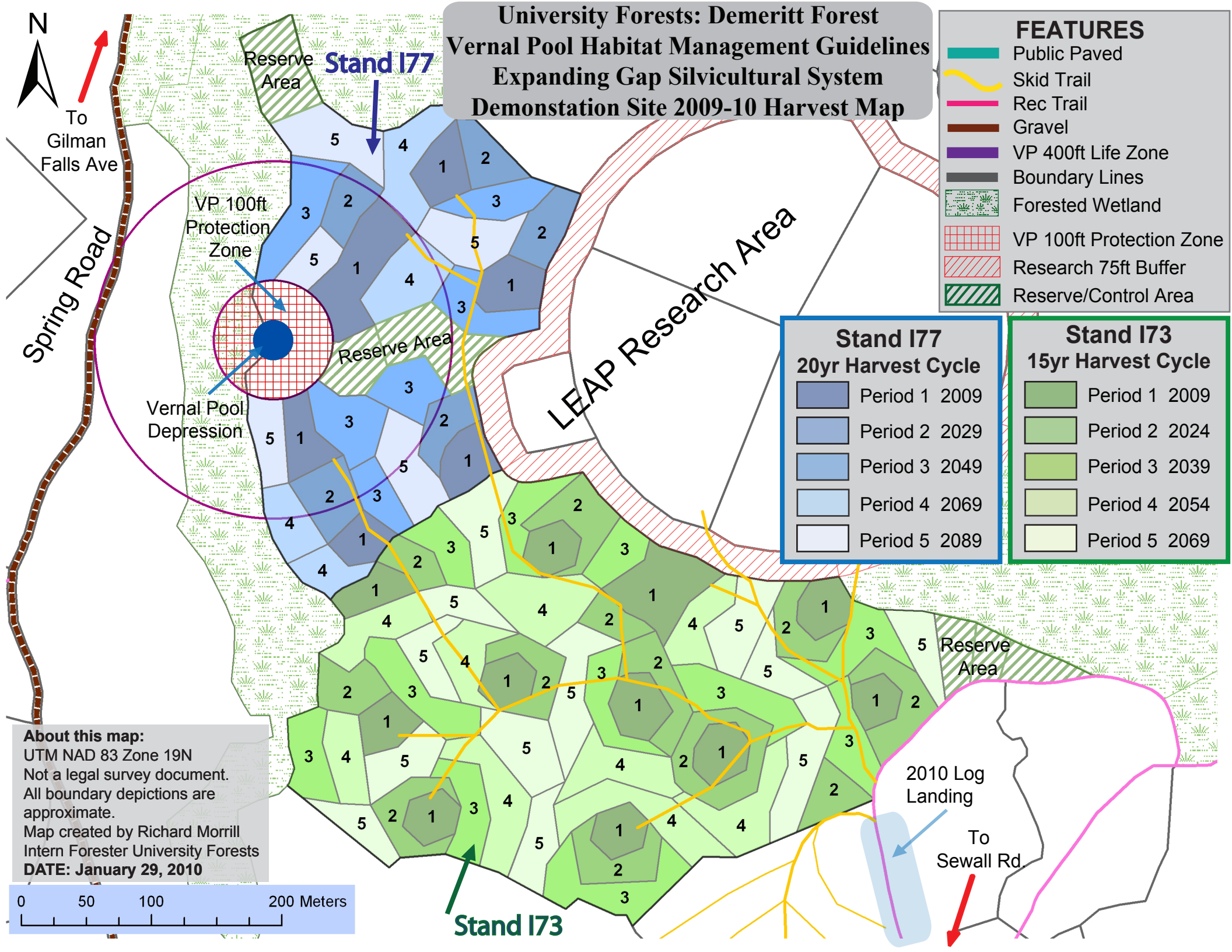
University Forests: Demeritt Forest
Vernal Pool Habitat Management Guidelines
Expanding Gap Silvicultural System
Demonstation Site 2009-10 Harvest Map
N
To Gilman Falls Ave
Spring Road
Reserve Area
Stand I77
VP 100ft Protection Zone
Vernal Pool Depression
Reserve Area
LEAP Research Area
FEATURES
Public Paved
Skid Trail
Rec Trail
Gravel
VP 400ft Life Zone
Boundary Lines
Forested Wetland
VP 100ft Protection Zone
Research 75ft Buffer
Reserve/Control Area
Stand I77
20yr Harvest Cycle
Period 1 2009
Period 2 2029
Period 3 2049
Period 4 2069
Period 5 2089
Stand I73
15yr Harvest Cycle
Period 1 2009
Period 2 2024
Period 3 2039
Period 4 2054
Period 5 2069
Reserve Area
2010 Log Landing
To Sewall Rd.
Stand I73
About this map:
UTM NAD 83 Zone 19N
Not a legal survey document.
All boundary depictions are approximate.
Map created by Richard Morrill
Intern Forester University Forests
DATE: January 29, 2010
0 50 100 200 Meters

University Forests: Demeritt Forest Field Tour Handout
Vernal Pool Habitat Management Guidelines & Expanding Gap Silvicultural System

Tour Stop 2: Vernal Pool Habitat Management Guidelines

Background: A collaborative effort involving state and federal agencies, forest managers, and the conservation community produced a set of Habitat Management Guidelines (HMGs) for Vernal Pools. The guidelines, (Calhoun & deMaynadier 2004), provide managers with details about both vernal pool ecology and recommendations for appropriate silviculture and harvesting practices in the vicinity of vernal pools.

Vernal Pool HMG Details: 3 VP Zones

Zone 1: VP Depression
Description: Site of amphibian breeding and predator feeding
Guidelines: Do not Disturb

Zone 2: VP Protection Zone -100ft from VP-
Description: Critical upland staging habitat for juvenile amphibians
Guidelines: Limited harvest retain >75% canopy cover & retain abundant CWM

Zone 3: Amphibian Life Zone -Area between 100ft & 400ft from VP-
Description: Important upland habitat for pool breeding amphibians
Guidelines: Limited harvest retain >50% canopy cover & retain/recruit abundant CWM

University Forests HMG Implementation:
Adapted expanding gap approach to satisfy the Vernal Pool HMGs

- Designed gaps and expansions to maintain habitat connectivity between pool and upland habitats (loosely organized like spokes on a wheel)
- Treated all of stand (outside zone 2) as if within Zone 3
- Used area control method to maintain >50% of stand in desirable habitat (table 5)
- Retention tree selection focus on CWM maintenance and recruitment (table 6)
- No machine entry into Zone 2
- Reserve/control area designated to foster connectivity goals

Gap Sizes over 5 Entry Periods

(Table 4)

Stand	Mode Gap Size (Ac)	Min Gap Size(Ac)	Max Gap Size (Ac)
I77	0.40	0.32	0.92
I73	0.40	0.28	0.85

(Table 5)
Stand I77

Entry Period	Acres non Habitat	Percent of Stand Area
1	3.0	23%
2	5.1	39%
3	5.3	41%
4	5.2	40%
5	4.8	37%
Average		36%

(Table 6)

Retention Tree Selection Criteria
Species diversity
Snag/CWM current
Snag/CWM recruit.
Seed production
Crown spacing
Crown form/class
Stem form/quality
BT sprout supress