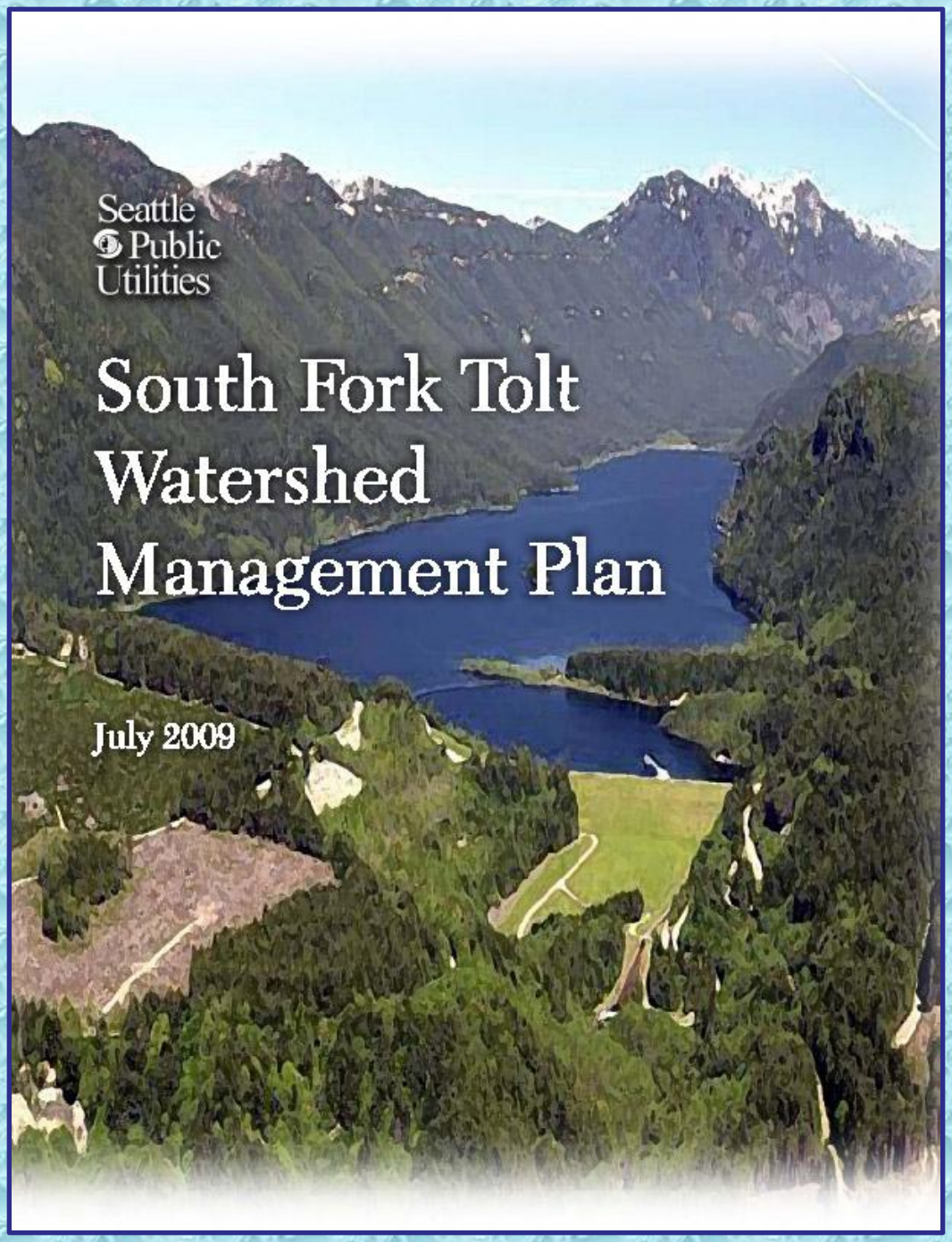
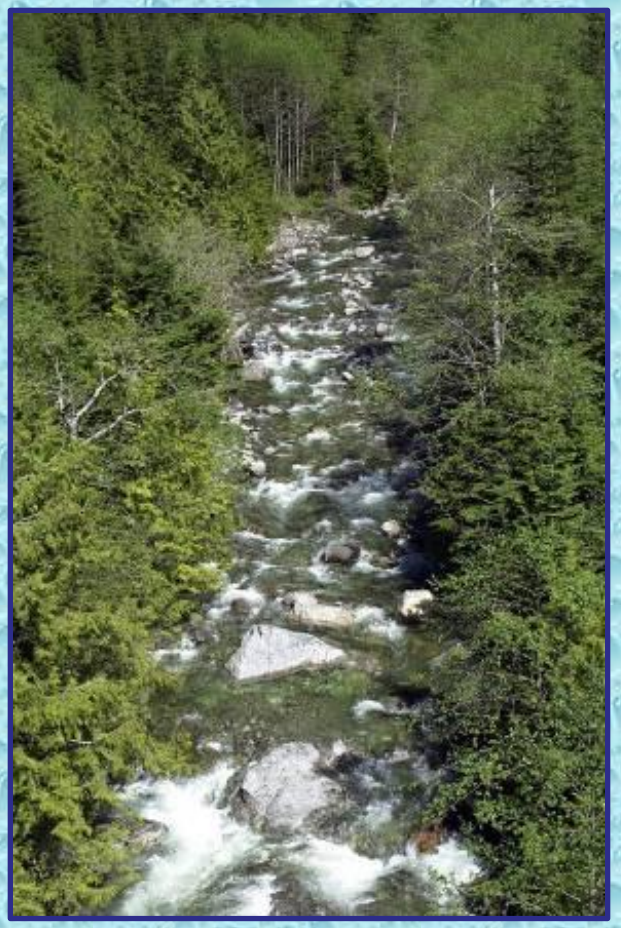
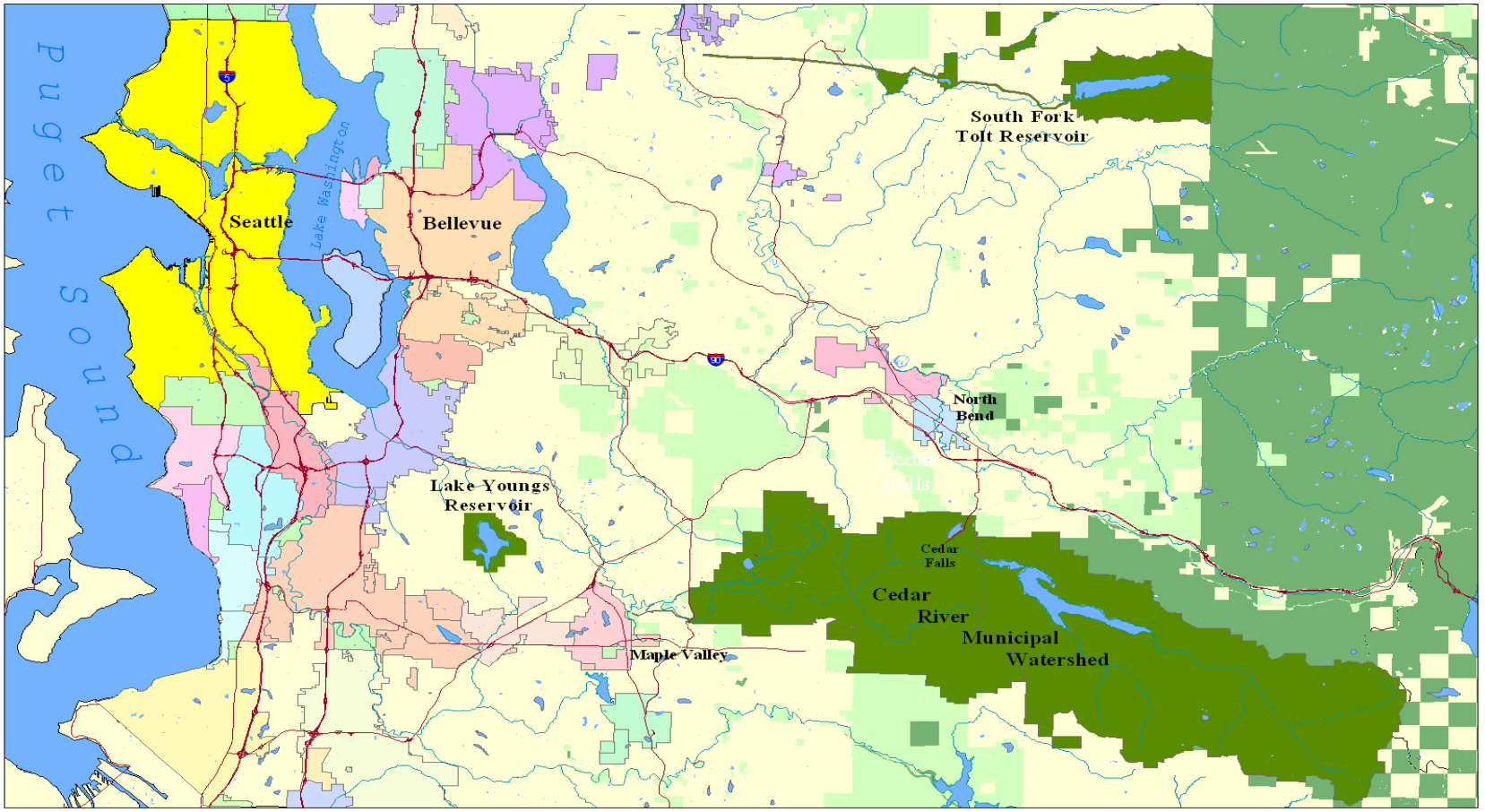




Brent Lackey

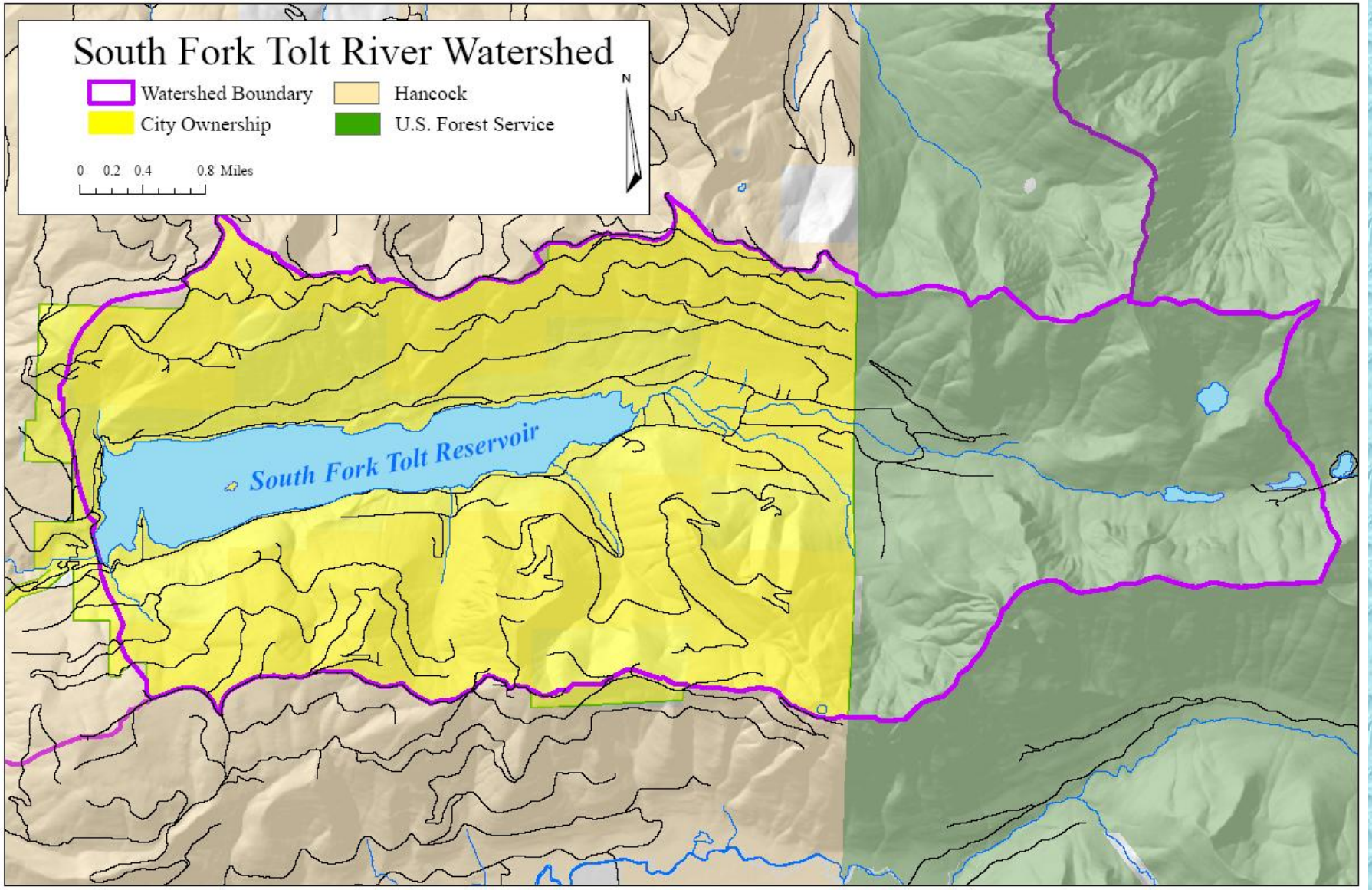
Major Watersheds
Strategic Advisor

Background on the Tolt Supply basin



- 30-40% of the Seattle water supply
- 12,100-acre municipal watershed above dam
- 8,400 acres (70%) owned by SPU, 3700 acres by USFS
- Basin is all forested, NO ESA-listed species in municipal watershed
- Most roads have already been decommissioned

South Fork Tolt River Municipal Watershed



Primary Watershed Management Issues

- Forest resource management following Weyerhaeuser era
- Neighboring land relationships
- Aquatic & riparian resource management
- Road system management
- Cultural Resource protection

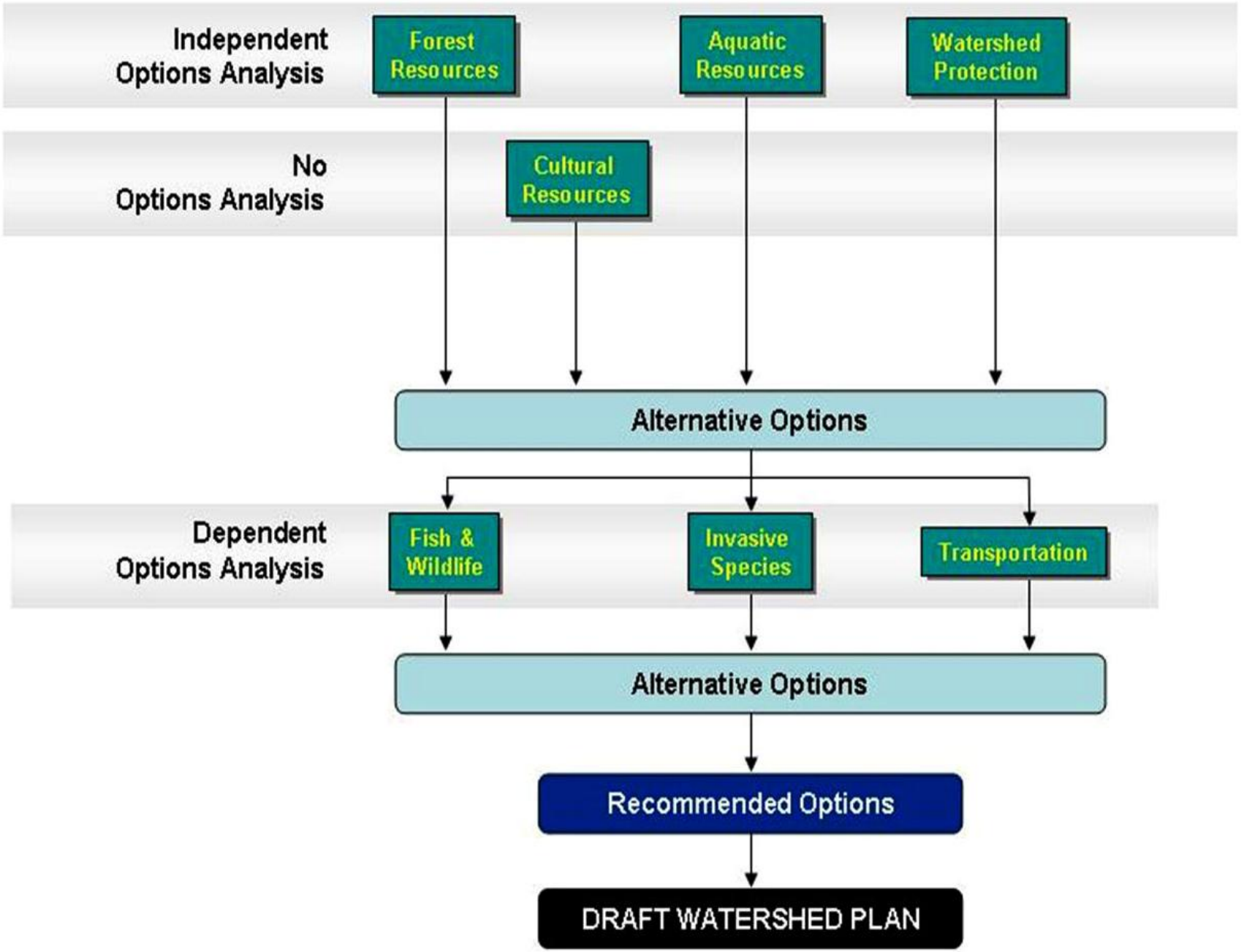
SPU Approach to Mgmt Plan Development

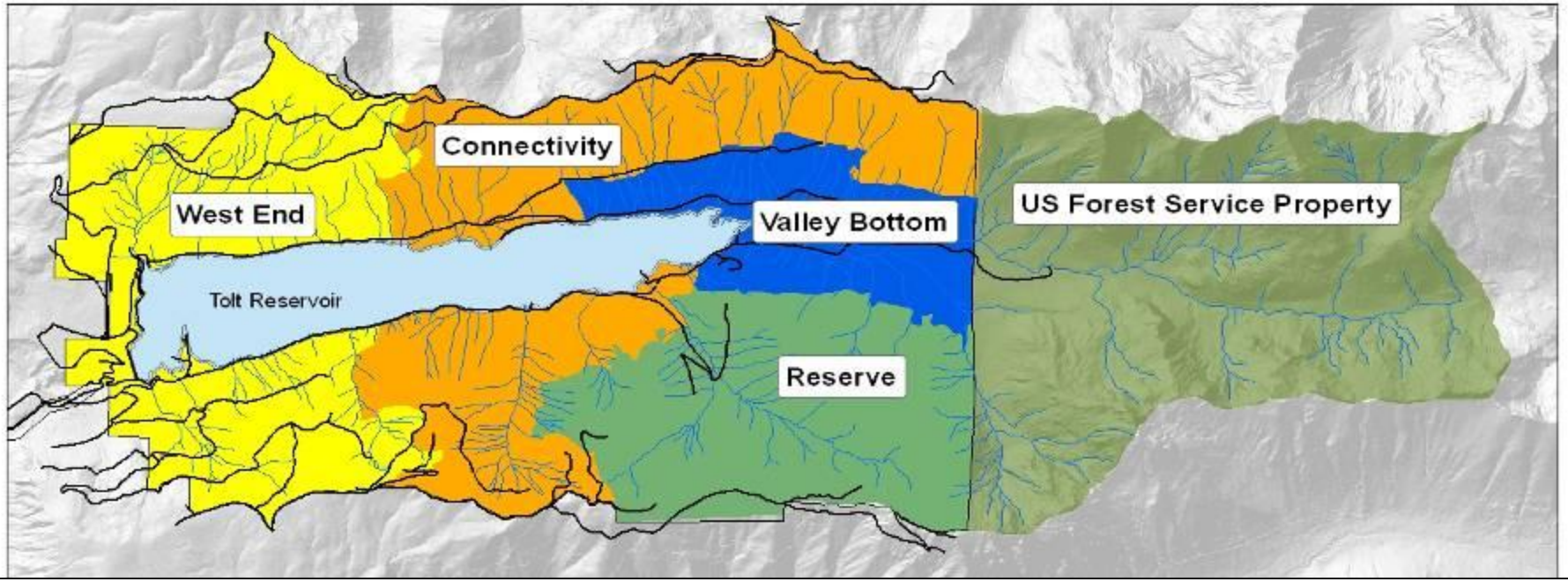
1. Collect habitat/ecosystem data
   - Renew watershed analysis:
     - stream channel classification, hydrology, riparian assessment, mass wasting and sediment analysis, roads inventory and sediment modeling
   - Forest survey on all SPU land in the basin
     - Timber inventory, stand typing, down and standing dead wood, special habitats

SPU Approach to Mgmt Plan Development

2. Technical Workgroups
   - Internal technical teams assessed data and landscape needs, modeled possible management approaches, and developed recommended policies and projects.
   - Eight workgroups were formed:
     1. Forest Resources
     2. Neighboring Properties
     3. Aquatic Resources
     4. Transportation System
     5. Fish and Wildlife
     6. Invasive Species
     7. Cultural Resources
     8. Security and Protection

South Fork Tolt Watershed Plan Alternative Development Process





Type of forest mgmt activities	**OPTION #1: Status Quo No Management**	**OPTION #2: Commercial Forestry Focus**	**OPTION #3: Commercial/ Restoration Hybrid**	**SELECTED OPTION #4: Restoration Only**
Commercial Activity	None	- Small clearcuts of up to 40 acres; - Avg. 25 acres/year; - Thinning for timber maximization.	- Patch cuts up to 2 acres; - Thinning increases timber values.	No commercial activity
Restoration Activity	No active restoration	No active restoration—thinning not intended to benefit habitat.	Thinning has some habitat benefit in all areas outside of reserve	Variable density thinning for habitat value exclusively
Reserves	Entire watershed in effective reserve status	Only “Reserve” area is protected from harvest	Only “Reserve” area is protected from harvest	No ecological restoration in “Reserve” area; some restoration thinning (PCT) planned

Results?

SPU *Triple Bottom Line* Analysis:

1. Financial—Net revenues from commercial harvest would be small.

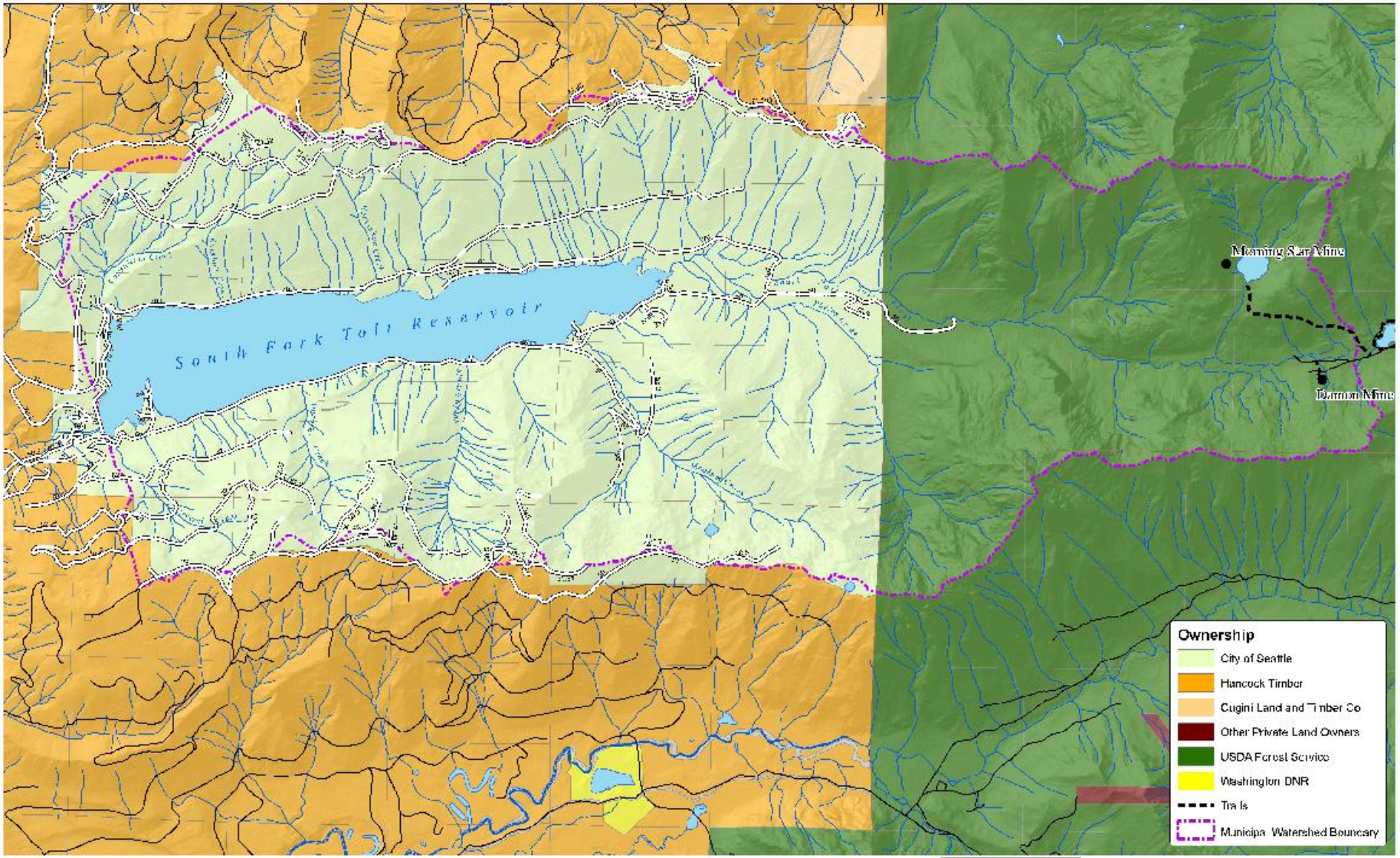
2. Social—Probable political opposition to commercial harvest with stakeholders and ratepayers

3. Environmental—Positive ecological effects of restoration important in long-term

BOTTOM LINE:

Habitat Restoration is Preferred Strategy

SPU & Our Neighbors



Seattle Public Utilities — Watershed Services Division

TETRA TECH

Triangle

SOUTH FORK TOLT MUNICIPAL WATERSHED MANAGEMENT PLAN

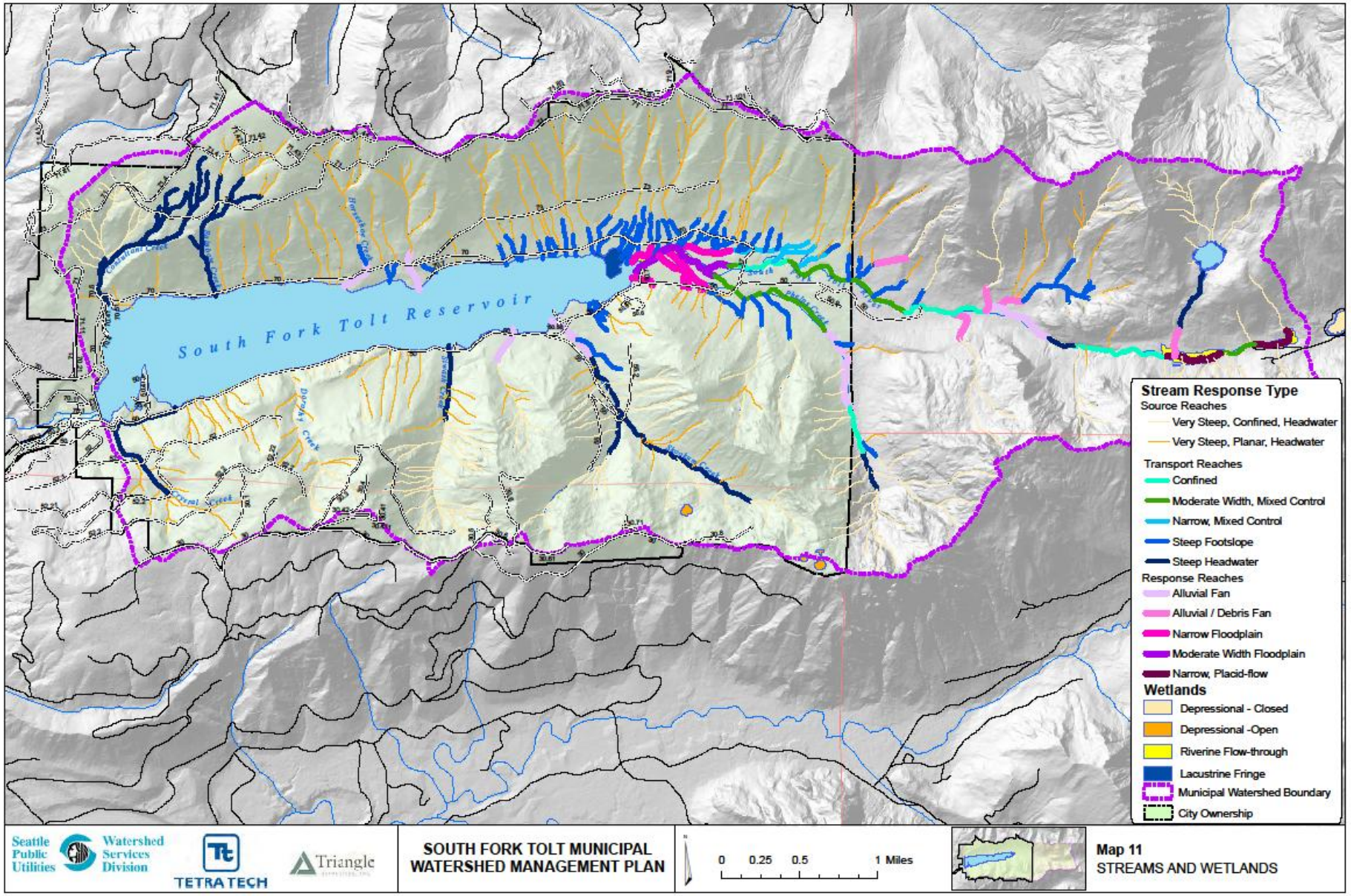
0 0.25 0.5 1 Miles

Map 4
TRAILS AND NEIGHBORING PROPERTY OWNERSHIP

Neighborhood Harmony

- No significant challenges between SPU and USFS or Hancock Timber Mgmt.
- Updated road use agreement with Hancock is appropriate.
- Further analysis of long-term threats from historic mining claims in MBSNF portion of the watershed.

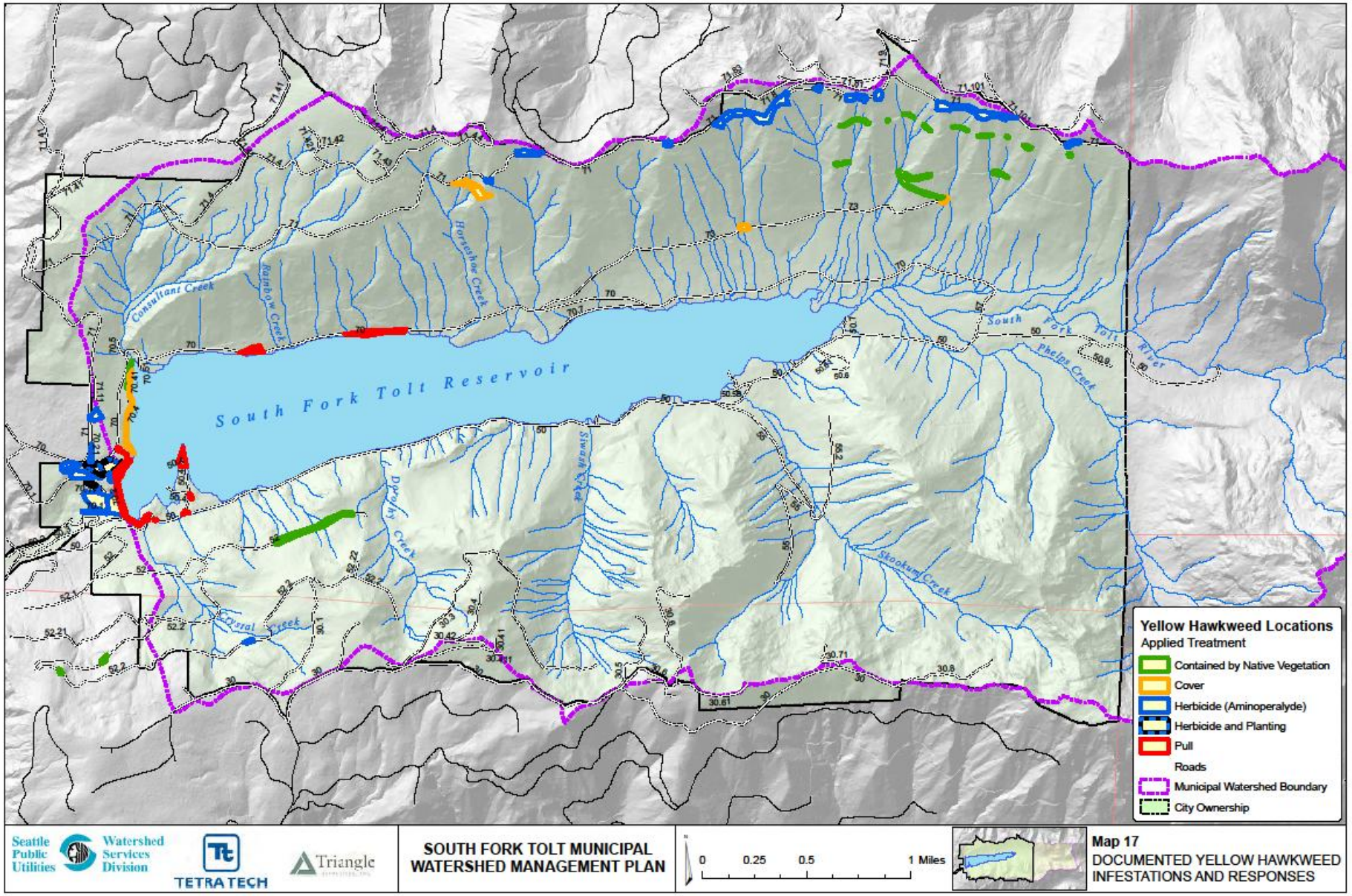
Aquatic Resources



Other plan management areas…

- Limited aquatic restoration focused on increased LWD in low gradient reaches of major streams, and sediment retention in steeper streams.
- Ongoing and improved efforts to eliminate invasions of yellow hawkweed at locations throughout the watershed.
- Roads work will include improvements to “core” road system that will remain, and limited additional decommissioning of unneeded roads.
- Conduct Traditional Cultural Properties (TCP) study and provide resource protections through same approach as Cedar River Watershed.

Invasive Species



Other plan management areas…

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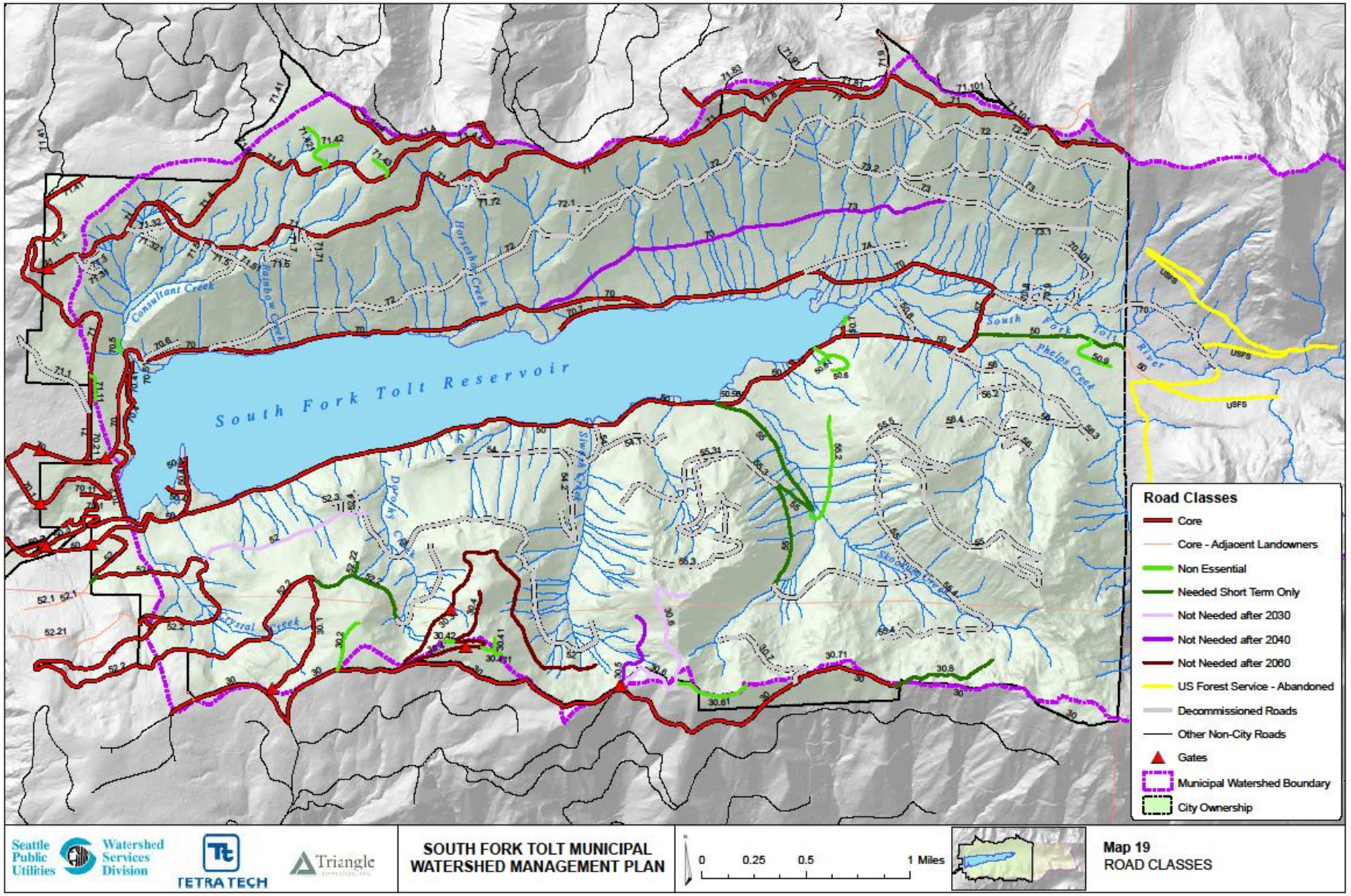
Road work


South Fork Tolt Reservoir
Consultant Creek
Rainbow Creek
Horseshoe Creek
Phelps Creek
South Fork Tolt River
Road Classes
Core
Core - Adjacent Landowners
Non Essential
Needed Short Term Only
Not Needed after 2030
Not Needed after 2040
Not Needed after 2060
US Forest Service - Abandoned
Decommissioned Roads
Other Non-City Roads
Gates
Municipal Watershed Boundary
City Ownership
Seattle Public Utilities
Watershed Services Division
TETRA TECH
Triangle
SOUTH FORK TOLT MUNICIPAL WATERSHED MANAGEMENT PLAN
0 0.25 0.5 1 Miles
Map 19
ROAD CLASSES

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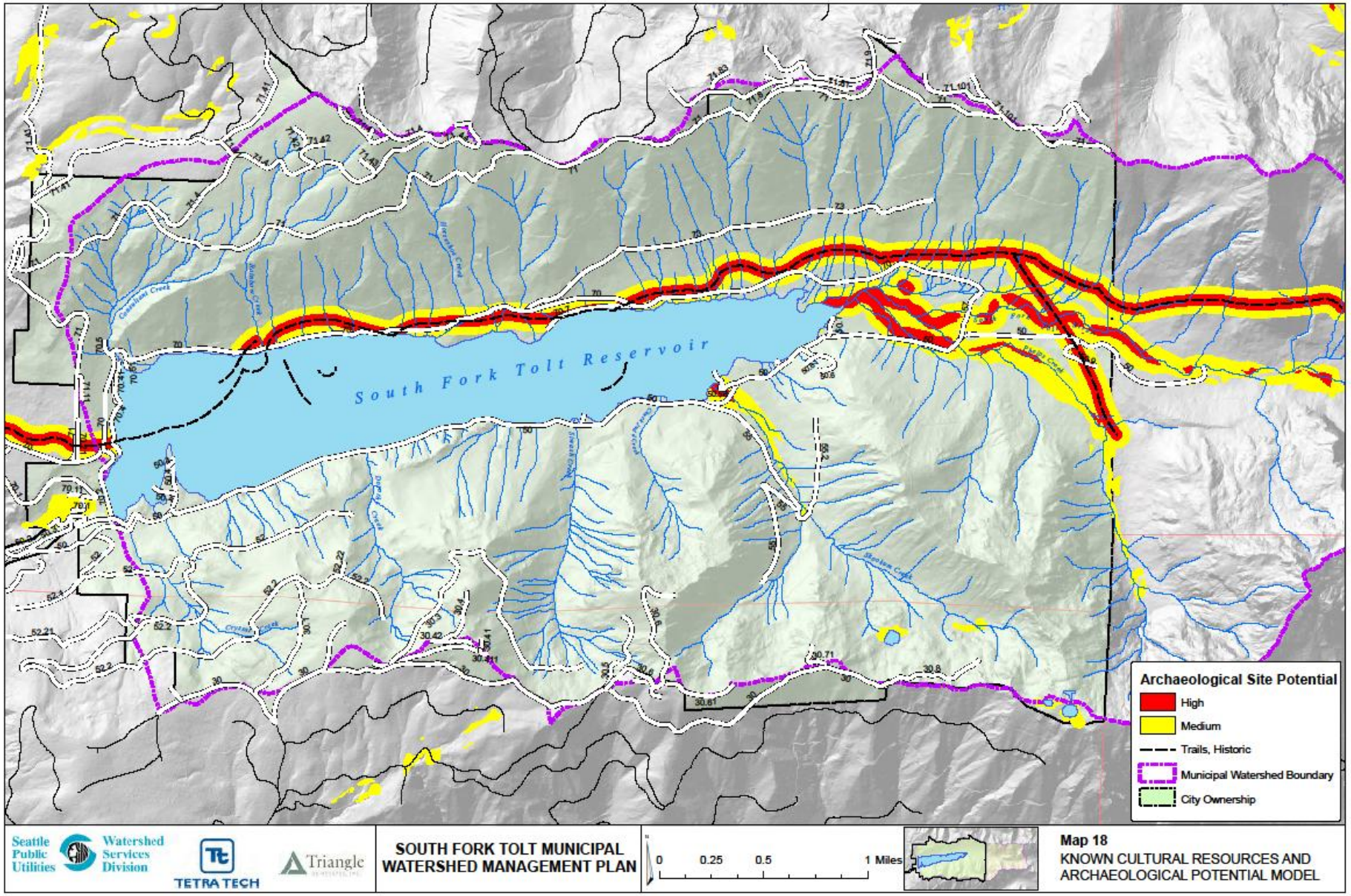
Cultural Resources



Implementation!

Timeframe

- Road improvements begin June 2010 conclude 2012.
- Aquatic projects begin June 2010 conclude 2012.
- Security improvement likely 2011-2014.
- Forest thinning ongoing through at least 2030.
- Roads O&M ongoing in perpetuity.

Implementation!

Costs

- Ongoing “break-even” O&M Program for forest thinning work.
- 3-year CIP investment of approximately $400,000 for aquatic and road improvements.
- Ongoing annual O&M costs for core transportation system of approximately $65,000/yr.
- Forthcoming additional investments in Security and Protection—primarily new gates, locks, and boundary fencing/signage with CIP cost of $500,000-$1,000,000

Implementation!

First Tolt Forest Thinning Project Completed May 2010

Discussion and Questions