

Oak Forest Restoration At Washougal Oaks Natural Area

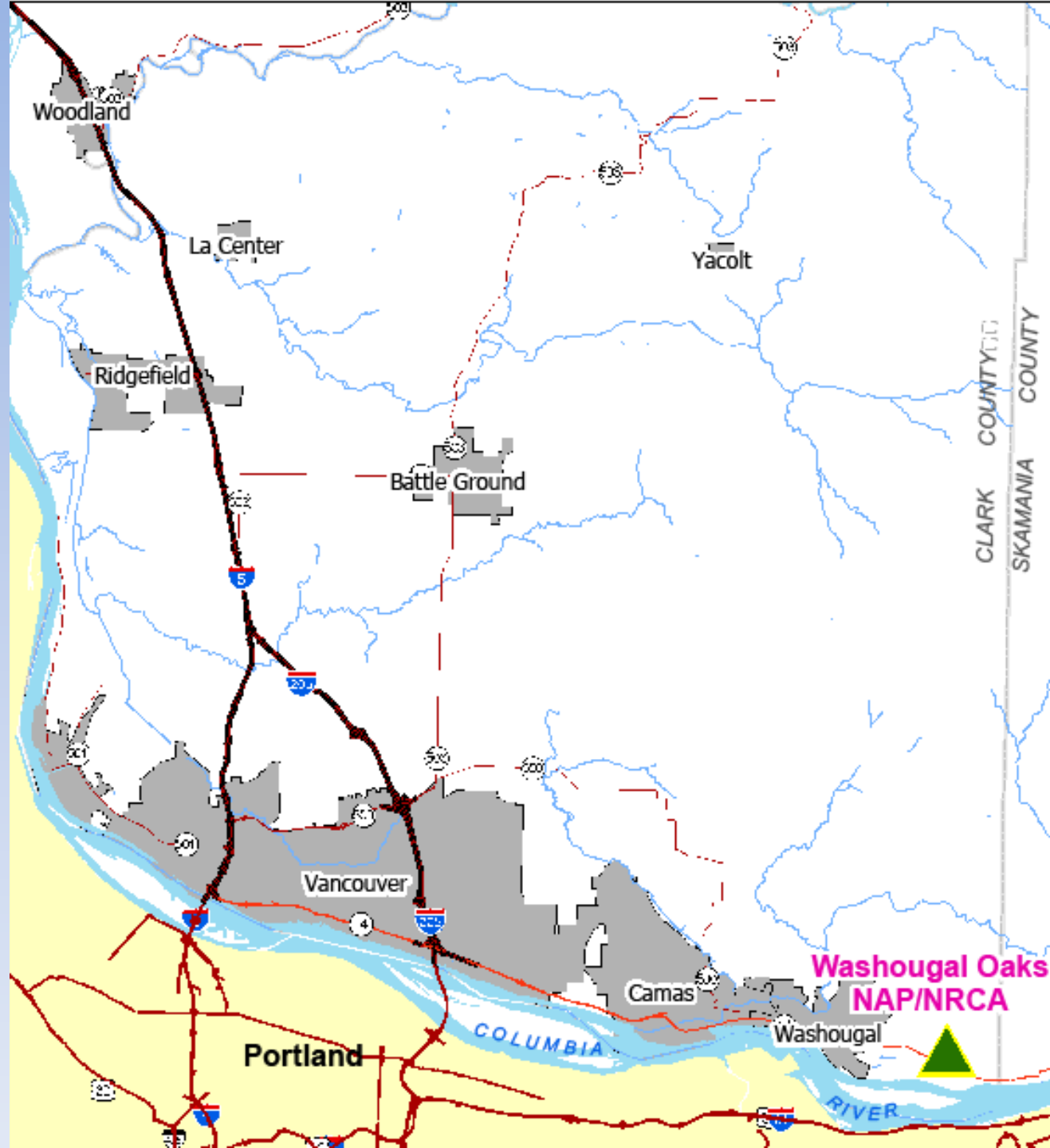
Carlo Abbruzzese
David Wilderman

Washington Department of Natural Resources

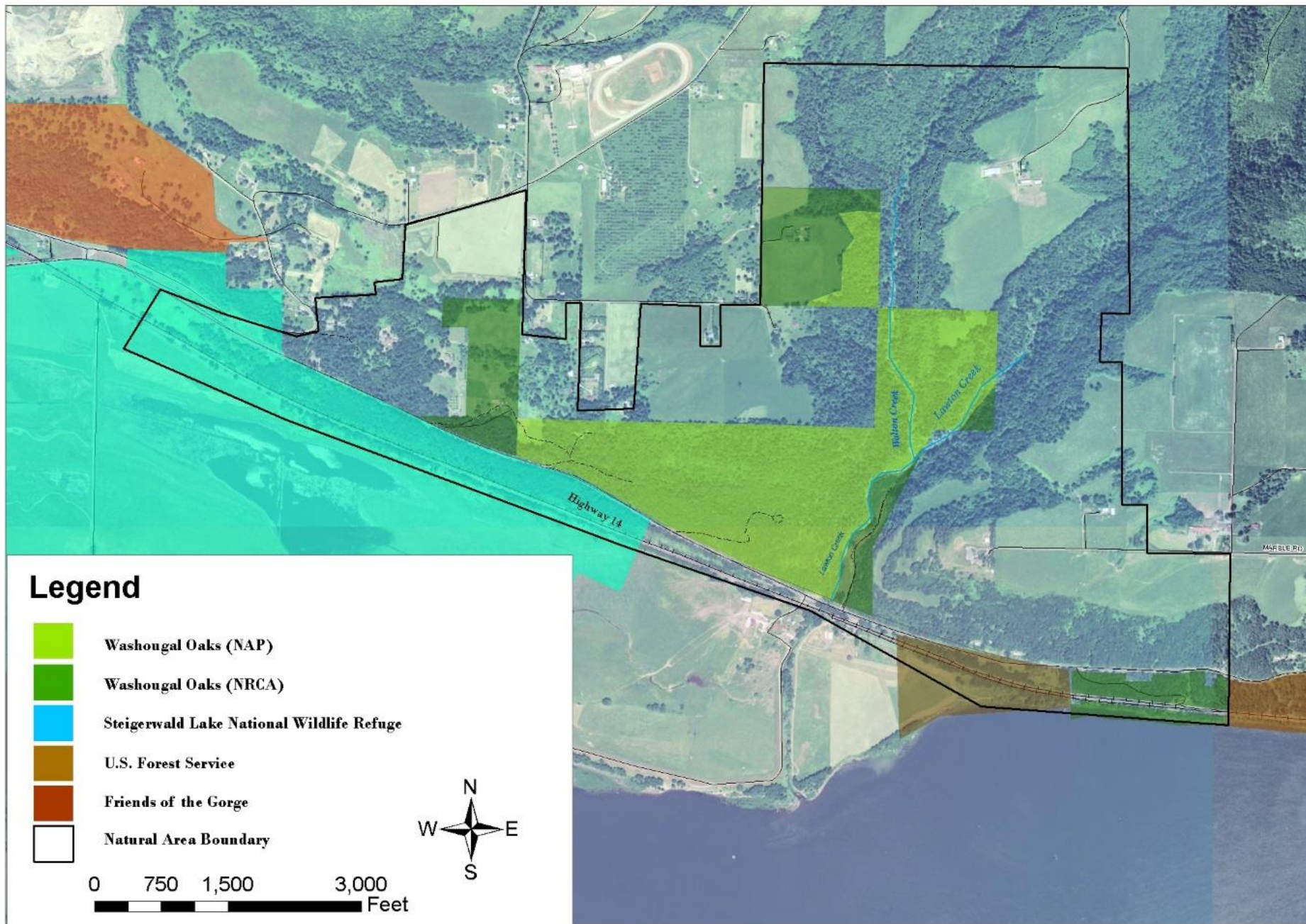


WASHINGTON STATE DEPARTMENT OF
Natural Resources

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Washougal Oaks Natural Area



Washougal Oaks Natural Area

- One of the largest high-quality oak woodland in western Washington
- Mostly Native understory
- Globally imperiled plant community



Rare Species and Communities



Oregon white oak forest



Larch Mountain salamander

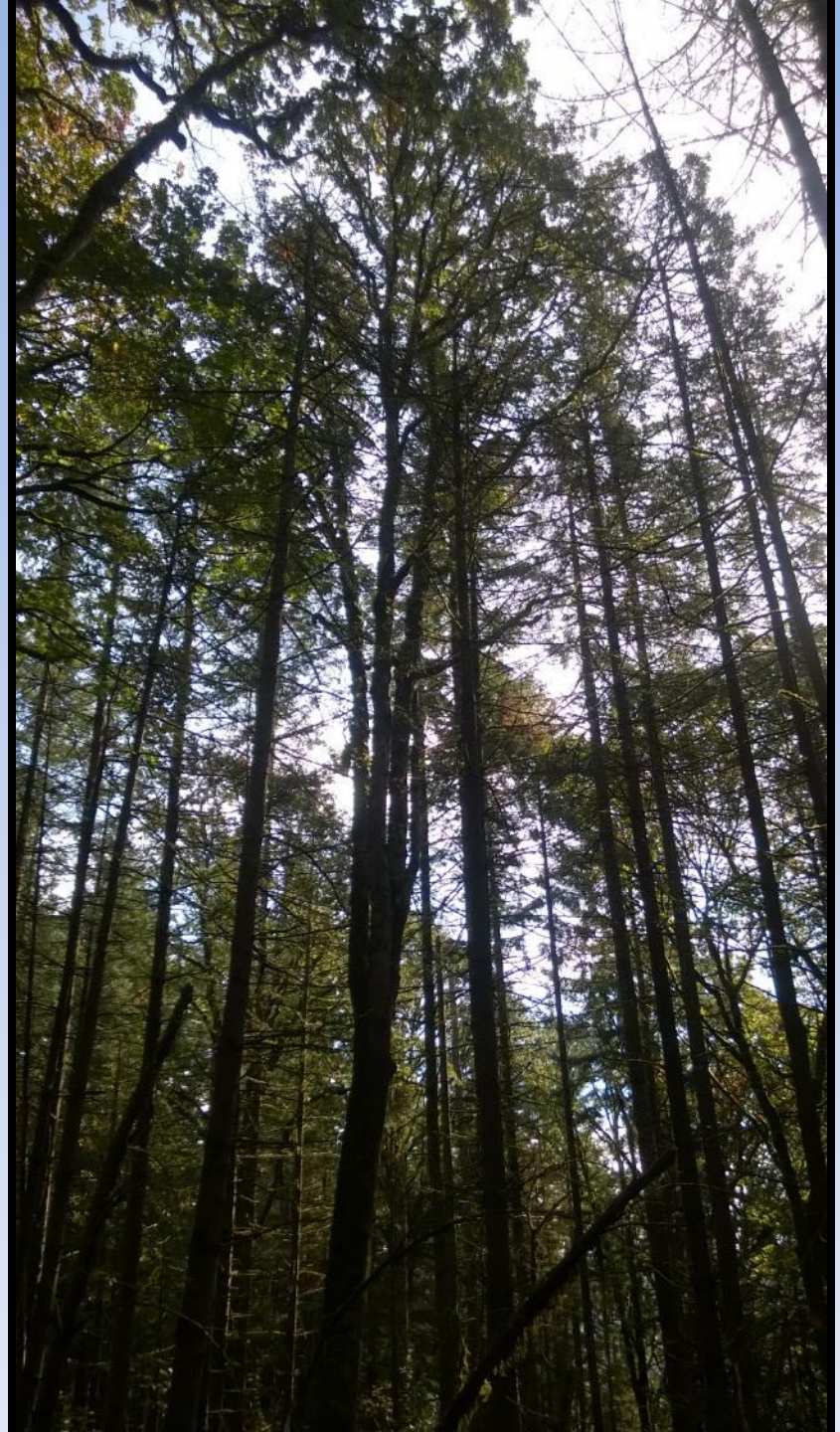


Small-flowered trillium



Slender billed white-breasted nuthatch

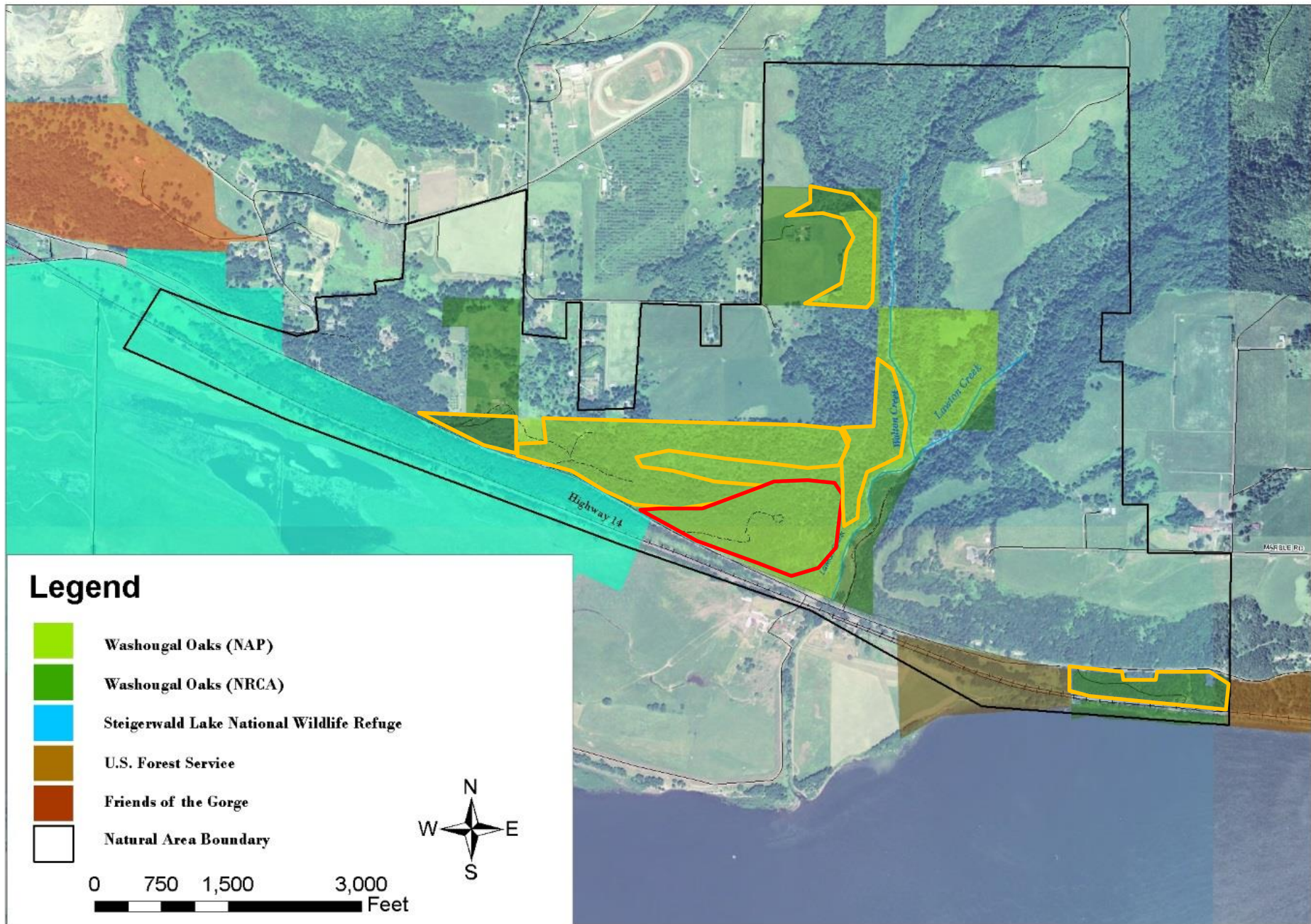
Conifer Thinning



Target Species



Washougal Oaks Natural Area





Trees to be fallen were marked with orange ring. Faller took care to not damage oaks when dropping fir.





Climber preparing to top tree. Topped trees remain standing as snags longer than girdled trees because they don't rot from the base.





Moving logs to the Landing
and Lawton Creek



Five topped trees are visible in this picture



All felling work was done by hand, and tree removal by helicopter so as to not disturb soil and encourage weeds.



Light gap created by falling Douglas fir trees. New opening will benefit oaks and wildflowers like camas, chocolate lily and tiger-lily.



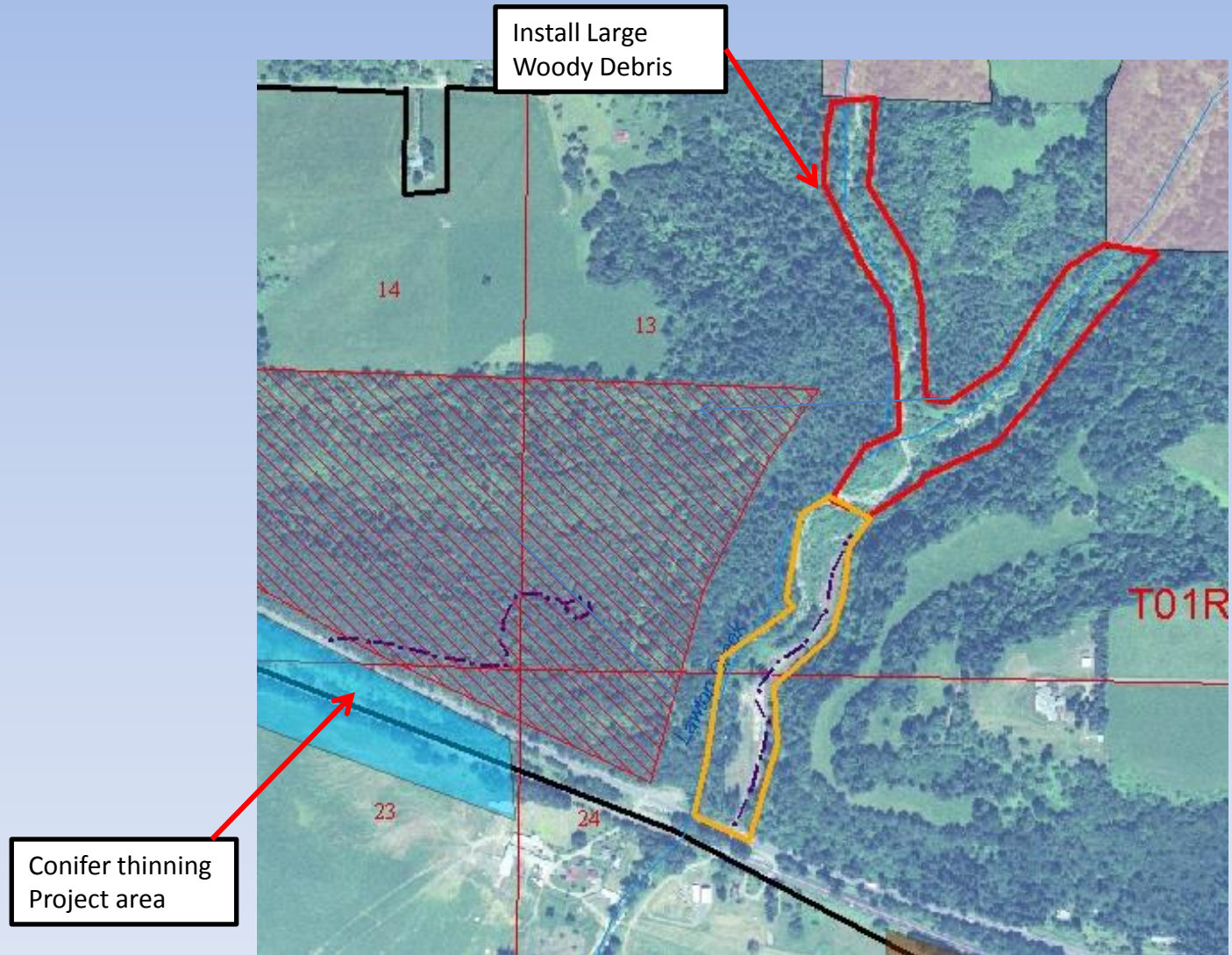
Log sorting. Most went to a local mill. Smaller trees were chipped and used as mulch on plantings.



The landing from the air



Salmonid Habitat Improvement



Lawton Creek

Fish Habitat Restoration



Steelhead (federal threatened)
Coastal Cutthroat (federal proposed threatened)
Coho salmon (federal candidate)

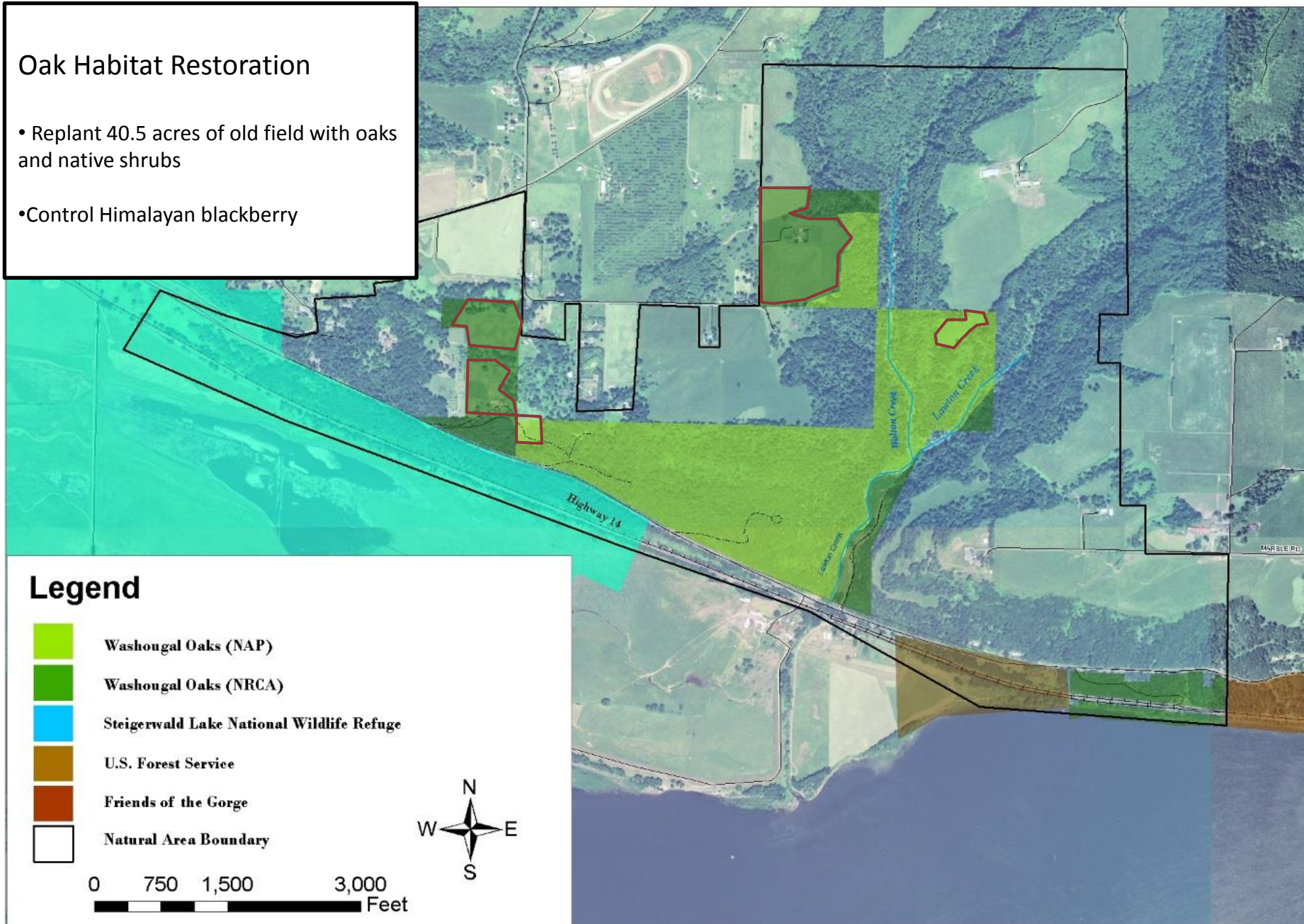




Washougal Oaks Natural Area

Oak Habitat Restoration

- Replant 40.5 acres of old field with oaks and native shrubs
- Control Himalayan blackberry





Large Oak that had been surrounded by blackberry



Old weedy horse pasture that is now planted in Oregon white oak with native shrubs between



Tube held up using pvc conduit



Native shrubs planted between oaks



Invasive Weed Control

Armenian (Himalayan) Blackberry
Rubus armeniacus



Shining Geranium (*Geranium lucidum*)



Geranium surrounding rare trillium

English Ivy (*Hedera helix*)



Winter ivy treatment



Geranium Fall 2015



Ivy browning in summer after treatment

