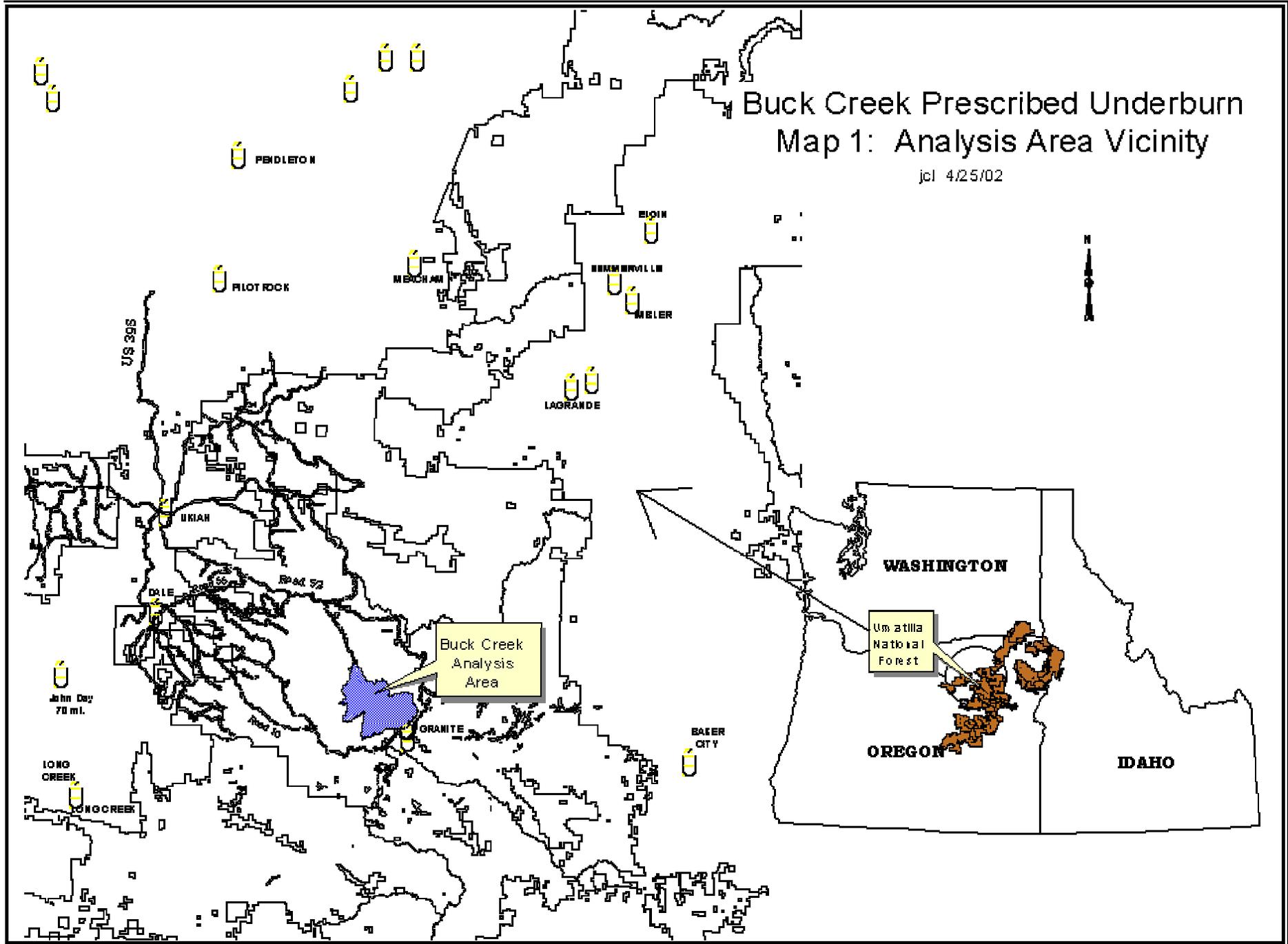


APPENDIX A

MAPS

Buck Creek Prescribed Underburn Map 1: Analysis Area Vicinity

jcl 4/25/02



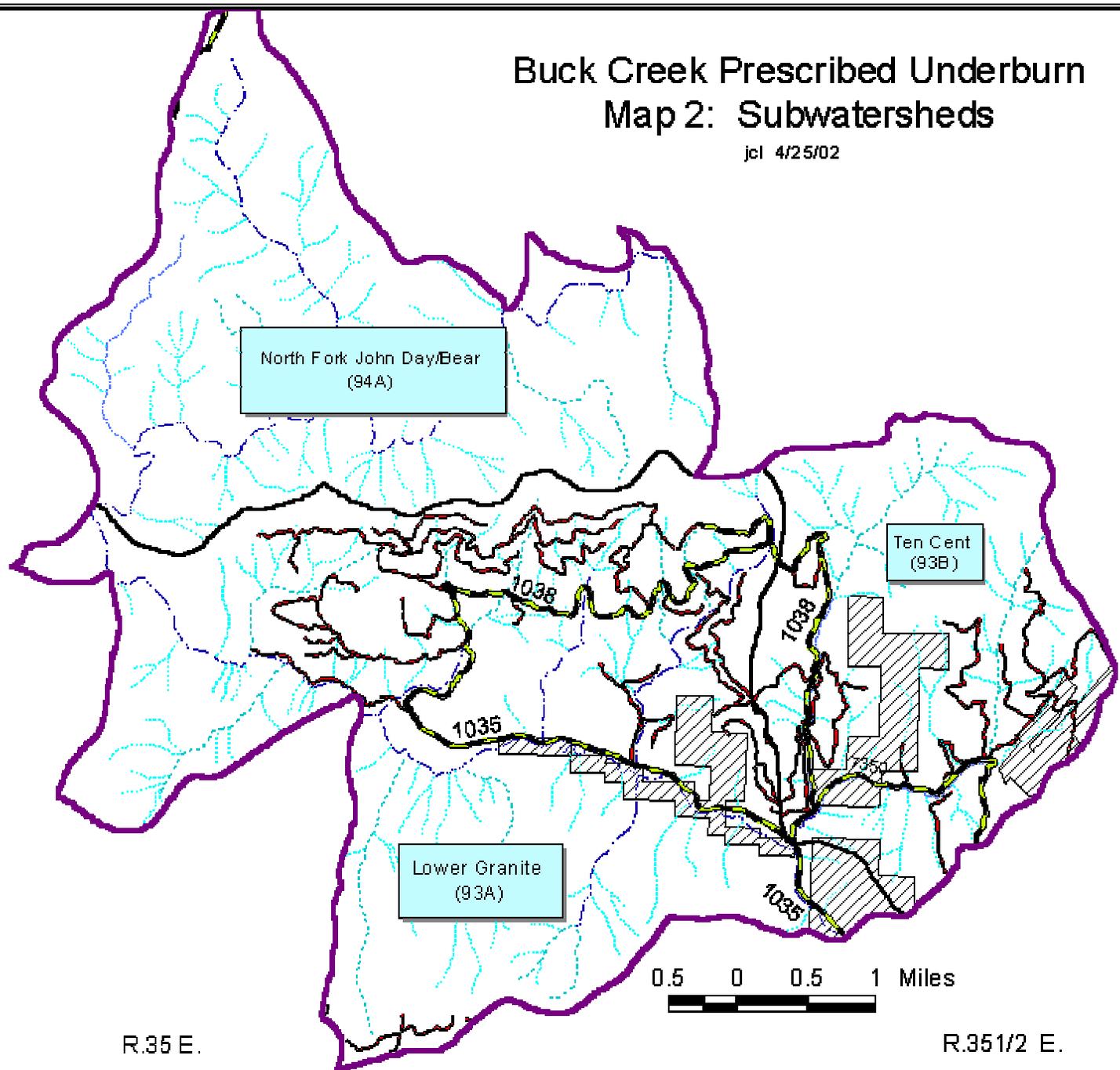
Buck Creek Prescribed Underburn

Map 2: Subwatersheds

jcl 4/25/02

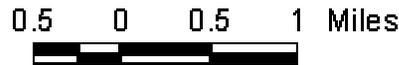


T
08
S



Legend

- Analysis area
- Subwatershed boundary
- Open roads
- Closed roads
- Streams**
- Stream Class 1
- Stream Class 2
- Stream Class 3
- Stream Class 4
- Private land



R.35 E.

R.35 1/2 E.

Buck Creek Prescribed Underburn

Map 3: Forest Plan Management Areas

jcl 4/25/02



Legend

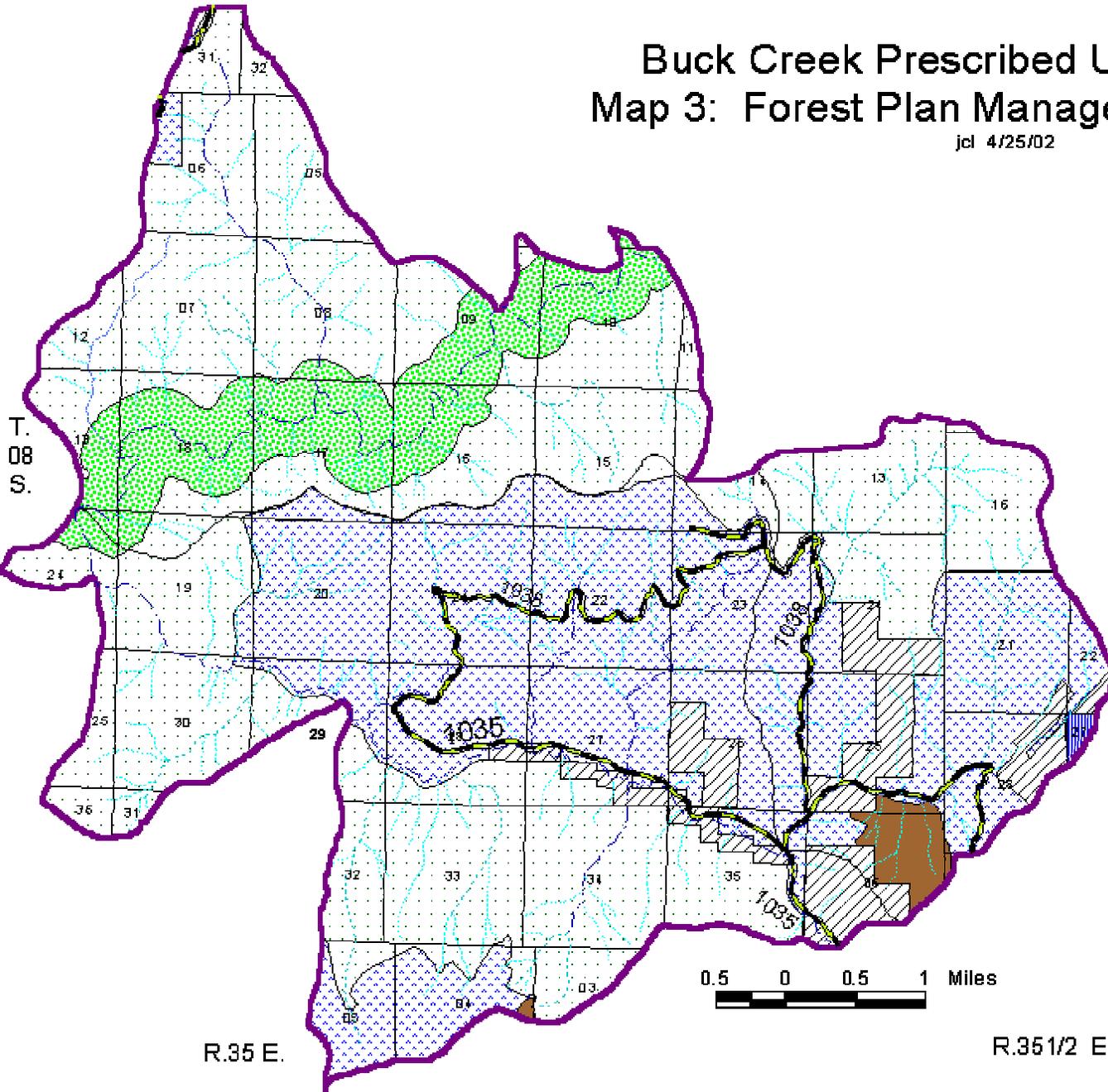
- Analysis area
- Sections
- Open roads
- Streams**
 - Stream Class 1
 - Stream Class 2
 - Stream Class 3
 - Stream Class 4
- Management Strategy Areas**
 - 18 Anadromous Fish Emphasis (WAW)
 - B1 Wilderness
 - B7 Wild & Scenic
 - C1 Dedicated Old Growth
 - C7 Special Fish Management
 - Private land

0.5 0 0.5 1 Miles



R.35 E.

R.35 1/2 E.



Buck Creek Prescribed Underburn Map 4: Alternative 2

jcl 4/25/02



Legend

-  Analysis area
-  Sections
-  Open roads
-  Closed roads
- Streams
-  Stream Class 1
-  Stream Class 2
-  Stream Class 3
-  Stream Class 4
-  Contours
-  Units
- Ownership
-  Private

* Unit 1 falls within the
North Fork John Day
Wilderness.

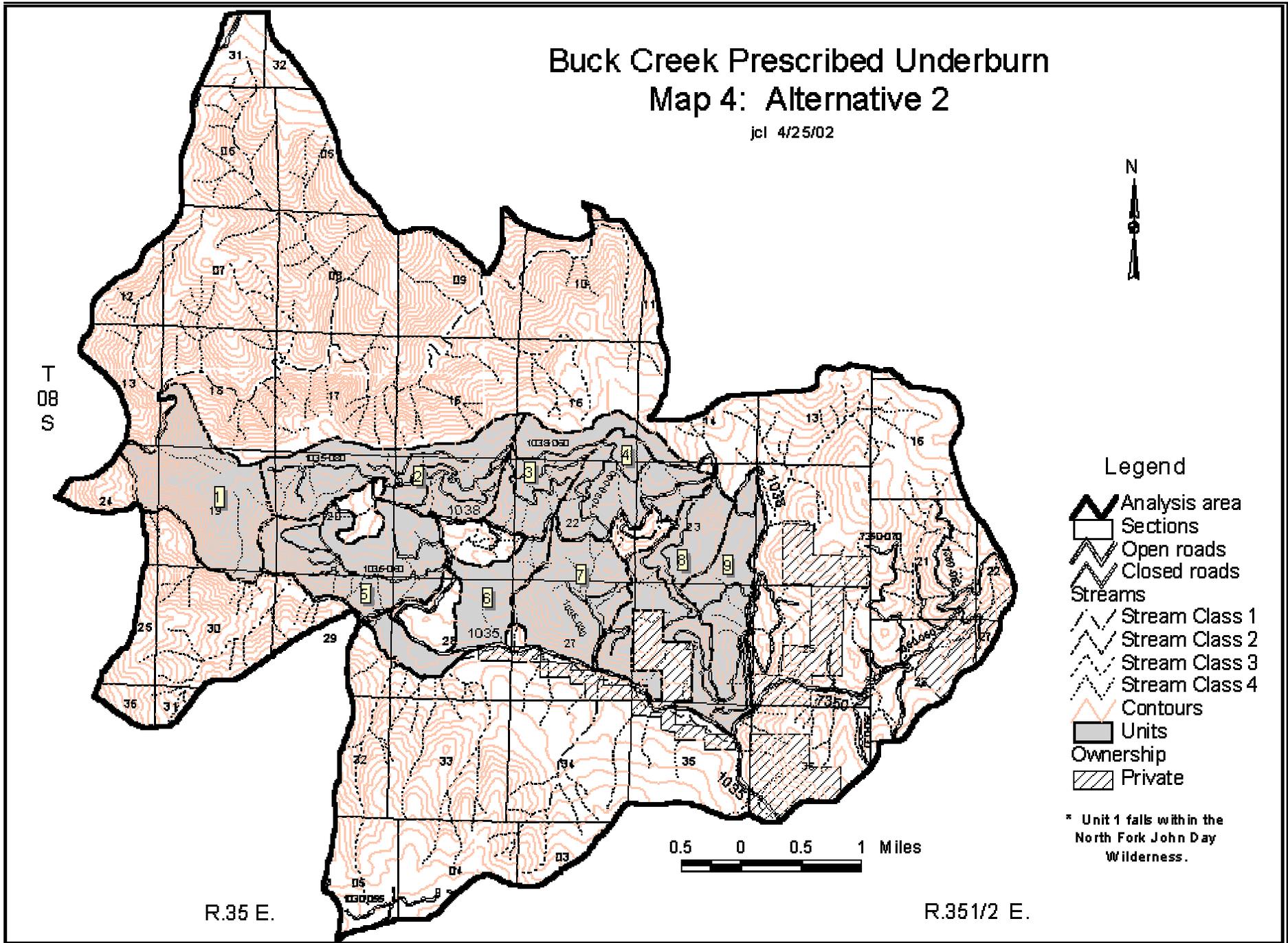
0.5 0 0.5 1 Miles



R.35 E.

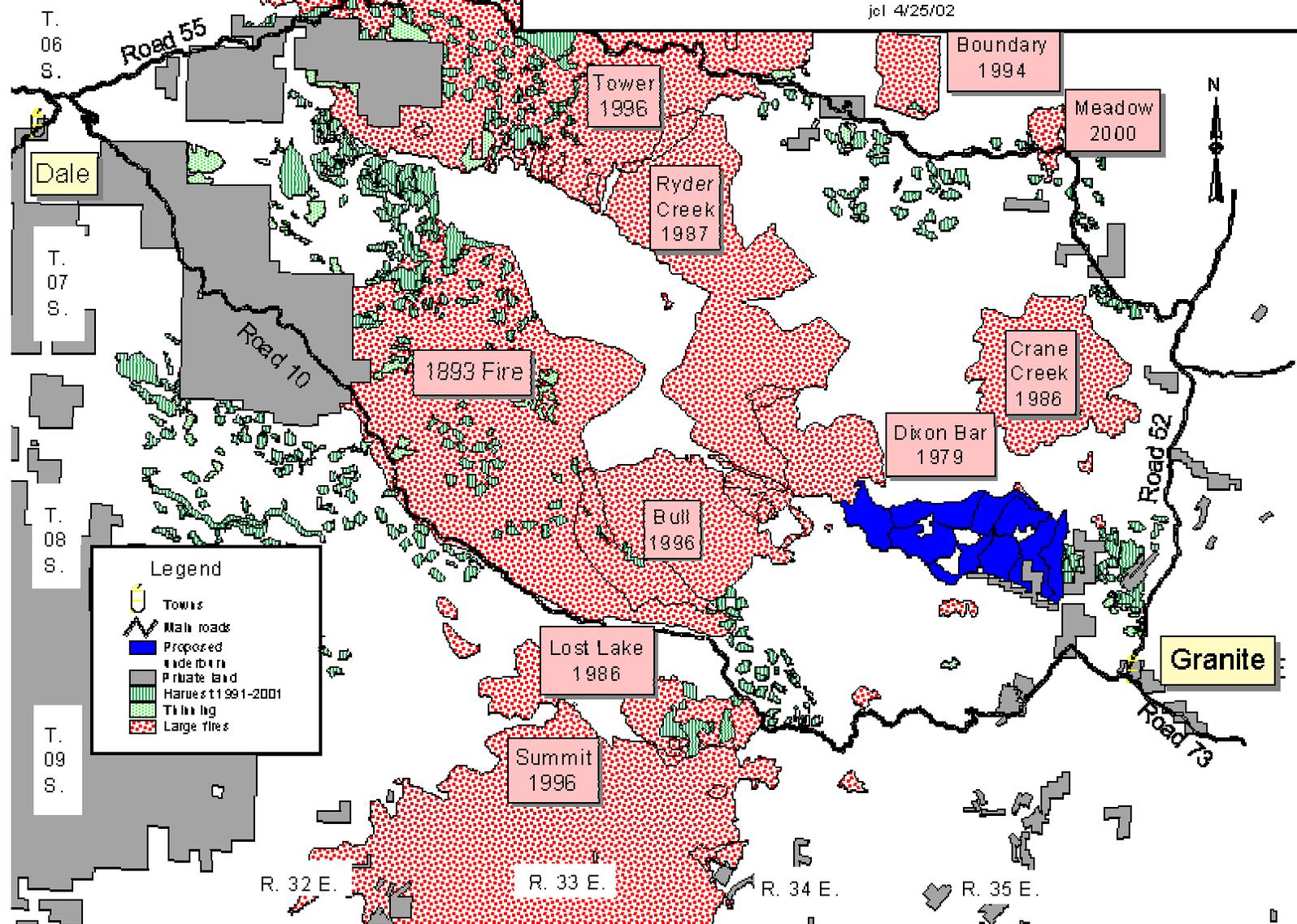
R.35 1/2 E.

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Buck Creek Prescribed Underburn Map 5: Alternative 2 Band of Reduced Fuels

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APPENDIX B

PAST, ONGOING, & FUTURE ACTIVITIES

PAST ACTIVITIES

Timber Harvest—12,207 acres since 1970 (actual area affected is less because some areas were harvested more than once). Associated effects include: reduction of tree cover (in particular, old forest structure), increased stream temperatures from shade removal, reduction in large instream wood, soil erosion and compaction, increased sediment from landings, roads, and skid trails, noxious weed species establishment and dispersal, and changed timing of water runoff.

Non-commercial tree thinning—7,765 acres since 1972 (actual area affected is less because some areas were thinned more than once). Associated effects include: reduction in tree stocking and associated stress.

Road Construction—55.1 miles of system road. Associated effects include: increased sediment and stream temperatures, increase disturbance of wildlife, noxious weed species establishment and dispersal.

Fire Suppression. Associated effects include: change in forest cover and wildlife habitat types, increased forest densities and related reductions in forest health, delay of large instream wood production, horizontal and vertical build-up of fuels, increased fire intensities.

Wildfire—1,900 acres since 1979. Associated effects include: increased sediment and stream temperatures from loss of vegetation and soil cover, reduction in large instream wood.

Livestock Grazing. Associated effects include: decreased pool frequency, increase stream temperatures, loss of riparian vegetation, increased sediment, noxious weed species establishment and dispersal

Placer Mining. Associated effects include: increased soil erosion, increased sediment and stream temperatures, noxious weed species establishment and dispersal

Rehabilitation of Mine Tailings—about 2 miles along Lower Granite Creek. Associated effects include: increase hydrologic access to the floodplain

ONGOING ACTIVITIES

Placer and Lode Mining (at a much smaller scale than in the past)—approximately 120 active claims occur within the Granite Watershed.

Rehabilitation of Mine Tailings—Lower Granite Creek. Associated effects include: increase hydrologic access to the floodplain

OHVs (no trails, but some roads are open to use). Associated effects include: disturbance of wildlife

Dispersed Campsites. Associated effects include: decreased riparian vegetation and increased sediment

FORESEEABLE FUTURE ACTIVITIES

Nothing planned in this area at this time.

APPENDIX C

BEST MANAGEMENT PRACTICES

Best Management Practices (BMPs) are the primary mechanisms used to enable the achievements of water quality standards. The Environmental Protection Agency (EPA) has certified the Oregon Forest Practices Act and Washington Forest Practices Rules and Regulations as BMPs. The states of Oregon and Washington compared Forest Service practices with these state practices and concluded that Forest Service practices meet or exceed state requirements.

Following are the Best Management Practices that apply to the Buck Creek Underburn Project.

TIMBER MANAGMENT

T-7. *Streamside Management Unit Designation*

Description – A riparian zone is designated along streams and wetlands where prescriptions are made that will minimize potential adverse effects of nearby logging and related land disturbance activities on water quality and beneficial uses.

Location - All treatment units.

Effects - Minimize potential adverse effects of logging and related land disturbance activities on water quality and beneficial uses.

Application - Mitigation measures 1, 2, and 3 would avoid certain activities within Riparian Habitat Conservation Areas or limit activities to a specified distance from streams.

T-21. *Servicing and Refueling of Equipment*

Description - Prevent pollutants from being discharged into or near rivers, streams, and impoundment's or into natural or man-made channels leading to such areas.

Location – All treatment units.

Effects - Detrimental impacts to water quality will be reduced by restricting fueling locations to certain areas.

Application - Servicing of all equipment would be done only in areas approved by the Forest Service. District and operator hazardous response plans would be in place.

FIRE SUPPRESSION AND FUELS MANAGEMENT

F-1. *Fire and Fuel Management Activities*

Description - Reduce the public and private losses that could result from wildfire and/or subsequent flooding and erosion by reducing the frequency, intensity, and destructiveness of wildfire.

Location - All treatment units.

Effects - Increase percent of fire-tolerant species in the stands, and create a break in fuels to facilitate prescribed natural fire, fire suppression activities, and fuels reduction, and reduce erosion and sediment related to severe wildfire.

Application - Alternative 2 contains design elements that would reduce activity-related and natural fuels, thereby reducing the potential for catastrophic wildfire.

F-2. *Consideration of Water Quality in Formulating Prescribed Fire Prescriptions*

Description - Maintain water quality by limiting the amount of soil exposed by prescribed burning.

Location - All treatment units.

Effects - Limited soil erosion and reduced water quality impacts.

Application – The project would occur during spring or fall when soil moisture and fire weather are optimum for low-intensity underburning. Mitigation measures 1 and 2 would protect streams from soil erosion by providing riparian habitat buffers and limited exposure of mineral soil within these buffers. Mitigation measure 6 would limit effects on soils due to fire control lines, roads and landings.

F-3. *Protection of Water Quality During Prescribed Burning Operations*

Description - Maintain soil productivity, minimize erosion, and prevent ash, sediment, nutrients, and debris from entering water bodies.

Location - All treatment units.

Effects - Water quality will be maintained; downstream users of water will not be affected.

Application - Weather and fuel conditions will be checked during prescribed burning to ensure that soil and water protection parameters set by the burn prescription are met; otherwise burn techniques will be adjusted accordingly.

F-4. *Minimizing Watershed Damage from Fire Suppression Efforts*

Description – Avoid watershed damage in excess of that which would be caused by the fire itself.

Location – All treatment units.

Effects – Protection of watershed soils from excess use of heavy equipment or use of equipment on fragile soils.

Application – Use of heavy equipment is limited and ameliorated by mitigation measures 5 and 6 and by on-site monitoring by the District hydrologist.

F-5. *Repair or Stabilization of Fire Suppression Related Watershed Damage*

Description – Stabilize all areas that have had their erosion potential significantly increased or their drainage pattern altered by suppression-related activities.

Location – All treatment units.

Effects – Reduce erosion caused by fire control line construction.

Application – Mitigation measures 5 and 6 will reduce erosion potential related to fire suppression activities through use of waterbars and reseeded of fire control lines after underburning.

WATERSHED MANAGEMENT

W-7. *Water Quality Monitoring*

Description - Determine the effects of the proposed action on the beneficial uses of water, monitor baseline watershed conditions for comparison with State Water Quality and Forest Plan standards and estimate long-term trends, ensure the health and safety of water users, and evaluate BMP effectiveness.

Location - Entire project area.

Effects - Monitoring would ensure that mitigation to protect water quality is effective, and, if not, would recommend changes for future activities.

Application - The third monitoring item (Section 2.3.2) applies to this BMP.