocene (approximately 1.6 to 13 m.y.). Interbedded mudstone, silty, very fine sandstone and sandy siltstone. Upper portions of the unit are typically reddish-yellow, lower portions are gray to dark gray. Lower protions sandier and contain occasional pebble and conglomerate lenses.

Ty Yager Formation: Early Tertiary (approximately 50 to 60 m.y.) Interbedded well-consolidated silty shale, siltstone, sandstone, mudstone and conglomerate. Clasts of the shale and mudstone disaggregate over the course of several seasons by repeated wetting and drying cycles. Sandstone units are generally massive (no visible bedding) and contain detrital muscovite. Medium gray where fresh. Finer grained materials are often well bedded. The unit in this locality is mapped as dipping steeply to the northeast.

Kjfs Central Belt of the Franciscan Complex, Sedimentary Rocks: Cretaceous/Jurassic (approximately 145 m.y.). Well consolidated sandstone, siltstone, and shale with minor amounts of conglomerate. Medium to dark gray where fresh. This unit is described as moderately to highly deformed and highly sheared locally.

Kjfm Melange: Highly sheared shale matrix containing individual blocks of graywacke, mudtone, conglomerate, greenstone, chert, blueschist, greenschist, actinolite, talc and serpentinite.

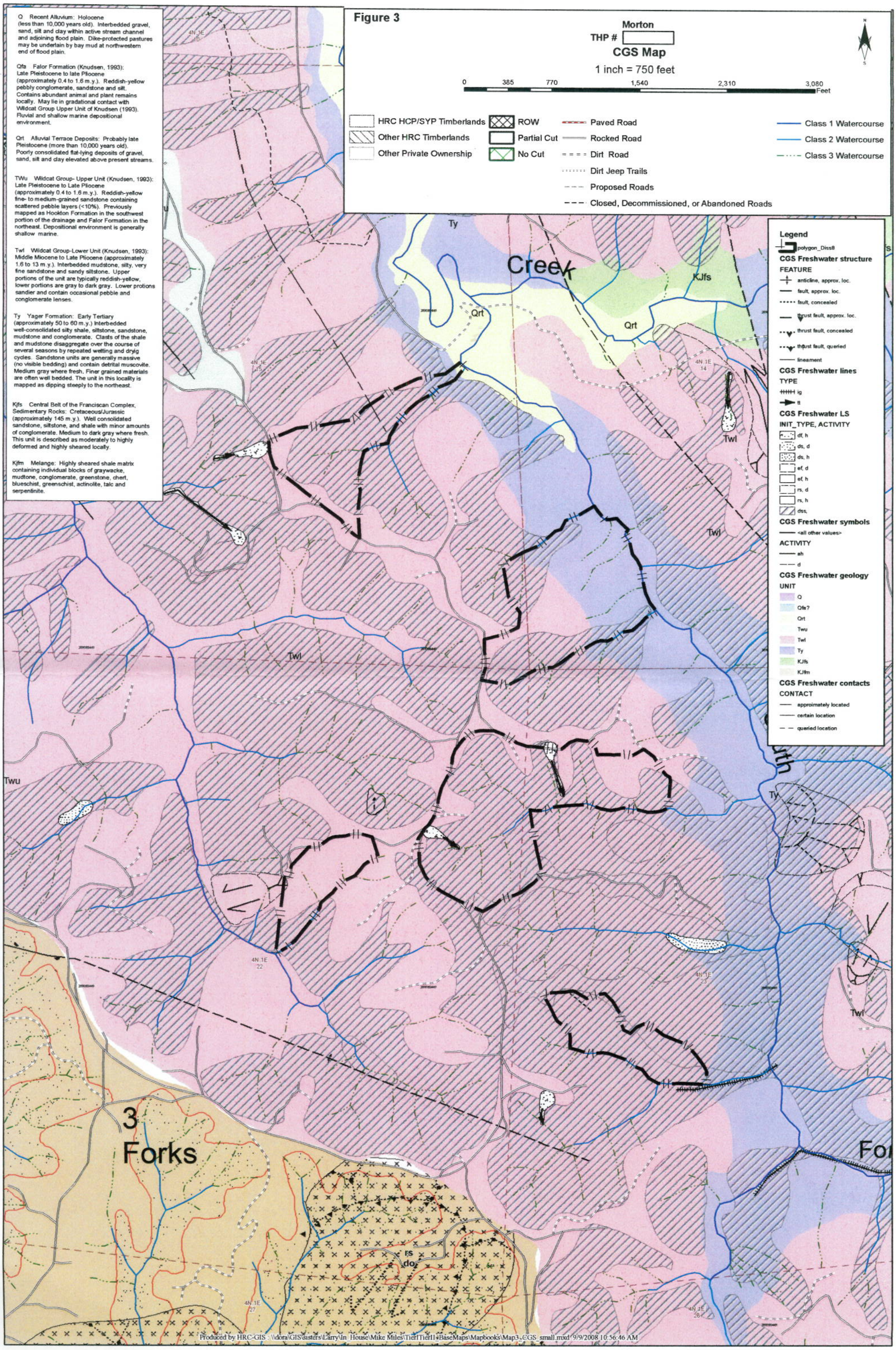
Figure 3

Morton
THP # [ ]
CGS Map
1 inch = 750 feet

0 385 770 1,540 2,310 3,080 Feet

HRC HCP/SYP Timberlands
Other HRC Timberlands
Other Private Ownership
ROW
Partial Cut
No Cut
Paved Road
Rocked Road
Dirt Road
Dirt Jeep Trails
Proposed Roads
Closed, Decommissioned, or Abandoned Roads
Class 1 Watercourse
Class 2 Watercourse
Class 3 Watercourse

Legend
polygon_Diss8
CGS Freshwater structure
FEATURE
anticline, approx. loc.
fault, approx. loc.
fault, concealed
thrust fault, approx. loc.
thrust fault, concealed
thrust fault, queried
lineament
CGS Freshwater lines
TYPE
ig
tt
CGS Freshwater LS
INIT_TYPE, ACTIVITY
df, h
ds, d
ds, h
ef, d
ef, h
rs, d
rs, h
dss,
CGS Freshwater symbols
<all other values>
ACTIVITY
ah
d
CGS Freshwater geology
UNIT
Q
Qfa?
Qrt
Twu
Twl
Ty
KJfs
KJfm
CGS Freshwater contacts
CONTACT
approimately located
certain location
queried location



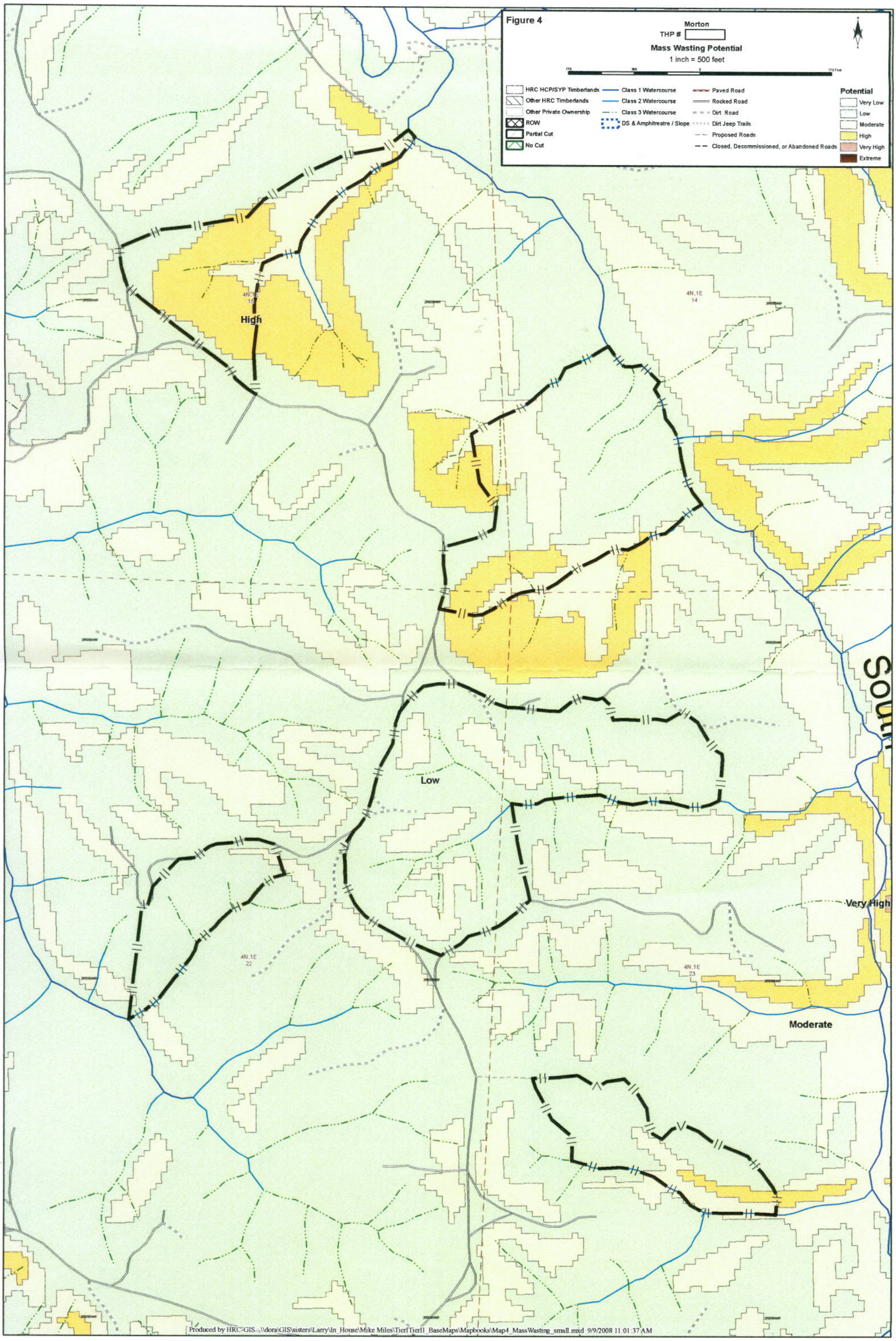


Figure 4
Morton
THP #
Mass Wasting Potential
1 inch = 500 feet
HRC HCP/SYP Timberlands
Other HRC Timberlands
Other Private Ownership
ROW
Partial Cut
No Cut
Class 1 Watercourse
Class 2 Watercourse
Class 3 Watercourse
DS & Amphitreatre / Slope
Paved Road
Rocked Road
Dirt Road
Dirt Jeep Trails
Proposed Roads
Closed, Decommissioned, or Abandoned Roads
Potential
Very Low
Low
Moderate
High
Very High
Extreme
High
Low
Very High
Moderate
4N,1E
14
4N,1E
22
4N,1E
23
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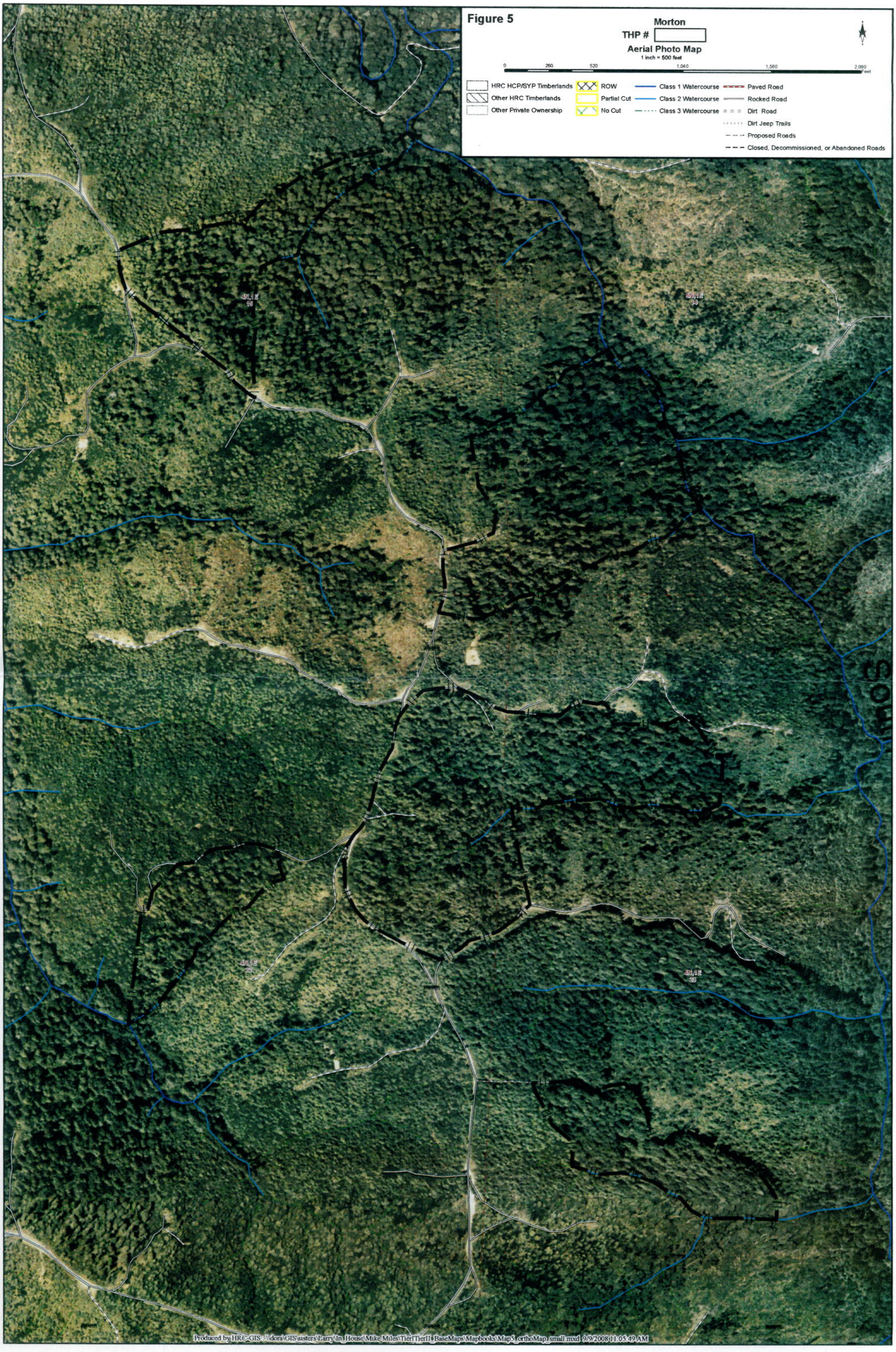
Figure 5
Morton
THP #
Aerial Photo Map
1 inch = 500 feet
0
260
520
1,040
1,560
2,080
Feet
HRC HCP/SYP Timberlands
Other HRC Timberlands
Other Private Ownership
ROW
Partial Cut
No Cut
Class 1 Watercourse
Class 2 Watercourse
Class 3 Watercourse
Paved Road
Rocked Road
Dirt Road
Dirt Jeep Trails
Proposed Roads
Closed, Decommissioned, or Abandoned Roads
4N,1E
22
4N,1E
23
4N,1E
26
4N,1E
27
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Figure 6

THP # Morton

Watershed Analysis Deep-Seated Landslide

1 inch = 500 feet

0 265 530 1,060 1,590 2,120 Feet

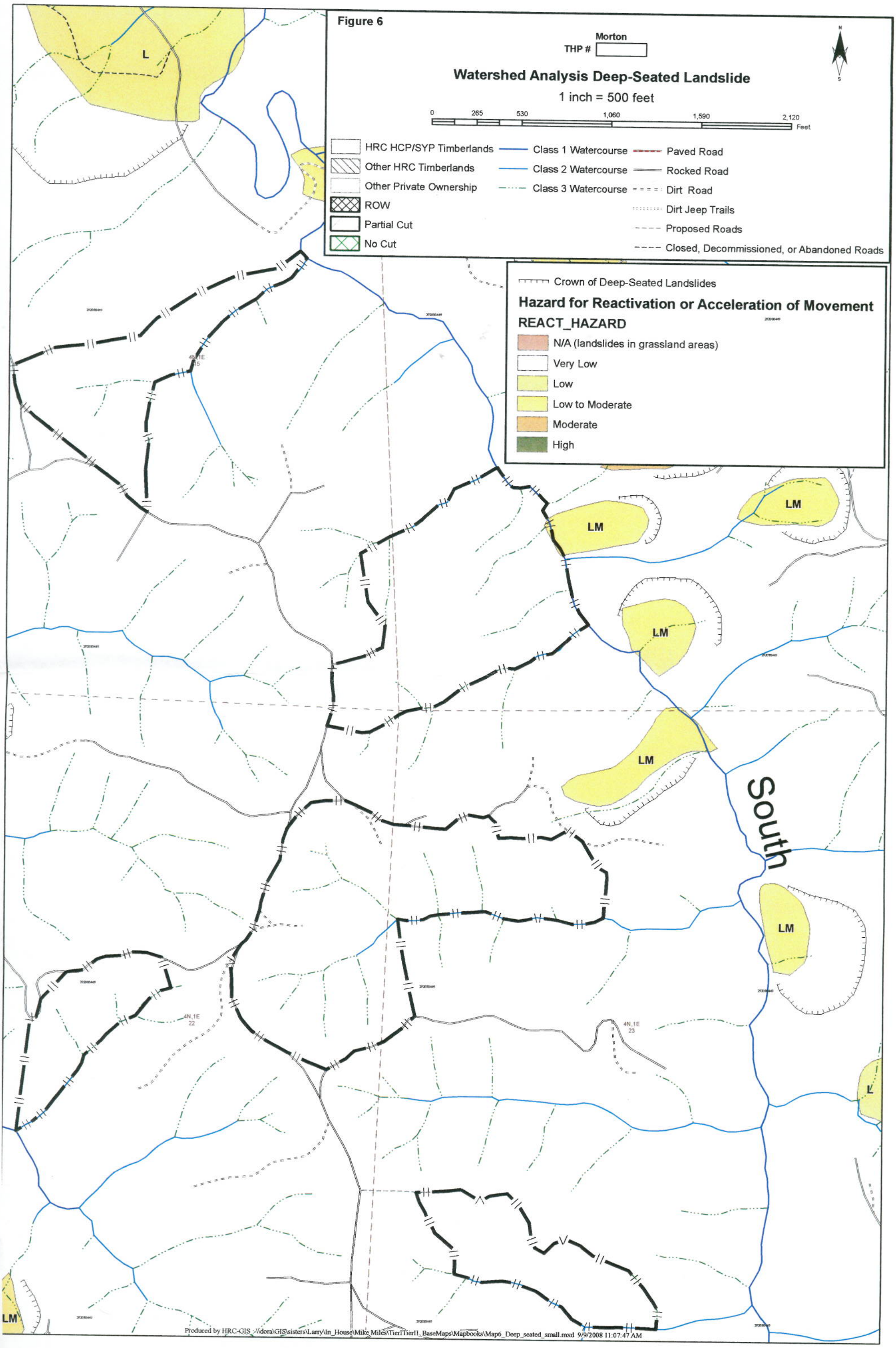
N S

- HRC HCP/SYP Timberlands
- Other HRC Timberlands
- Other Private Ownership
- ROW
- Partial Cut
- No Cut
- Class 1 Watercourse
- Class 2 Watercourse
- Class 3 Watercourse
- Paved Road
- Rocked Road
- Dirt Road
- Dirt Jeep Trails
- Proposed Roads
- Closed, Decommissioned, or Abandoned Roads
- Crown of Deep-Seated Landslides

Hazard for Reactivation or Acceleration of Movement

REACT_HAZARD

- N/A (landslides in grassland areas)
- Very Low
- Low
- Low to Moderate
- Moderate
- High



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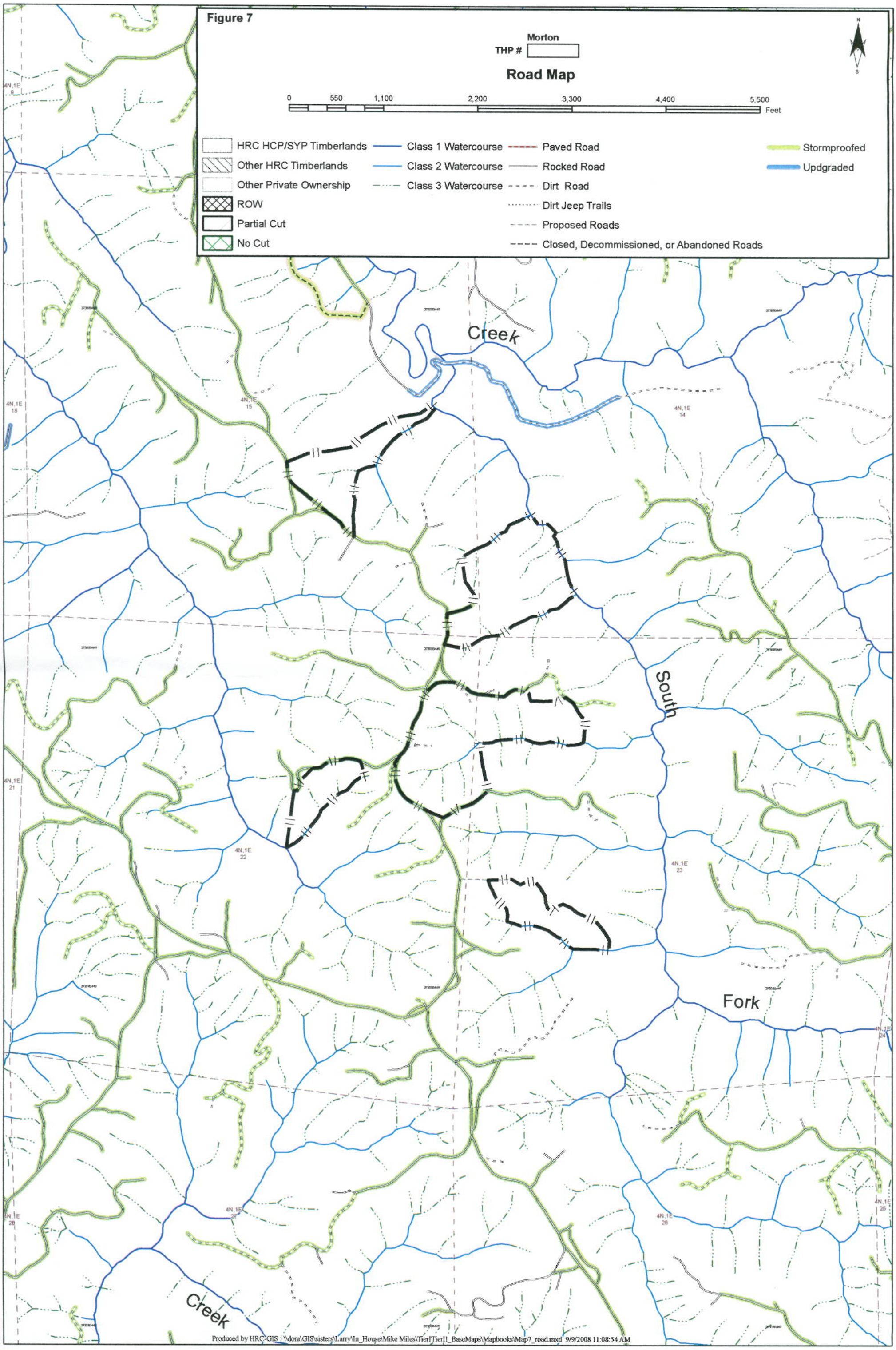
Figure 7
Morton
THP #
Road Map
0
550
1,100
2,200
3,300
4,400
5,500
Feet
HRC HCP/SYP Timberlands
Other HRC Timberlands
Other Private Ownership
ROW
Partial Cut
No Cut
Class 1 Watercourse
Class 2 Watercourse
Class 3 Watercourse
Paved Road
Rocked Road
Dirt Road
Dirt Jeep Trails
Proposed Roads
Closed, Decommissioned, or Abandoned Roads
Stormproofed
Updgraded
Creek
South
Fork
Creek
4N,1E 9
4N,1E 16
4N,1E 15
4N,1E 14
4N,1E 21
4N,1E 22
4N,1E 23
4N,1E 24
4N,1E 28
4N,1E 27
4N,1E 26
4N,1E 25
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