

Agenda

0845-0900: Arrival at parking area (next page)

0900-1230: Introduction and site visits

i. Introduction in parking area to SCD/NOAA effort and agroforestry as applied to the aquatic corridor situation, and the vision for community stewardship with reciprocity, and the framework. Answer clarifying questions.

ii. W5 Degraded Forest “Conifer Plantation” site visit

iii. W1 Degraded Woodland site visit

iv. P1 Weedy Patch “Mother Garden” site visit

1230-1300: Lunch at P1, bring your own lunch.

1300-1345: Conceptual Design Session 1 – Three groups will be established, each with a designated site (W5, W1 or P1). Our design goals are to at minimum produce seeds, cuttings, and divisions in situ to support future restoration while restoring riparian functions and biodiversity. We may consider designing other useful and sustainable harvests that don’t degrade riparian functions and support restoration. Our goal is to imagine what is possible and desirable for the land and its communities so that we can then back-engineer the cultural, social, and economic systems capable of doing the work. We expect we will also clarify the limitations in our existing funding and regulatory approaches. White boards and markers will be provided.

1345-1415: Interim Design Review – groups present initial designs and receive feedback.

1415-1500: Conceptual Design Session 2

1500-1530: Final Design Review

1530-1545: Wrap up



Address: 19829 Niederle Rd, Monroe, WA 98272

This address in Google/Apple Maps will take you to Paula's Pepper Jelly which is across from where we will meet. Someone will be at the parking location to flag you down and ensure you find it. Note that WA-203 is named N. Lewis St north of the Skykomish River and named Monroe Duvall RD south of the river.

From Monroe:

From *US Rte 2* turn south onto **N. Lewis St / WA-203**

Travel south across the Skykomish River bridge and turn left/east onto **Niederle RD**. This will be the first left you can take immediately after crossing over the river.

Follow **Niederle RD** approximately $\frac{1}{4}$ of a mile to a gravel road running north/south to the parking location (see attached map)

From the south traveling north on Monroe Duvall RD / WA-203

Traveling north on **WA-203** you will pass a Diedrich Espresso (drive through coffee) on the left/west. 1 mile north of Diedrich Espresso, just prior to the river will be **Nierdele RD**

Turn right/east onto **Nierdele RD** (if you miss this turn you go over the river into Monroe to turn around)

Follow **Niederle RD** approximately $\frac{1}{4}$ of a mile to a gravel road running north/south to the parking location (see attached map)

Site: W5 Degraded Forest (1.42 acres) “The Conifer Plantation”

Landform & Water: Observed levee gaps and topography, as well as soil texture suggests that river water may flow through the site during moderate flood events. County flood models indicate this area has “deep and fast” flow from the mainstem to Haskell Slough during 10-year flood events (constrained by the Niederle road prism). The unit is located between 50 and 140’ from the riverbank. Bank erosion is currently hindered by a partially functioning piling and board revetment. The unit is between 400-1000’ upstream from the Highway 203 bridge and road prism that may cause backwatering.

Forests & Biota: Degraded forests are primarily a dense stand of Douglas-fir (commonly 5-9” DBH) with almost no understory (some knotweed, blackberry, sword fern), a high level of stem exclusion and low crown to height ration. Occasional other softwoods are present such as Sitka spruce, western red cedar and grand fir. Several softwood legacy trees exist within these fir stands. Patches of leaning and fallen Douglas fir but with green leaves still present indicate the possible presence of root rot. The forest unit to the north has understory of Himalayan blackberry, with large Snowberry patches present. Other species noted in the vicinity are hazelnut, sword fern, fringe cup, herb robert geranium, hedge nettle, red-osier dogwood, manroot, lady fern, elderberry, butterfly bush, English Ivy and big leaf maples. A single cedar stump eaten by beaver was found, some deer browse on deciduous shrubs was observed.

Infrastructure & Operations: The patch is located 700’ from an access road, bordered to the north by the Skykomish River and a forest unit (F11) and to the south by active cropland and a blackberry patch (P7). This will strongly limit access with vehicles and equipment (other than hand carried) by crews and logistics/timing of work may need to coincide with the agricultural harvest/planting schedule if crew needs to work with anything not carried.

Soil Conditions: The site is mapped as “Riverwash” One 2’ test pit was dug, predominately fine sand, no clear strata observed, with a poorly developed A-horizon. Some moisture was observed with depth, with roots found along whole depth of test pit. The thin litter layer was 0.5” and composed of a mix of conifer needles and cottonwood leaves from adjacent Unit F11.

Known Site Activities: The cropland to the south likely to be fertilized with manure twice a year, likely to be sprayed with herbicide twice a year. The west end of the patch is bordered by Highway 203. Unauthorized camps and litter are an issue in the patch in the past. More frequent access by landowners is expected to reduce recurrence. Neighbors have some degraded trails that run through all forest patches along the river for family use, which they want opened back up to facilitate family walks and get together.

Potential Goals

- Thin conifer canopy to increase stem growth to support main-stem shading and potential log recruitment.
- Regenerate understory to increase community value, biodiversity and forest resilience.
- Maximize ecological or community value from material created by thinning.
- Avoid fire hazard from abundant slash near areas of unauthorized camping.

Site: W1 Degraded Woodland (0.93 Acres)

Landform & Water: The unit is mostly flat and located 150' south of the Skykomish mainstem and surrounds an old gravel pit (GP1) to the east and a swale (S2) to the northeast. County models suggest the site has limited inundation during 10-year flood events. The gravel pit and gravel layers observed in our test pit suggest portions of this unit were likely a historical river channel. Surface soils are silty suggesting infrequent inundation deposits fine materials indicating a low energy flood environment. DEMs indicate water level matches river levels likely connected by unconstrained shallow groundwater. The old gravel pit pond and swale likely backwaters during floods, but may serve as an exit location during very high flood events. The old gravel pit (GP1) has approximately 1:1.5 slopes along most its perimeter.

Forests & Biota: Trees in the western 1/3 of the unit are predominantly softwoods (spruce, Douglas-fir, western red cedar) with a closed canopy (perhaps 4-8" DBH) transitioning to hard woods (cherry, cottonwood, big leaf maple) for the remaining 2/3 on the south and east along the road and around the gravel pit pond (GP1). These hardwoods are a closed deciduous canopy dominated by cottonwood (perhaps 8-15" DBH) with some maple in the understory and a patch of cherry along the edge and part of the interior. The understory is a mix of salmonberry and blackberry. The uncommon species manroot is climbing the blackberry along the southern forest edge. Other species noted in the unit are red-osier dogwood, lady fern, snowberry, salmonberry, Canadian thistle, butterfly bush, Nootka rose and burdock. Evidence of some beaver presence was found as a freshly chewed stick floating in the gravel pit pond. The gravel pit pond largely lacks a fringe of emergent vegetation due to the slope. Small fish (appx 2") have been observed along the shore, but no known investigation into species inhabiting the water has been conducted. Beaver or otter trails have been found between the river and the pond. Two white-tail deer were flushed from the deciduous forest, and the blackberry fringe does not appear to limit interior deer browse.

Infrastructure: This site is bordered on the south by a maintained gravel road with easy access for crews and equipment. The gravel pit provides potential for year-round irrigation water. The disposition of water rights is unknown. The northern border is associated with an old road bed, now a trail, that runs parallel to the river approximately 170' from the OHW.

Soil Conditions: NRCS soils surveys suggest Pilchuck, however one test pit found gravel layer starting at around 18" down, with surface soils predominately silt, with some fine-grained sand and little clay, more similar to a **Sultan** soil, which is consistent with mapped soils south of the unit. Roots were found to about 12" depth. The duff layer was 6"+ consisting of Himalayan blackberries litter and unidentifiable organic matter, with a 2-3" dark A-horizon.

Known Site Activities: No evidence of unpermitted camps were found, and the social trail network runs through the patch but has not been maintained. This site is not located next to active cropland, so manure/pesticide spray is currently not anticipated. An active manure storage area (ST1) and abandoned Christmas Tree blocks (FT1 and FT2) are located across the road to the south and are anticipated to remain the Farmland Trust ownership.

Potential Goals/Design Challenges:

- Avoid impacts to manroot population (potential seed source for very uncommon species?)
- Increase the production and diversity of useful materials from native understory to support restoration and ethnobotanical education.
- Enhance the sunny southern edge of the site for production of materials requiring higher levels of sun exposure.

- Consider future enhancement of the gravel pit wetlands (likely cut/fill to form emergent zone).
- Integrate snowberry propagule harvest as part of trail management?
- Prevent tree encroachment into the farm road.

Site: P1 Weedy Patch (1.57 acres) “The Mother Garden”

Landform & Water: This site is bordered to the north by the Skykomish River, to the east and south by forest and to the west by an old railroad trestle which marks the boundary of Railroad Camp (ST3). The site is part of the natural river levee along the Skykomish mainstem. County models indicate most of the site is shallowly inundated but without fast or deep flows during 10-year flood events, however the low spot along the southern extent of the unit may have deep and fast water. The site extends from the river edge approximately 460' to the farm road.

Forests & Biota: This area defined by a series of large canopy gaps with blackberry, Eurasian grasses, and knotweed, adjacent to an abandoned railroad trestle. Other species noted along site are snowberry, big-leaf maple, spruce, Douglas-fir, grand fir, St. John's wort, Scot's broom and hedge nettle. Adjacent forest typically supports hazelnut/snowberry understory. Forests along the perimeter are maple, cottonwood and red alder. Cedar and spruce have been planted portions of the adjacent understory. The site likely has enough sun to support areas with shade-intolerant species. White-tailed deer have been observed browsing on site.

Infrastructure: The unit has easy access by gravel roads and is adjacent to the best camping location on the site. The site contains a historical farm road with coarse angular rock on unmodified soils. Off the road, the sandy soils can trap vehicles. The railroad trestle is creosoted materials with the level of soil contamination untested. There are abandoned fence lines along the railroad grade, and through the forest, with an abandoned gate located on the old farm road in the middle of the site. The riverbank where the railroad trestle meets the river is armored with riprap. A historical bridge across the river has been removed, and some in-water rock remains.

Soil Conditions: Pilchuck sandy loam soil was confirmed at on soil pit on a separate site visit, with very poor A-horizon development, with well-sorted medium sand at 18" depth with roots present. The old road beds have approximately 2-3" of angled rock atop unmodified soils, and buried under a shallow layer of soil and litter. Surface conditions matching Pilchuck soils were confirmed with a shovel probe across the northern part of the site, but the low spots along the southern portion of the site are unexplored.

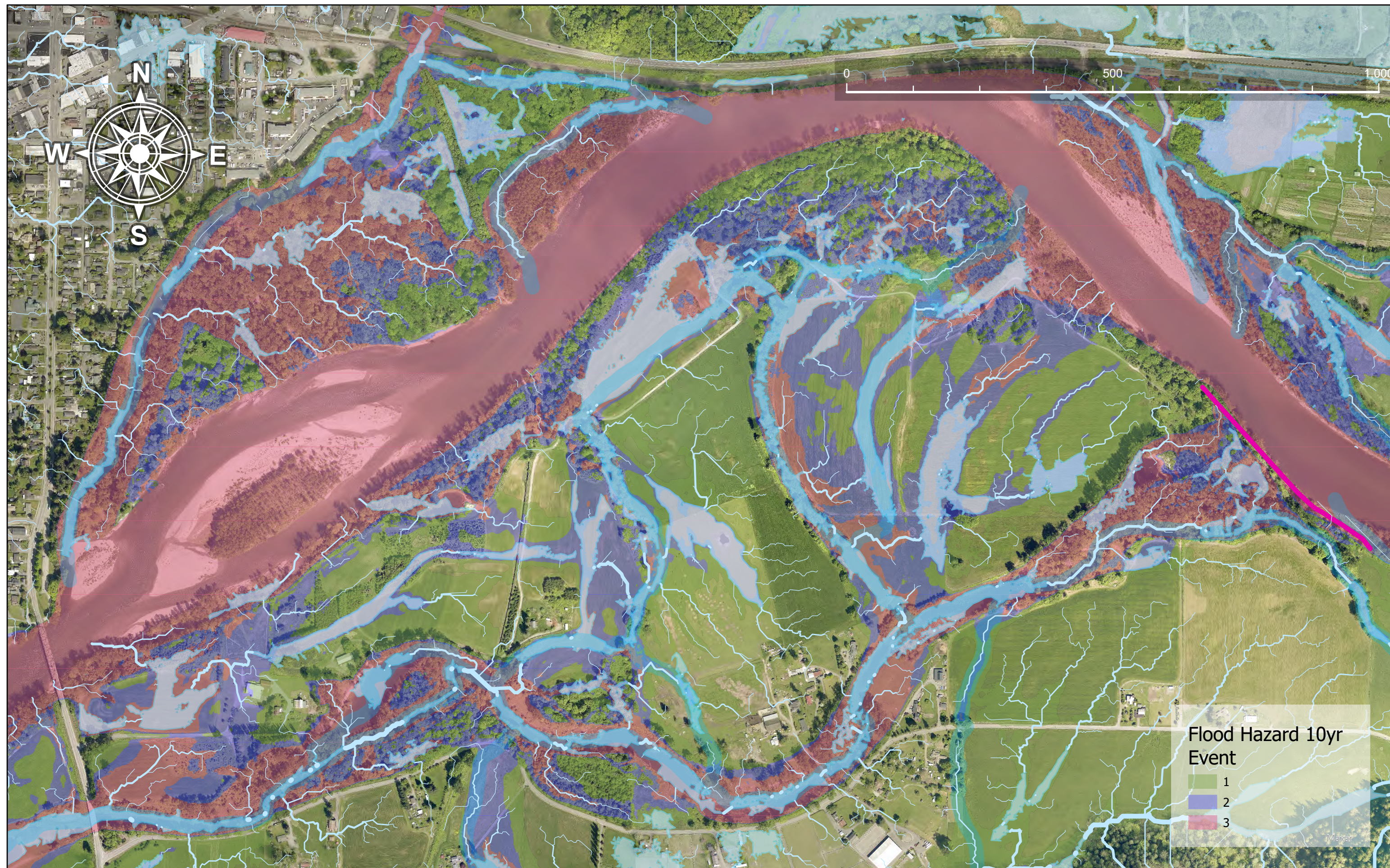
Known Site Activities: Knotweed was cut in fall of 2022 as part of early site management and has regrown. The site has been actively used by neighbors for water access and community gatherings. The site is visible to visitors at Al Borlin Park on the north bank of the river. The site is adjacent to a high-quality swimming beach (ST3).

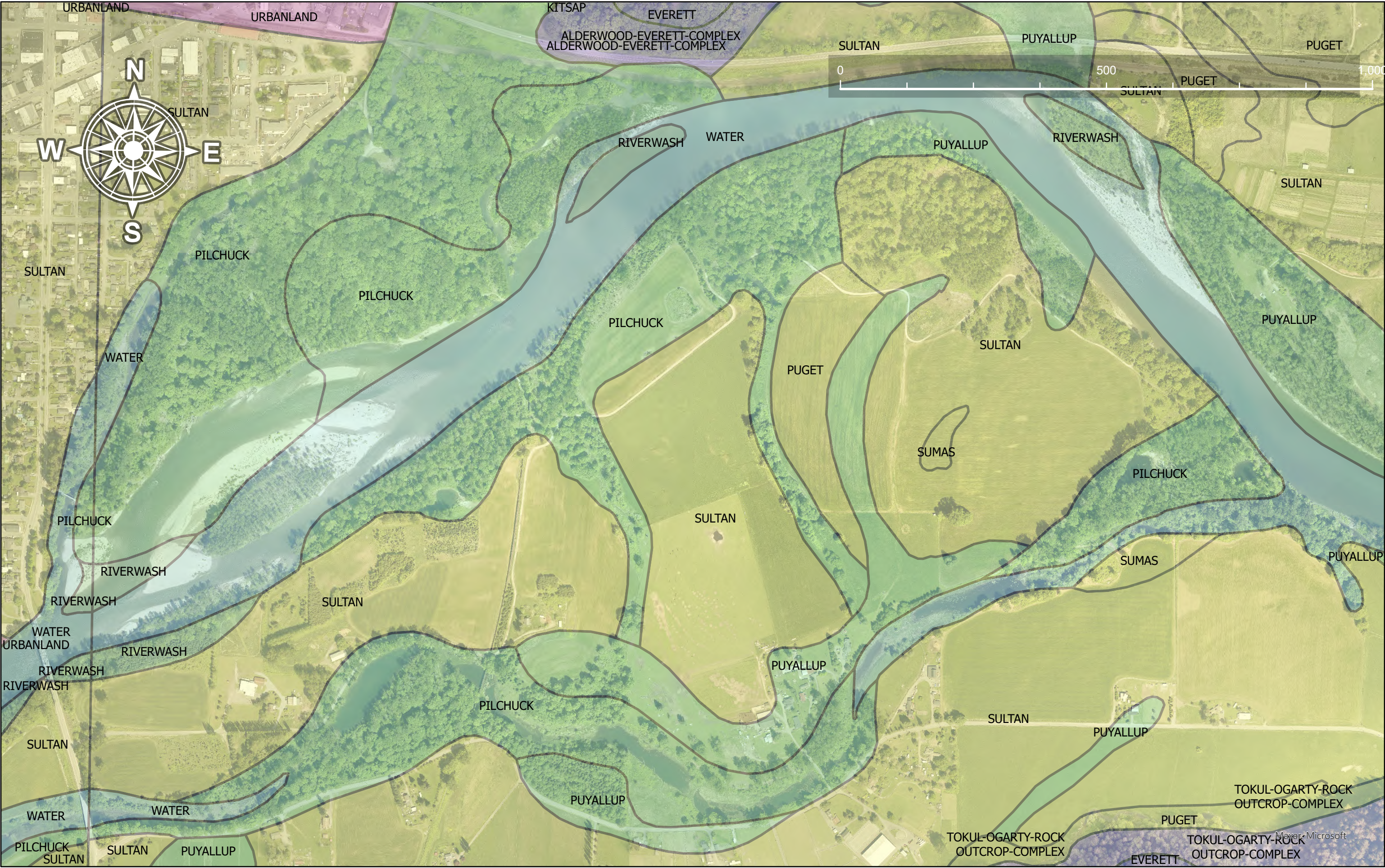
Potential Goals/Design Challenges:

- Sand-bedded soils are likely low in nutrients.
- Develop forest canopy adjacent to the river to begin production of logs for large woody debris and shade.
- Maximize the value realized from the relatively high solar exposure on the site during forest development.

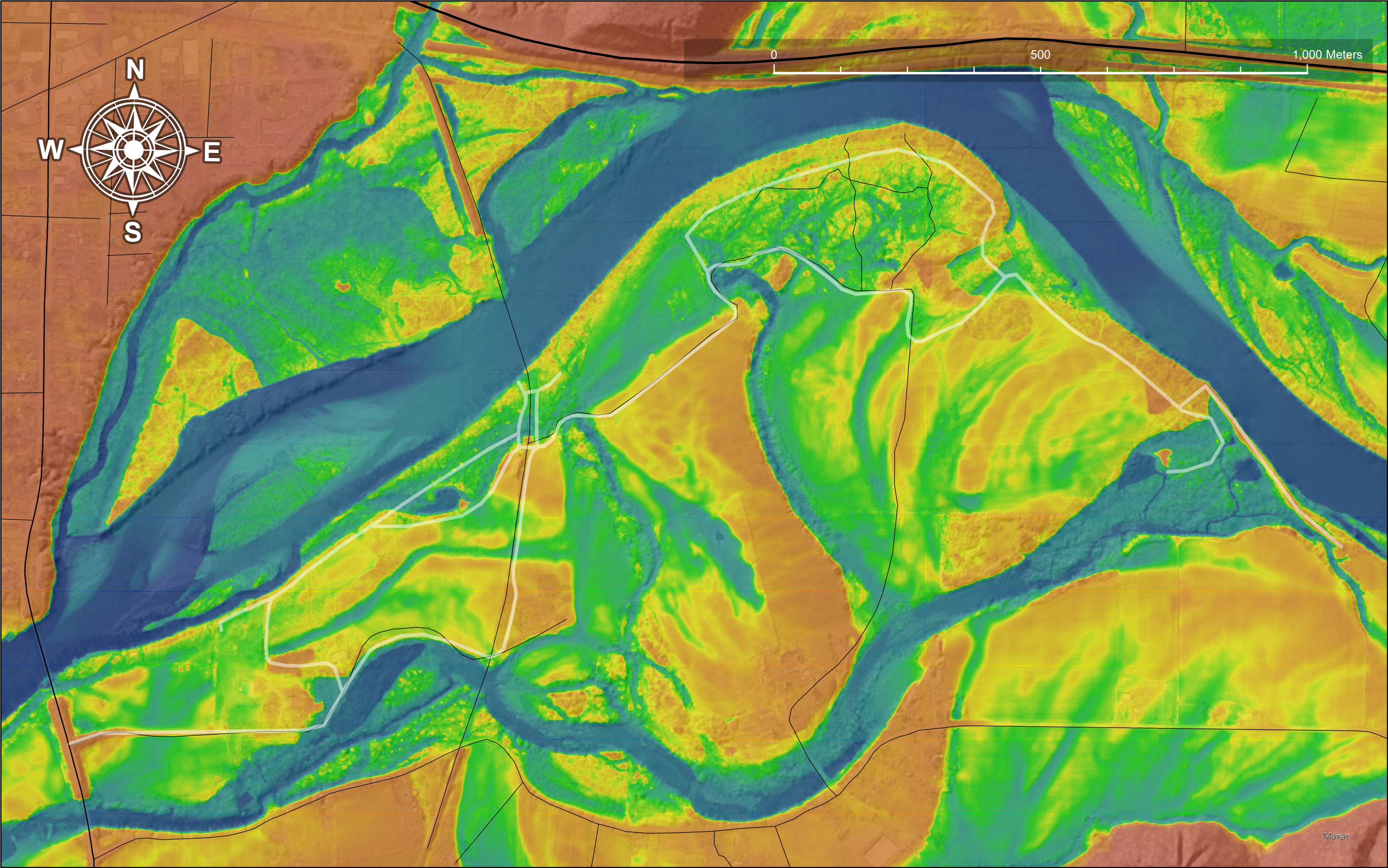
- Leverage proximity to camp site to develop educational value with higher plant diversity, plantings to support ethnobotany and restoration education, and production of propagules for restoration of adjacent sites.
- Incorporate tent sites and narrow trails within the restoration site to support education functions.
- Use the site as an experiment in physical knotweed control using scythe mowing and shading, and using knotweed biomass as mulch for soil development.
- Consider the potential for future trestle removal.

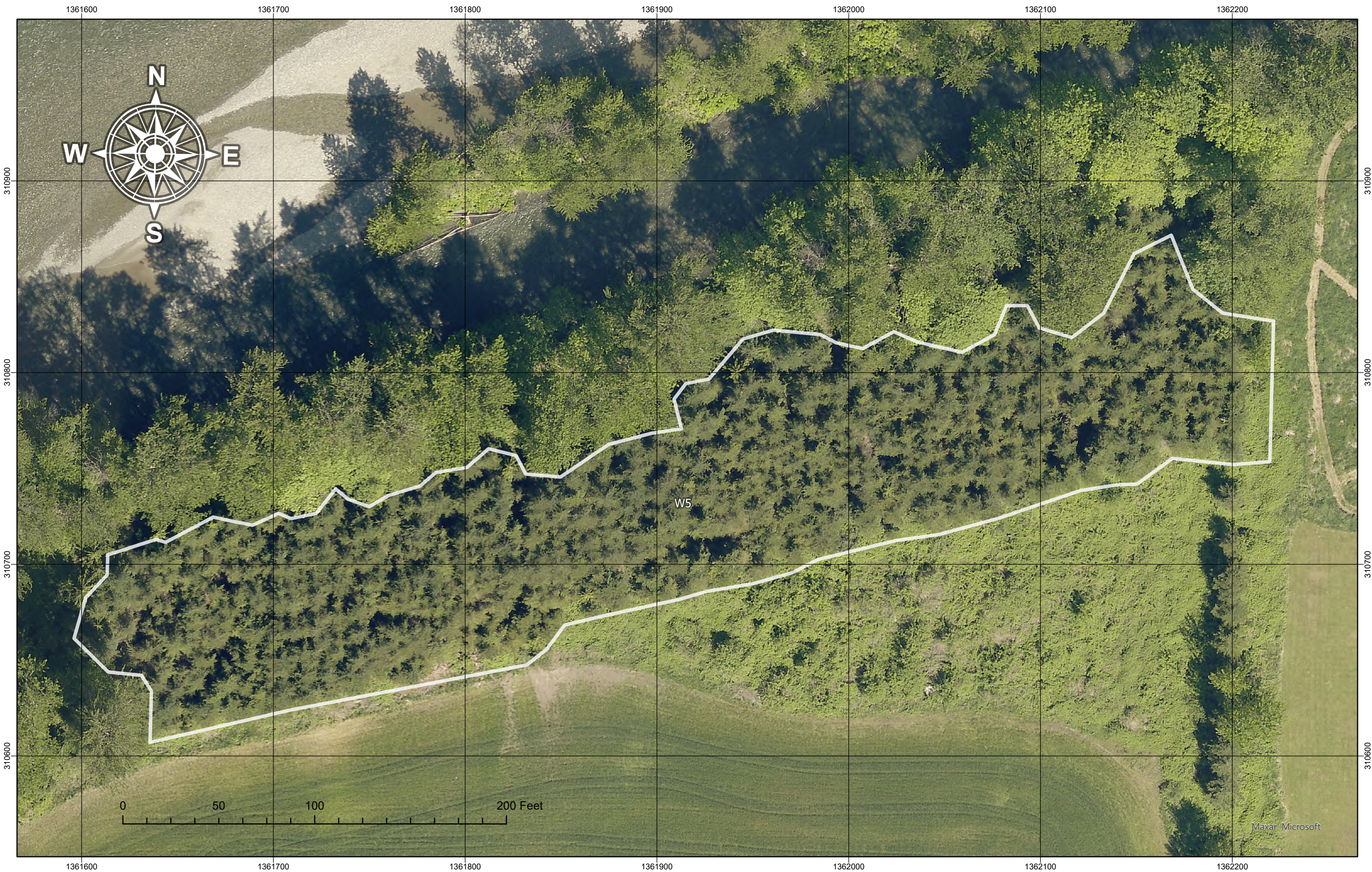






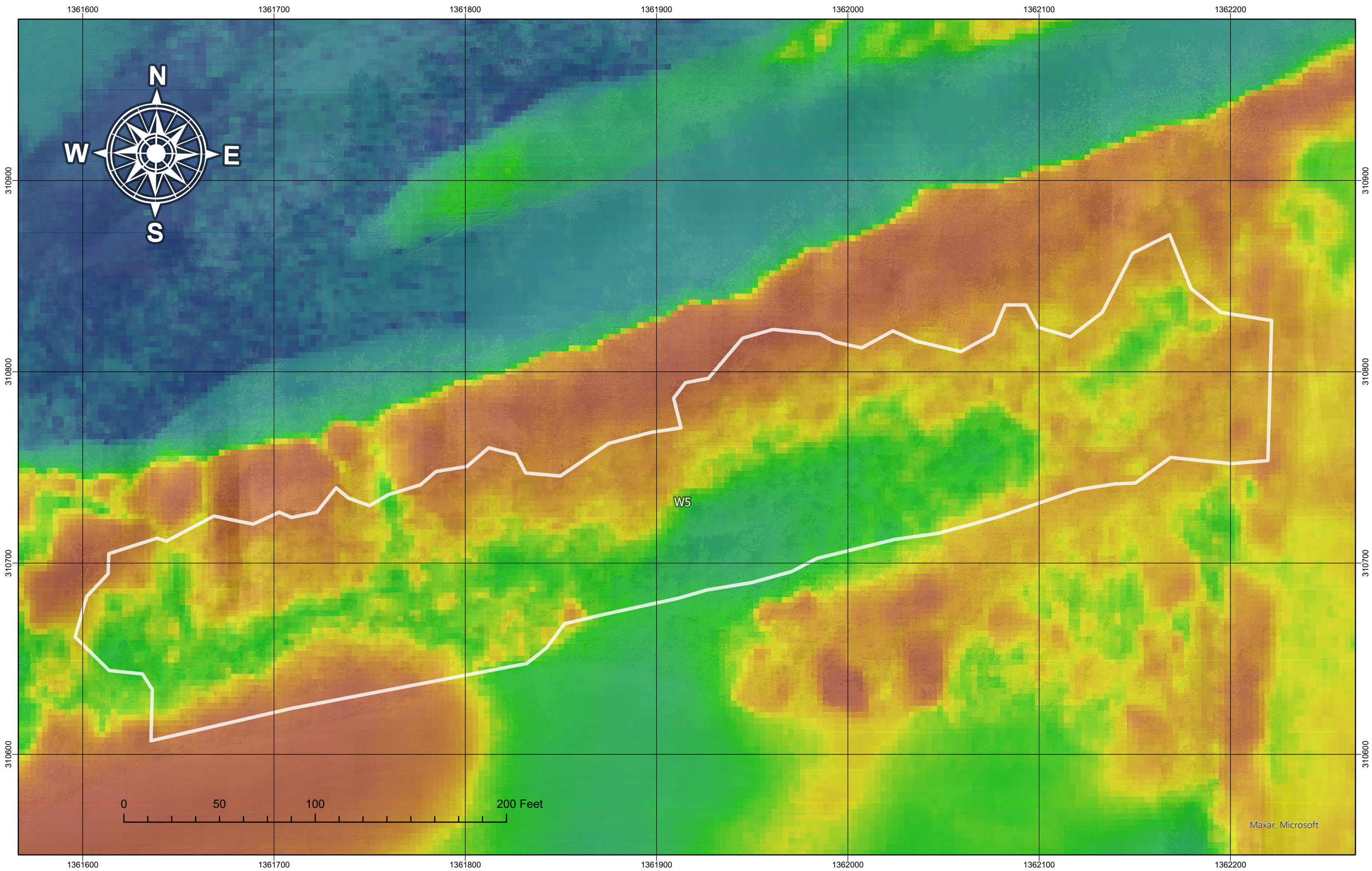






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