

Prairies are Cultural Landscapes: Preserving Prairie History and Archaeology in the Southern Puget Lowland

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Abstract

Archaeological sites associated with prairies in western Washington provide invaluable information on the history of Indigenous landscape stewardship and resource use practices. Archaeological evidence and oral histories indicate that prairies in the Puget Lowland have been managed for thousands of years. In the course of Cultural Resource Management (CRM) in the Southern Puget Lowland, archaeological sites in these settings are often recorded as lithic isolates or small lithic scatters, and unfortunately these site types are often not ascribed historical significance. Less than 3% of precolonial prairies remain in western Washington due to settler incursion, and prairie archaeological and cultural sites remain susceptible to impacts from development and agriculture. What methods are we using to identify archaeological sites and cultural landscapes on Puget Lowland prairies, and how can we better preserve this important history? In this poster we recommend that prairie archaeological sites are components of cultural landscapes, and we suggest that status quo CRM methods are not adequate for recognizing these important sites.

Upper Chehalis Basin Prairies are Historically Significant Cultural Landscapes

Our service area is concentrated on the Puget Sound, Lower Cowlitz, Lower and Upper Chehalis, Deschutes, Skokomish, Hood Canal, Nisqually, and Puyallup basins, and as such much of our research on prairie history is focused here (Figure 1). Oral history, traditional ecological knowledge, ethnography, written history, and archaeology indicate that prairies in the Upper Chehalis basin were managed with fire, and that these anthropogenic landscapes provided important food and medicine and supported a wide range of cultural purposes (Storm 2004).

The prairies of the Upper Chehalis basin are also important to American settler history, and especially the history of early American colonization of the region. In a recent study (Mathews et al. 2025) we found that American settlers situated Donation Land Claims on prairies 85% of the time in Lewis County, where the upper Chehalis basin is situated. These places were important to the early American economy, including international and Indigenous commerce and the subsistence farming that enabled Americans to settle permanently here.

Cultural Landscapes are Historically Significant

In this poster we explore a cultural resource management framework that defines anthropogenic prairie landscapes as historic districts. Within this context, districts link discontinuous archaeological and cultural sites that are otherwise at risk of loss without due consideration. The concept of the historic district adequately connects sites associated with anthropogenic prairies, but we also blend definitions of cultural landscapes and traditional cultural places to better encapsulate how we view these historically and culturally important places.

The National Park Service (NPS) defines a traditional cultural place as a “building, structure, object, site, or district that may be listed or eligible for listing in the National Register for its significance to a living community because of its association with cultural beliefs, customs, or practices that are rooted in the community’s history and that are important in maintaining the community’s cultural identity” (NPS 2024). These places are historically significant if their “existence is significant to a community because of its place in the community’s knowledge about its origins, its cultural history, or the nature of the world.”

The NPS defines a cultural landscape as “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values” (NPS 2025). Cultural landscapes include human-modified ecosystems which include prairies, forests, rivers and shores, and constructed works.

We have identified some preliminary features of anthropogenic prairies that may be considered for historic register eligibility (Table 1). Special consideration should be applied when assessing the integrity of prairie landscapes due to effects of modern intrusion on these landscapes and the vitality of prairies that have been neglected following American colonization of the region.

Table 1. Proposed NRHP eligibility criteria of anthropogenic prairie features.

| Criterion | Definition | Anthropogenic Prairie Site Features |
|-----------|--|--|
| A | “Be associated with important events that have contributed significantly to the broad pattern of our history” | <ul style="list-style-type: none"> Prairie landscape Villages Task sites Burials Fire paleoecology in soil, vegetation, and seed bank |
| B | “Be associated with the lives of persons significant in our past” | <ul style="list-style-type: none"> Prairies associated with important people, beings, and spirits Villages Burials Fire paleoecology in soil, vegetation, and seed bank |
| C | “Embody the distinctive characteristics of a type, period or method of construction; or represent the work of a master; or possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction” | <ul style="list-style-type: none"> Fire paleoecology in soil, vegetation, and seed bank Villages Camps Task sites Landscape features created by beings Trails |
| D | “Have yielded, or may be likely to yield, information important in prehistory or history” | <ul style="list-style-type: none"> Fire paleoecology in soil, vegetation, and seed bank Villages Task sites, including lithic scatters and isolates Harvesting/processing features or isolates |

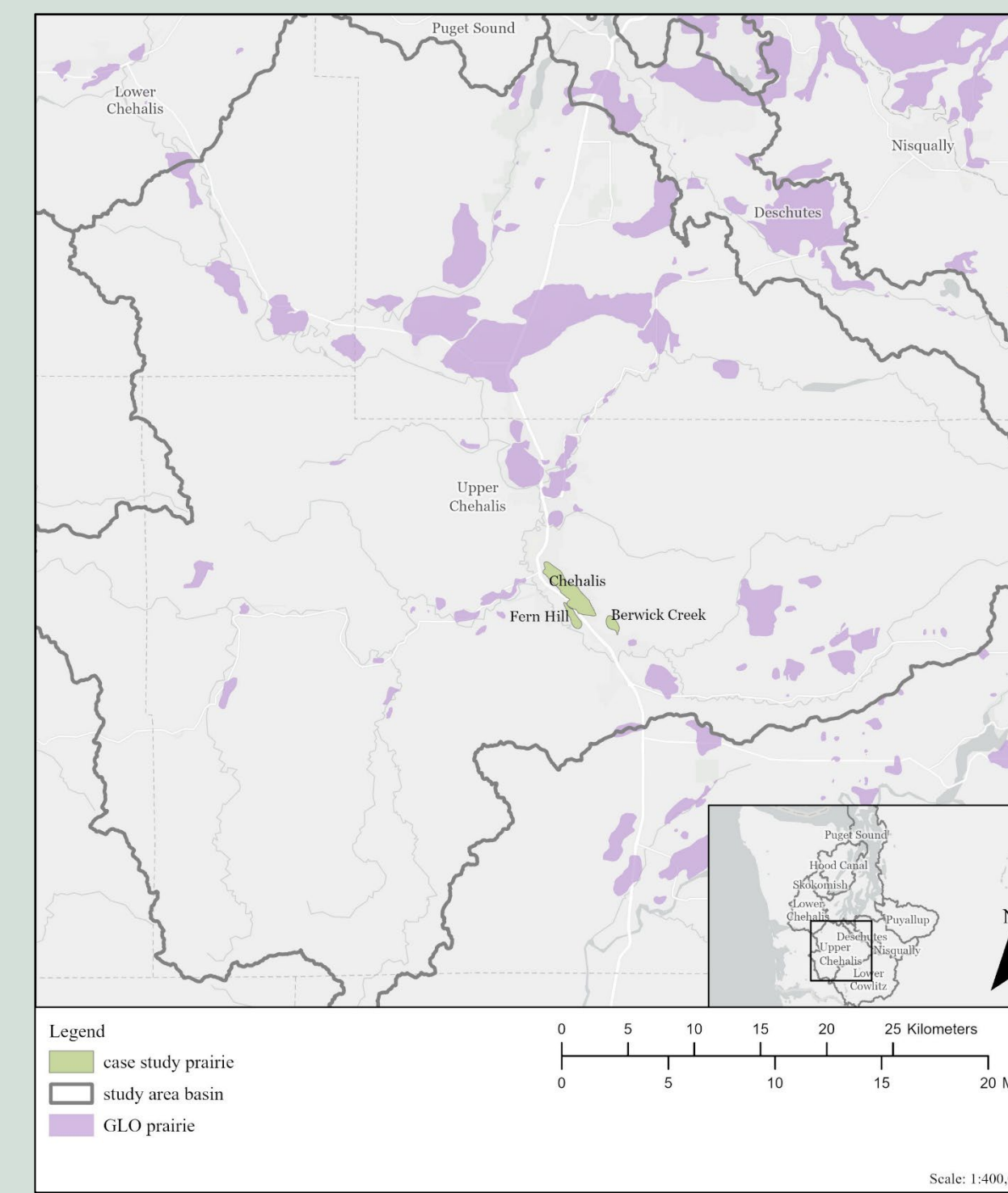


Figure 1. Case study area and GLO mapped prairies.

Defining Prairie Boundaries & Boundary Issues in CRM

Archaeological properties are often recorded as sites, but archaeological districts can also be used to bound groupings of sites linked by function, theme, or plan, including discontinuous spatially discrete sites (NPS 2000). Drawing boundaries around historic properties is a perpetual challenge in CRM that affects the management of these resources. To explore the possibility of defining anthropogenic prairies as cultural landscapes, we utilized General Land Office (GLO) plats to map prairie boundaries.

The GLO commissioned plat maps for the purpose of advertising and managing lands available for American settlement after the enactment of the Oregon Donation Land Claim Act in Oregon Territory (which initially included land that is now Washington

State). We recognize that these plats are imperfect, but they serve as a rough draft for delineating prairies that were managed by Indigenous people from time immemorial.

Antiquity Consulting maintains a GIS database of GLO and DLC data, which includes georeferenced GLO plats and polygons of prairies mapped on GLO plats. In a previous study (Leonard-Doll and Mathews 2024) we found that the majority (60.5%) of prairie sites were within 100 meters of the GLO-mapped prairie margin. As such, we elected to buffer the boundaries of the GLO-mapped prairies by 100 meters to study sites associated with anthropogenic prairies (see Figure 1).

Archaeological Site Eligibility Case Study: Chehalis, Fern Hill, and Berwick Creek Prairies

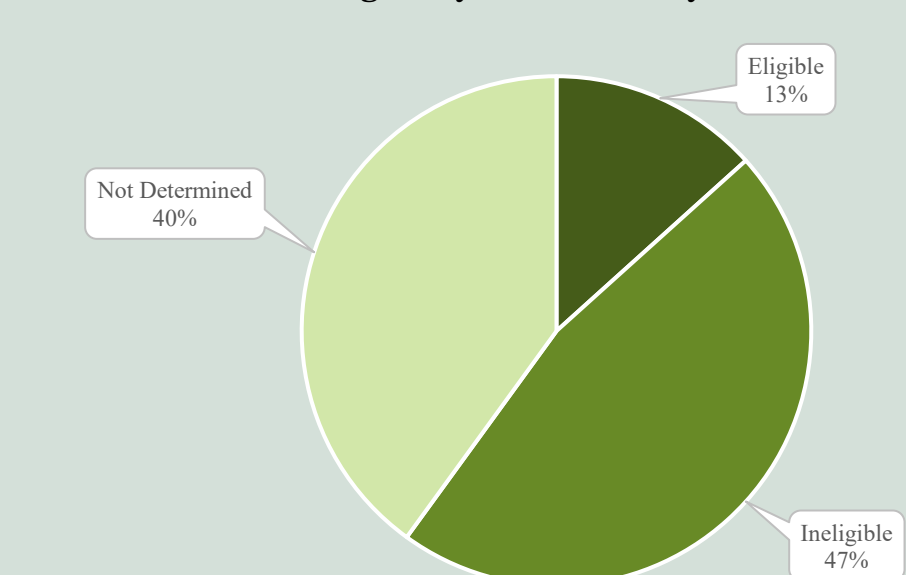
To better understand how we might shift our thinking about small, dispersed prairie archaeological sites, we selected the Chehalis, Fern Hill, and Berwick Creek prairies as a study area (see Figure 1). The study area was created by buffering the margins of GLO-defined prairies by 100 meters following justification in Leonard-Doll and Mathews 2024 discussed in the previous section. The register eligibility and significance criteria were tallied for each site within this study area (Table 2).

Table 2. Archaeological Lithic Sites on Chehalis, Fern Hill, and Berwick Creek Prairies.

| Site # | Prairie | Site Size (meters) | NRHP Eligibility | Criteria Discussed |
|----------|------------------------------------|--------------------|------------------|--------------------|
| 45LE520 | Berwick Creek | 120 x 245 | Eligible | D |
| 45LE521 | Berwick Creek | 55 x 200 | Eligible | D |
| 45LE913 | Berwick Creek | 20 x 124 | Ineligible | A, D |
| 45LE573 | Berwick Creek | 18 x 19 | Ineligible | D |
| 45LE1060 | Berwick Creek | 1 x 1 | Ineligible | D |
| 45LE1061 | Berwick Creek | 1 x 1 | Ineligible | D |
| 45LE893 | Berwick Creek (55 meters outside) | | Ineligible | - |
| 45LE916 | Berwick Creek | 1 x 1 | Ineligible | - |
| 45LE917 | Berwick Creek | 1 x 1 | Ineligible | - |
| 45LE928 | Chehalis | | - | - |
| 45LE578 | Fern Hill | | - | - |
| 45LE614 | Berwick Creek | | - | - |
| 45LE690 | Berwick Creek | 38 x 168 | - | - |
| 45LE613 | Berwick Creek (3.5 meters outside) | | - | - |
| 45LE894 | Berwick Creek (4 meters outside) | | - | - |

In the broader Chehalis River basin, very small lithic sites are often recorded from limited surveys and these sites are frequently recommended not eligible for listing on historic registers. Under Washington State law these sites are protected from unmitigated impacts which means eligibility recommendations are not necessary outside the Section 106 process, but 60% of these sites have received eligibility recommendations or determinations (Figure 2). Only two sites in the study area have been determined eligible, comprising 13% of the study sites and 22% of sites with determinations. These two sites are among the largest sites of the study and diagnostic tools were observed at these sites.

Figure 2. NRHP eligibility of case study prairie sites.



“The spirit and direction of the Nation are founded upon and reflected in its historic heritage”

The National Historic Preservation Act (16 U.S.C. §470) was established in the belief that the “historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people.” Anthropogenic prairies have been and continue to be critically important places in our region. The historical significance and living culture of anthropogenic prairies is undeniable, and our treatment of these sites in cultural resource management should consider the broader cultural landscape.

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